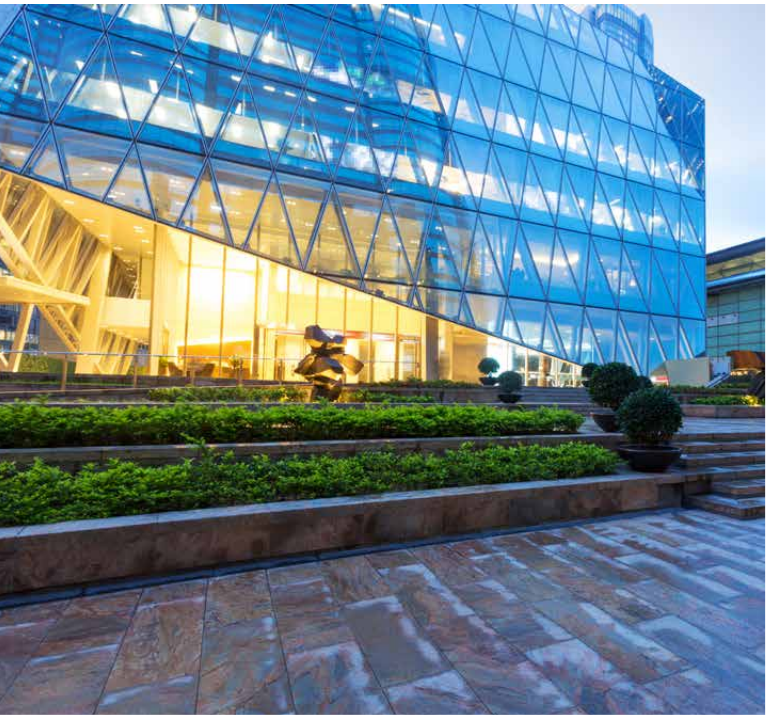
MITSUBISHI ELECTRIC

VRF City Multi Product Catalogue



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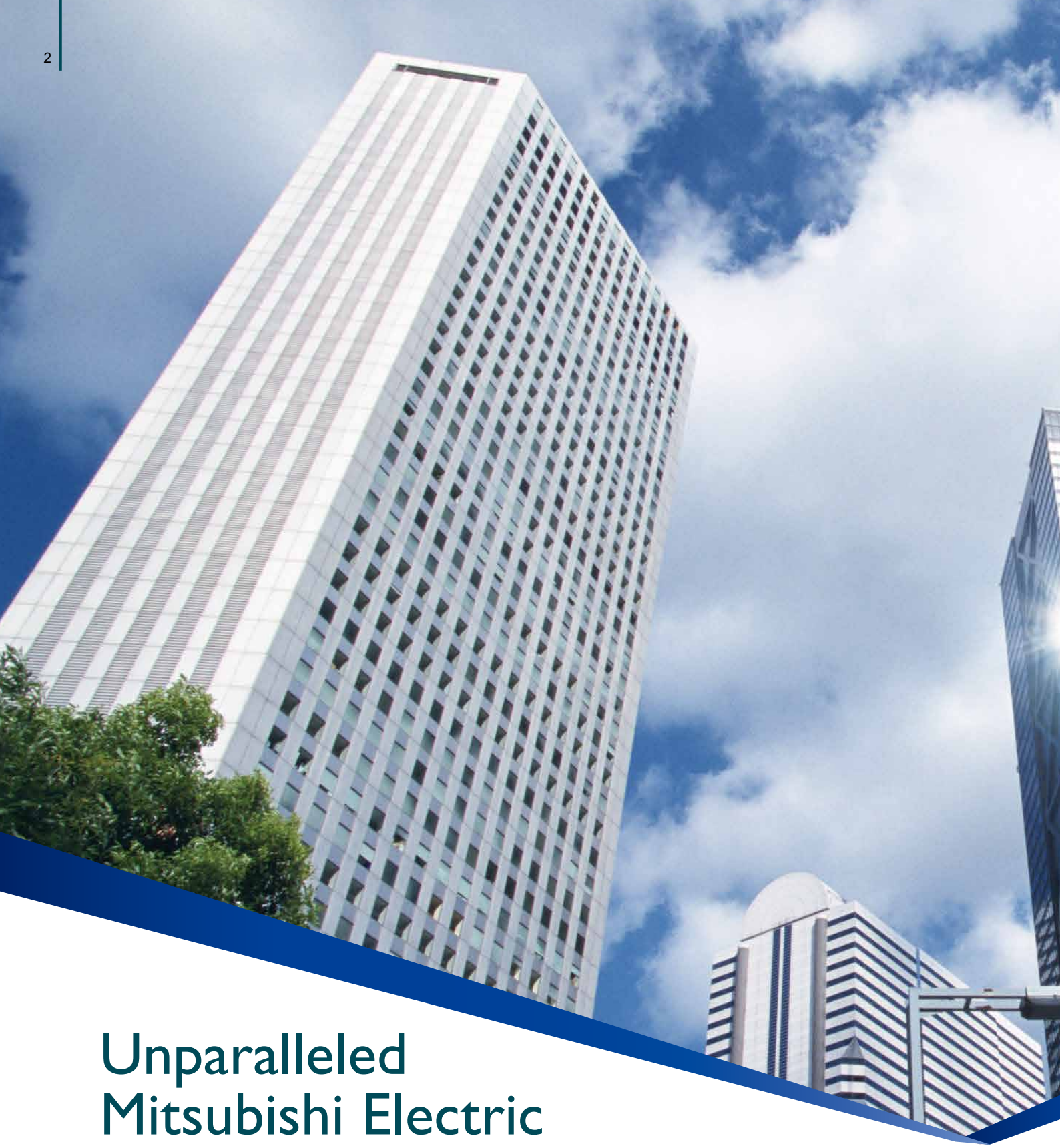

Unparalleled Mitsubishi Electric Air Conditioning Systems

Founded in 1921, Mitsubishi Electric is a globally-renowned household name with a solid reputation for excellent products and services. Since our foundation, we have risen to the very pinnacle of the air conditioning industry and we continue to maintain that position.

The company is proud of its achievements in providing some of the most energy-efficient systems on the market.

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CITY MULTI VRF

CITY MULTI
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Standard | High efficiency

S-Series P.91

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Air cooled

R2-Series P.12

PURY-P PURY-EP

Standard | High efficiency

Water cooled

WR2-Series P.69

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BC CONTROLLER P.101

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- Main BC controller with sub BC controller
- Sub BC controller

*CITY MULTI R2/WR2-Series systems require the use of a BC controller.

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CITY MULTI
SELECTION

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- 2-way ariflow type

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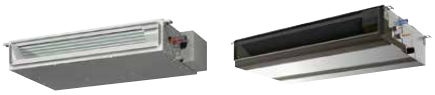
Ceiling concealed type

PEFY- P P.129
- Low noise type
- Compact depth type
- Low static pressure type
- Medium static pressure type
- High static pressure type
- Fresh air intake type



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- PI/DIDO/AI controller
- LONWORKS® interface
- BACnet® interface

CITY MULTI VRF

Outdoor/Heat Source Units

Mitsubishi Electric offers a wide range of products in order to meet air-conditioning needs for both new constructions and existing buildings.

Air-Cooled Units

(Cooling/Heating Changeover, Simultaneous Cooling/Heating)

Air cooled

Y-Series

Cooling or Heating

Heat pump

Standard: 8-54HP **High efficiency: 8-54HP**

- A two-pipe refrigerant system allows for a system changeover from cooling to heating, and ensures that a constant indoor climate is maintained in all zones
- Wide range of standard and high-efficiency models up to 54HP

P.11

R2-Series

Simultaneous Cooling and Heating

Heat recovery

Standard: 8-44HP **High efficiency: 8-44HP**

- Simultaneous cooling and heating operation with a two-pipe system available only from Mitsubishi Electric*
- Energy-efficient with heat recovery feature

*Data as of 1992, researched by Mitsubishi Electric Corporation
*Color of the external finish depends on the production location. Please refer to the specification for details on the external finish.

P.12

Water-Cooled Units

(Cooling/Heating Changeover, Simultaneous Cooling/Heating)

Water cooled

WY-Series

Cooling or Heating

Heat pump

8-36HP

- Allows heat source units to be installed on separate floors, making it suitable for use in high-rise buildings
- Installation of heat source units in machine rooms helps maintain the exterior appearance of the building

P.68

WR2-Series

Simultaneous Cooling and Heating

Heat recovery

8-36HP

- Simultaneous cooling and heating operation with a two-pipe system available only from Mitsubishi Electric*
- Greater energy efficiency made possible by using the waste heat from both the heat source units and indoor units

*Data as of 1992, researched by Mitsubishi Electric Corporation

P.69

Horizontal Airflow Units

Air cooled

S-Series

Cooling or Heating

Heat pump

1-fan type: 3.5-6HP

2-fan type: 4.5-8HP

- Compact design that allows individual air conditioning in small-scale buildings and stores

P.91

System	Air cooled											
Type	Heat pump											
Model name	Y-Series Standard						Y-Series High efficiency					
	PUHY-P YNW-A1(-BS) NEW			PUHY-P YSNW-A1(-BS) NEW			PUHY-EP YNW-A1(-BS) NEW			PUHY-EP YSNW-A1(-BS) NEW		
Model	 size S size L size XL						 size S size L size XL					
HP \ modules	S	L	XL	S	L	XL	S	L	XL	S	L	XL
8HP P200	8						8					
10HP P250	10						10					
12HP P300	12						12					
14HP P350		14						14				
16HP P400		16		8 8				16		8 8		
18HP P450		18		8 10				18		8 10		
20HP P500			20	10 10					20	10 10		
22HP P550				10 12						10 12		
24HP P600				12 12						12 12		
26HP P650				10	16					10	16	
28HP P700					14 14						14 14	
30HP P750					14 16						14 16	
32HP P800					14 18						14 18	
34HP P850					16 18						16 18	
36HP P900					18 18						18 18	
38HP P950				10	14 14					10	14 14	
40HP P1000				10	14 16					10	14 16	
42HP P1050				10	16 16					10	16 16	
44HP P1100					14 14 16						14 14 16	
46HP P1150					14 16 16						14 16 16	
48HP P1200					16 16 16						16 16 16	
50HP P1250					16 16 18						16 16 18	
52HP P1300					16 18 18						16 18 18	
54HP P1350					18 18 18						18 18 18	

* Indicates single modules and indicates combination modules.

*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

*For combination modules, be sure to check the complete module's model name including the last part of the model name (e.g.: -A1). Please refer to the "Set Model" rows in the "SPECIFICATIONS".

System	Air cooled											
Type	Heat recovery											
Model name	R2-Series Standard						R2-Series High efficiency					
	PURY-P YNW-A1(-BS) NEW			PURY-P YSNW-A1(-BS) NEW			PURY-EP YNW-A1(-BS) NEW			PURY-EP YSNW-A1(-BS) NEW		
Model	 size S size L size XL						 size S size L size XL					
HP \ modules	S	L	XL	S	L	XL	S	L	XL	S	L	XL
8HP P200	8						8					
10HP P250	10						10					
12HP P300	12						12					
14HP P350		14						14				
16HP P400		16		8 8				16		8 8		
18HP P450		18		8 10				18		8 10		
20HP P500			20	10 10					20	10 10		
22HP P550				10 12						10 12		
24HP P600				12 12						12 12		
26HP P650				12	14					12	14	
28HP P700					14 14						14 14	
30HP P750					14 16						14 16	
32HP P800					16 16						16 16	
34HP P850					16 18						16 18	
36HP P900					18 18						18 18	
38HP P950					18	20					18	20
40HP P1000						20 20						20 20
42HP P1050						20 22 *1						20 22 *1
44HP P1100						22 *1 22 *1						22 *1 22 *1

* Indicates single modules and indicates combination modules.

*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

*Color of the external finish depends on the production location. Please refer to the specification for details on the external finish.

*1. 22HP (P550) can be used only in combination with others.

*For combination modules, be sure to check the complete module's model name including the last part of the model name (e.g.: -A1). Please refer to the "Set Model" rows in the "SPECIFICATIONS".

System	Water cooled								Air cooled	
Type	Heat pump				Heat recovery				Heat pump	
Model name	WY-Series				WR2-Series				S-Series 1-fan type	S-Series 2-fan type
	PQHY-P YLM-A1		PQHY-P YSLM-A1		PQRY-P YLM-A1		PQRY-P YSLM-A1		PUMY-SP VKMD-A(-BS) PUMY-SP YKMD-A(-BS)	PUMY-P VKM5(-BS) NEW PUMY-P YKM4(-BS) NEW PUMY-P YKMD-A(-BS)
Model										
modules / HP	S	L	S	L	S	L	S	L	-	-
3.5HP P80									3.5	
4.5HP P112									4.5	4.5
5HP P125									5	5
6HP P140									6	6
8HP P200	8				8					8
10HP P250	10				10					
12HP P300	12				12					
14HP P350		14				14				
16HP P400		16	8 8			16	8 8			
18HP P450		18	8 10			18	8 10			
20HP P500		20	10 10			20	10 10			
22HP P550		22	10 12			22	10 12			
24HP P600		24	12 12			24	12 12			
28HP P700				14 14				14 14		
30HP P750				14 16				14 16		
32HP P800				16 16				16 16		
34HP P850				16 18				16 18		
36HP P900				18 18				18 18		

* Indicates single modules and indicates combination modules.

*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

*For combination modules, be sure to check the complete module's model name including the last part of the model name (e.g.: -A1). Please refer to the "Set Model" rows in the "SPECIFICATIONS".

Y-Series

Cooling or Heating Heat pump

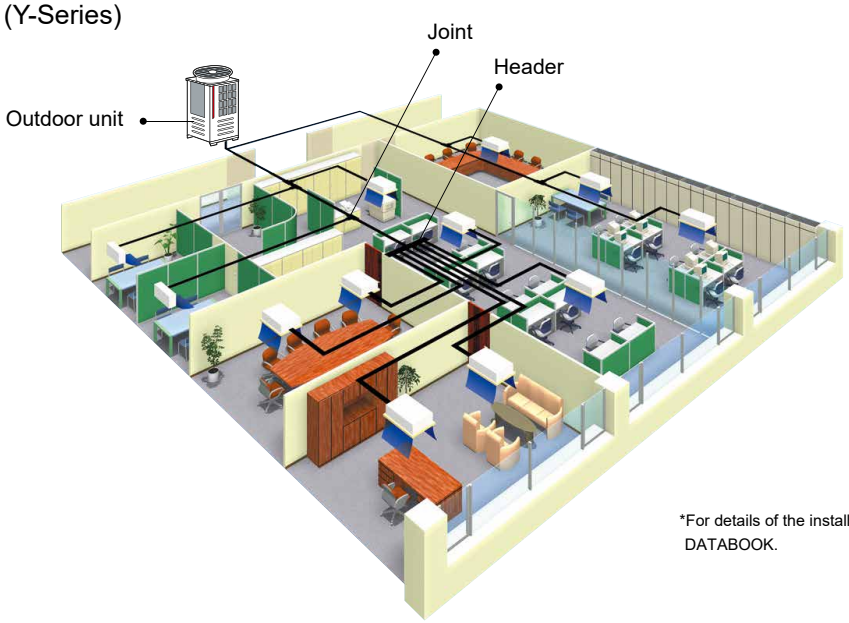
*This image shows the standard type.

Inverter, IPM, PWM, EP Flat tube, HIC, IH warmer, COMP enclosure, EP Adaptive flow, COP priority, Low noise, Auto-shift startup, Preheat, SCO, Dual, ET control, High SHF, Demand control, Cont. heating, ESP, Pump down, Individual LEV, Snow sensor

A two-pipe zoned system designed for heat pump operation

The CITY MULTI Y-Series (for large applications) makes use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes an inverter-driven compressor for effective energy use.
With a wide lineup of indoor units connected to a flexible piping system, the CITY MULTI Series can be configured to suit diverse applications. Up to 50 (Y-Series) indoor units can be connected with up to 130% connected capacity to maximize engineering design options. This feature allows easy air conditioning in each area with convenient individual controllers.

• Installation image (Y-Series)

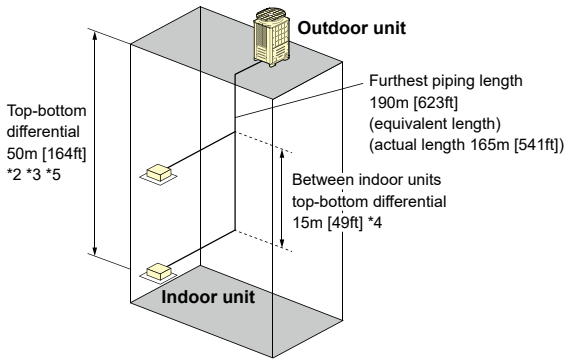


*For details of the installation restrictions, refer to the DATABOOK.

• System Pipe Lengths [(E)P200–(E)P1350]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	1,000 [3,280]
Maximum allowable length	165 (190 equivalent) [541(623)]
Furthest indoor from first branch	40 [131]*1

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]*2
Indoor/outdoor (outdoor lower)	40 [131]*3
Indoor/indoor	15 [49]*4



*1 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.
*2 90m [295ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
*3 60m [196ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
*4 30m [98ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one size larger pipes for indoor unit liquid pipes.
*5 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

R2-Series

NEW

*This image shows the standard type.

Simultaneous Cooling and Heating Heat recovery

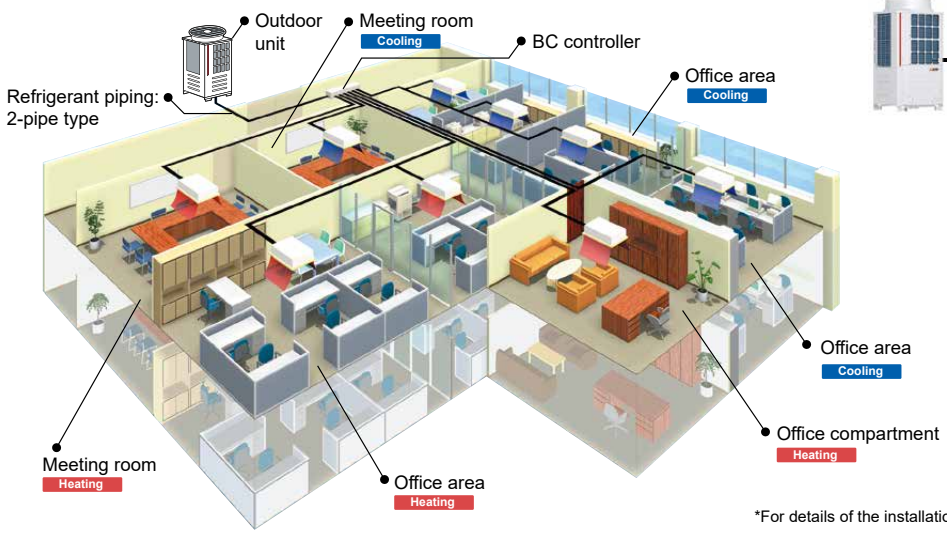
The world's first* two-pipe system that simultaneously cools and heats

*As of 1992 (according to our in-house survey)

The CITY MULTI R2-Series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. It is the technological heart of the CITY MULTI R2-Series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe.

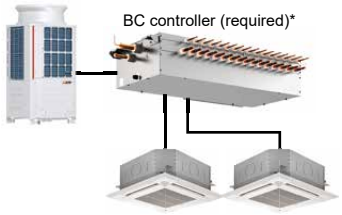
This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity.

• Installation image (R2-Series)



*For details of the installation restrictions, refer to the DATABOOK.

• System example



*R2-Series systems require the use of a BC controller.

• System Pipe Lengths [(E)P200–(E)P1100]

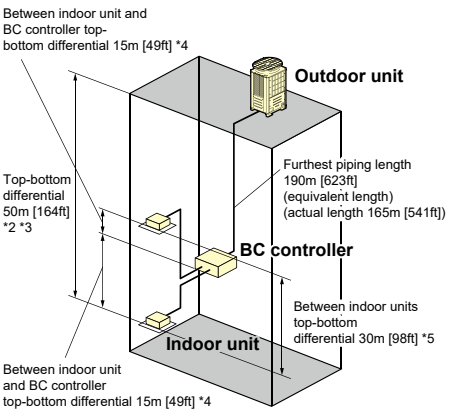
Refrigerant Piping Lengths	Maximum meters [Feet]
Total piping length	
(E)P200–(E)P300	550 [1,804]
(E)P350–(E)P550 (single module)	600 [1,968]
(E)P400–(E)P600	750 [2,460]
(E)P650	800 [2,624]
(E)P700–(E)P1100	1,000 [3,280]
Maximum allowable length	165 (190 equivalent) [541(623)]
Maximum length between outdoor and single/main BC controller	110 [360]

*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.

Maximum length between single/main BC controller and indoor and sub-BC controller*1	40-90 [131-295]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]*3
Indoor/outdoor (outdoor lower)	40 [131]*3
Indoor/BC controller (single/main)	15 [49]*4
Indoor/indoor	30 [98]*5
Main BC Controller/Sub-BC Controller	15 [49]

*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.



*1 When you install a sub-BC controller, please refer to DATABOOK for full details.
*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*3 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.
*4 Distance of Indoor sized P200, P250 from BC must be less than 10m [32ft], if any.
*5 Distance of Indoor sized P200, P250 from BC must be less than 20m [65ft], if any.

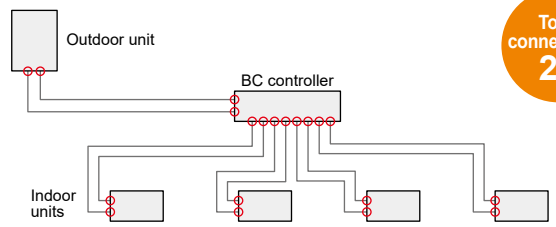
Benefits of the R2 system

Unique to Mitsubishi Electric, our heat recovery technology uses just two pipes, as opposed to the market conventional three. Our R2 system, designed for effective simultaneous heating and cooling, offers substantial savings on installation and annual running costs.

Mitsubishi Electric 2-pipe R2 system: less piping/connections compared to a 3-pipe system

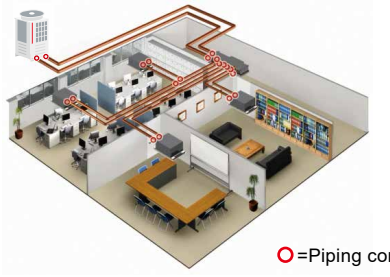
• Comparison example of piping connections

2 pipes **CITY MULTI R2**



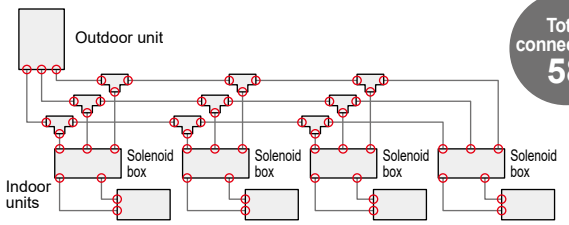
Total connections 20

Drastically reduces the amount of piping



○=Piping connections

3 pipes



Total connections 58

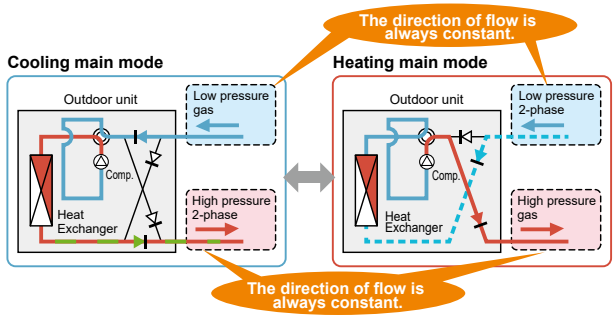
○=Piping connections

Cooling/heating modes can be switched without stopping operation

2 pipes **CITY MULTI R2**

When cooling/heating mode switches

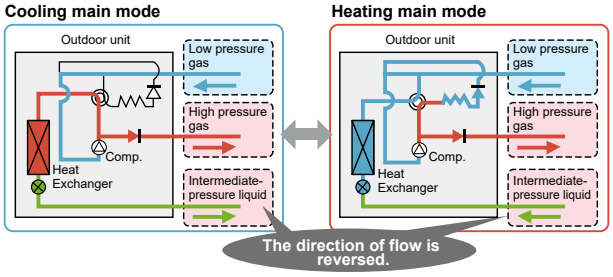
- There is no need to stop the compressor.
- The refrigerant noise that is generated when the refrigerant flow is switched can be lowered.



Conventional 3 pipes

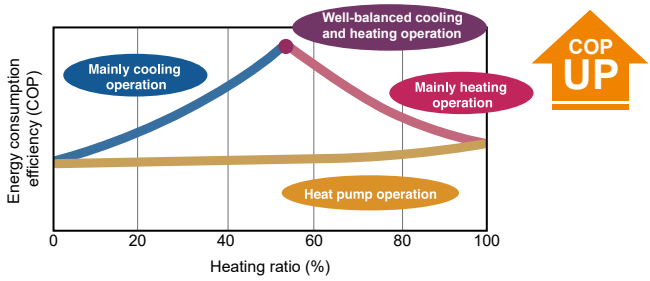
When cooling/heating mode switches

- Compressor shuts down.
- All indoor units stop for a few minutes.



Heat recovery operation for greater energy savings

• COP of the heat recovery system



COP of the heat recovery system

The more frequently cooling and heating are performed simultaneously, the greater the energy saving effect.

YNW-Series (Y/R2)

The 4-face air induction structural design and core components, such as compressor and fan, realizes energy-saving performance.

Energy Saving

Various key components have been equipped, improving energy-saving performance and meeting customers' requirements.

Flexible Noise Setting

All models in the series are equipped with low-noise operating mode as a standard feature. Choose from five different patterns for the optimum setting to meet the low-noise requirements.

Design

The modern design blends in well with most building architectures.

BC controller

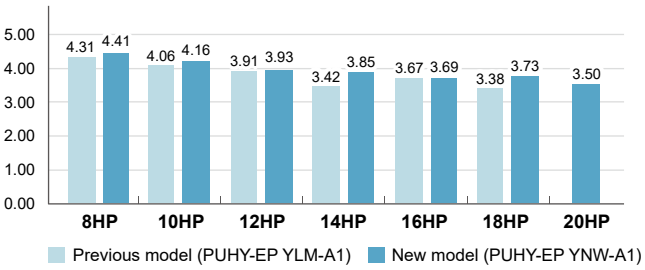
Up to 11 sub-BC controllers can be connected to the main BC controller.

Energy Saving

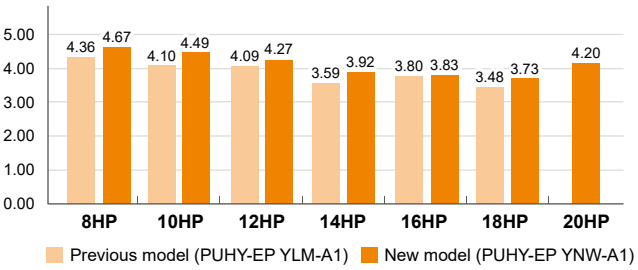
Compared to previous models, all the single modules (Y-series) in YNW-Series have improved EER and COP. For example, EER of the 14HP model (PUHY-EP350YNW-A1) is higher by about 12%. All these models ensure high energy saving.

• Y-Series (High efficiency type)

EER

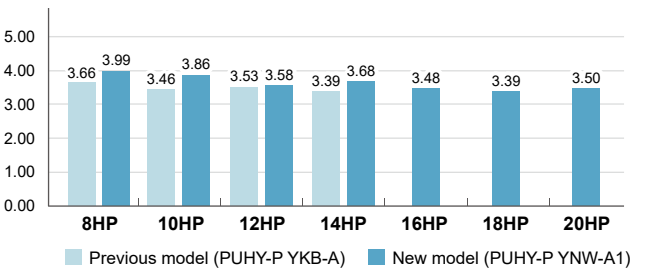


COP

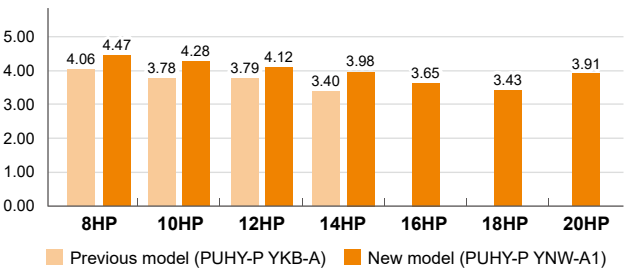


• Y-Series (Standard type)

EER



COP



*Comparison under the nominal condition.

Flexible Noise Setting

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

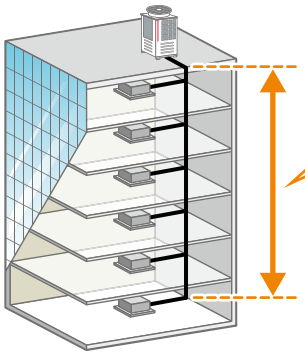
The low-noise mode, which conventionally only had one pattern, has been increased to four patterns. Including the rated pattern, a mode can be selected from a total of five patterns. The low-noise mode has four patterns (85%, 70%, 60% and 50%) in respect to the fan speed. This can be set with the outdoor unit's dip switch. The pattern can be selected according to the customer's requests when low-noise operation is required.

*In the low noise mode, the capacity will reduce.

Usable in an application with a large vertical separation of up to 90 meters

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

A height difference of up to 90m from the outdoor unit to the indoor unit can be supported with no extra-cost options.
This increases design flexibility and facilitates installation of these units even in high-rise buildings.



Height difference from outdoor unit to indoor unit:
The system can be configured with a height difference of up to **90m with no extra-cost options.**

* Whether the system can be configured with such a height difference varies depending on the model.
* The maximum height difference is 60 m when the outdoor unit is located lower than the indoor unit.
* Requires switch settings.

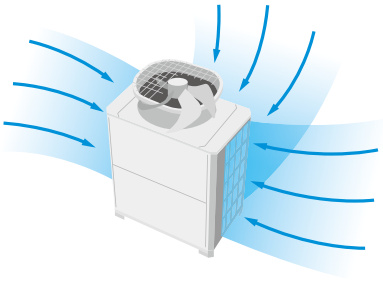
Key Components of YNW-Series

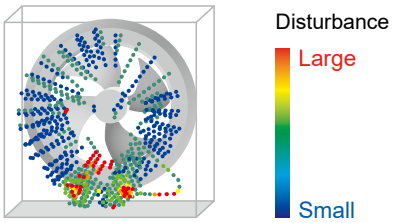
Four-way suction and new fan

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

• Air suction structure

Previous model (YLM)

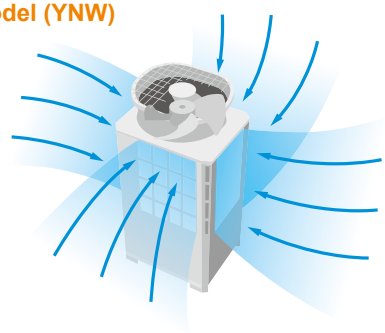


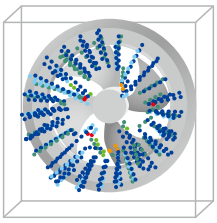


Visualization of air flow of fan

Previous three-sided coil design caused fan airflow turbulence.

Latest model (YNW)





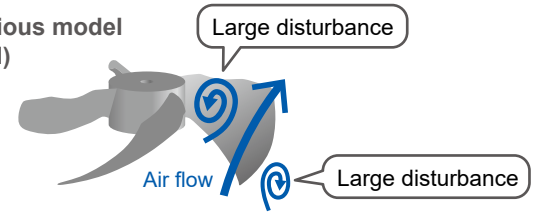
Fan and four-way suction reduce disturbance of air flow

Visualization of air flow of fan

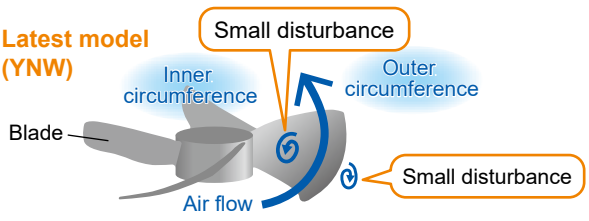
New four-sided coil design allows heat exchange without causing a disturbance of air flow in all directions.

• Fan structure

Previous model (YLM)



Latest model (YNW)



The concave-shaped blade of the propeller fan enables air to flow along the outer circumference of the blade while reducing a disturbance of air flow that occurs in the upstream and downstream of conventional propeller fans. This helps reduce power consumption as well as minimises sound levels.

Furthermore, the change of the orientation of the fan blade from the outer circumference direction to the inner circumference direction reduces air leakage from the outer circumference and sends more air to the upstream of the fan.

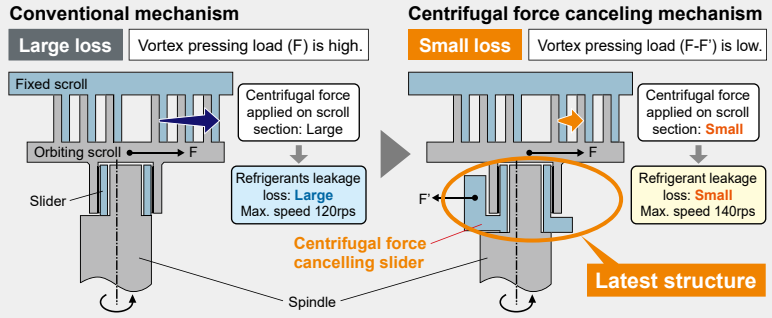
Compressor with centrifugal force canceling mechanism

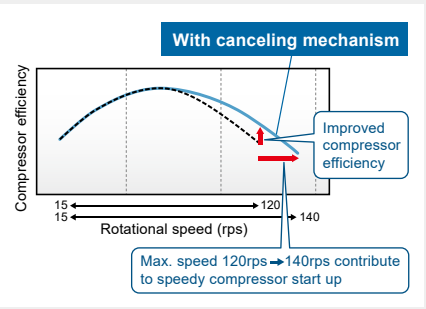
Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

The compressor, known as the heart of the air conditioner, has been improved. A centrifugal force canceling mechanism and a multi-port mechanism have been developed. In addition, we have mounted a high-efficiency motor. The synergetic effect of these latest technologies increases the compressor performance and efficiency, and also helps to improve the performance of the outdoor unit.

Centrifugal force canceling mechanism (8 to 14HP)

The structure of the scroll compressor causes a centrifugal force during operation. Conventionally, that centrifugal force is applied onto the scroll section. This causes refrigerant to leak, and restricts the increase in rotational speed to a maximum of 120rps.
With the latest compressor, the latest structure (centrifugal force canceling mechanism) has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps.
This mechanism also speeds up the start of operation, and enables operations such as preheat defrost operation and the smooth auto-shift startup mode.



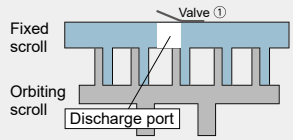


Multi-port mechanism

Efficient partial load operation is realised by avoiding over-compression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The latest compressor is equipped with two sub-ports in addition to the conventional discharge port to reduce this over-compression loss during low loads. In operating conditions with a low compression rate, the distance in the compression process is kept short by successfully avoiding unnecessary compression, and contributing to efficient partial load operation.

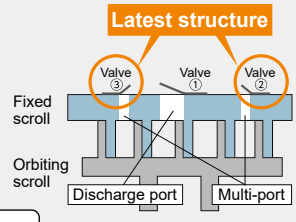
Conventional structure

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve①	Open	Open



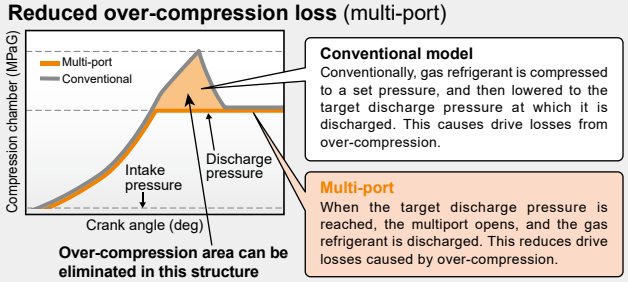
Multi-port structure

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve①	Open	Open
Sub-port	Valve②	Open	Closed
	Valve③	Open	Closed



The sub-port is opened during partial load operation to discharge the over-compressed gas.

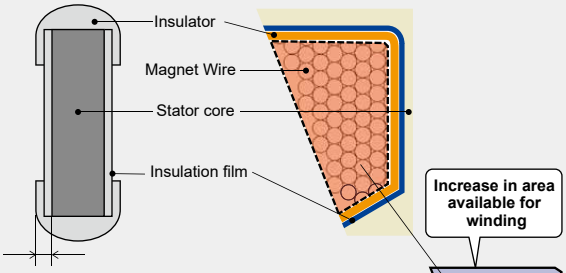
Reduced over-compression loss (multi-port)



Improved high-efficiency motor

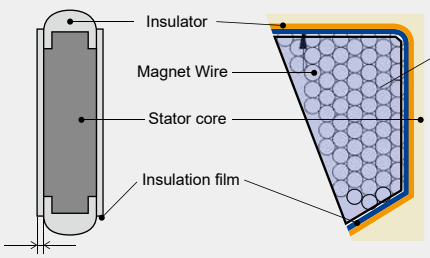
The insulator section that traditionally created a dead space is eliminated by insulating the motor's stator film. Since winding can be set in that section, the winding area can be increased by approx. 9%. The wire diameter has also been increased by two ranks, so the resistance between terminals is reduced, and the insulation distance is shorter. This improves the motor's operation performance and contributes to high-efficiency operation of the compressor.

Conventional model (YLM)



The insulator section is large, and the area where the copper wire can be wound is small.

Latest model (YNW)



The motor can be wound in the section where the insulator was, and a larger wire diameter can be used.

Y-Series Standard

PUHY-P YNW-A1(-BS) NEW

Model			PUHY-P200YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)	PUHY-P300YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.61	7.25	9.35
	Current input	A	9.4-8.9-8.6	12.2-11.6-11.2	15.7-14.9-14.4
	EER	kW / kW	3.99	3.86	3.58
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	5.59	7.35	9.10
	Current input	A	9.4-8.9-8.6	12.4-11.7-11.3	15.3-14.5-14.0
	COP	kW / kW	4.47	4.28	4.12
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	58.0/59.0	60.0/61.0	61.0/64.5
Sound power level (measured in anechoic room) *4		dB <A>	75/77	78/80	80/84
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.5	5.3	6.7
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	213 (470)	213 (470)	226 (499)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YNW-A1(-BS) NEW

Model			PUHY-P350YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P500YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
	Power input	kW	10.86	12.93	14.74	16.00
	Current input	A	18.3-17.4-16.7	21.8-20.7-19.9	24.8-23.6-22.7	27.0-25.6-24.7
	EER	kW / kW	3.68	3.48	3.39	3.50
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	45.0	50.0	56.0	63.0
		BTU / h	153,500	170,600	191,100	215,000
	Power input	kW	11.30	13.69	16.32	16.11
	Current input	A	19.0-18.1-17.4	23.1-21.9-21.1	27.5-26.1-25.2	27.1-25.8-24.9
	COP	kW / kW	3.98	3.65	3.43	3.91
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.0/64.0	65.0/67.0	65.5/69.5	63.5/66.5
Sound power level (measured in anechoic room) *4		dB <A>	80/83	82/86	84/89	82/85
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	300	305	365
		L/s	4,500	5,000	5,083	6,083
		cfm	9,534	10,593	10,770	12,888
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.6	11.4	11.7	13.3
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	293 (646)	334 (737)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P400YSNW-A1 (-BS)	PUHY-P450YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	45.0	50.0
		BTU / h	153,500	170,600
	Power input	kW	11.62	13.15
	Current input	A	19.6-18.6-17.9	22.1-21.0-20.3
	EER	kW / kW	3.87	3.80
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	50.0	56.0
		BTU / h	170,600	191,100
	Power input	kW	11.54	13.23
	Current input	A	19.4-18.5-17.8	22.3-21.2-20.4
	COP	kW / kW	4.33	4.23
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	61.0/62.0	62.0/63.0
Sound power level (measured in anechoic room) *4		dB <A>	78/80	80/82
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-P200YNW-A1 (-BS)	PUHY-P200YNW-A1 (-BS)	PUHY-P200YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.5	3.5	3.5	5.3
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	213 (470)	213 (470)	213 (470)	213 (470)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P500YSNW-A1 (-BS)	PUHY-P550YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	56.0	63.0
		BTU / h	191,100	215,000
	Power input	kW	14.97	17.54
	Current input	A	25.2-24.0-23.1	29.6-28.1-27.1
	EER	kW / kW	3.74	3.59
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	63.0	69.0
		BTU / h	215,000	235,400
	Power input	kW	15.18	16.99
	Current input	A	25.6-24.3-23.4	28.6-27.2-26.2
	COP	kW / kW	4.15	4.06
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	63.0/64.0	63.5/66.0
Sound power level (measured in anechoic room) *4		dB <A>	81/83	82/85
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-P250YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)	PUHY-P300YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.3	5.3	5.3	6.7
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	213 (470)	213 (470)	213 (470)	226 (499)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P600YSNW-A1 (-BS)	PUHY-P650YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	69.0	73.0
		BTU / h	235,400	249,100
	Power input	kW	19.88	20.79
	Current input	A	33.5-31.8-30.7	35.0-33.3-32.1
	EER	kW / kW	3.47	3.51
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	76.5	81.5
		BTU / h	261,000	278,100
	Power input	kW	19.17	21.61
	Current input	A	32.3-30.7-29.6	36.4-34.6-33.4
	COP	kW / kW	3.99	3.77
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	64.0/67.5	66.5/68.0
Sound power level (measured in anechoic room) *4		dB <A>	83/87	83/87
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-P300YNW-A1 (-BS)	PUHY-P300YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	240	240	185	300
		L/s	4,000	4,000	3,083	5,000
		cfm	8,474	8,474	6,532	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.7	6.7	5.3	11.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)
Net weight		kg (lbs)	226 (499)	226 (499)	213 (470)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P700YSNW-A1 (-BS)	PUHY-P750YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	80.0	85.0
		BTU / h	273,000	290,000
	Power input	kW	22.47	24.56
	Current input	A	37.9-36.0-34.7	41.4-39.3-37.9
	EER	kW / kW	3.56	3.46
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	88.0	95.0
		BTU / h	300,300	324,100
	Power input	kW	22.79	25.81
	Current input	A	38.4-36.5-35.2	43.5-41.3-39.8
	COP	kW / kW	3.86	3.68
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	65.0/67.0	67.0/68.5
Sound power level (measured in anechoic room) *4		dB <A>	83/86	84/88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PUHY-P350YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	270	270	300
		L/s	4,500	4,500	4,500	5,000
		cfm	9,534	9,534	9,534	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.6	8.6	8.6	11.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P800YSNW-A1 (-BS)	PUHY-P850YSNW-A1 (-BS)	PUHY-P900YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	90.0	96.0	101.0
		BTU / h	307,100	327,600	344,600
	Power input	kW	26.39	28.91	30.79
	Current input	A	44.5-42.3-40.7	48.8-46.3-44.6	51.9-49.3-47.5
	EER	kW / kW	3.41	3.32	3.28
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	100.0	108.0	113.0
		BTU / h	341,200	368,500	385,600
	Power input	kW	28.08	31.57	34.03
	Current input	A	47.4-45.0-43.4	53.2-50.6-48.8	57.4-54.5-52.6
	COP	kW / kW	3.56	3.42	3.32
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	67.5/71.0	68.5/71.5	68.5/72.5
Sound power level (measured in anechoic room) *4		dB <A>	85/90	86/91	87/92
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P350YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	305	300	305	305	305
		L/s	4,500	5,083	5,000	5,083	5,083	5,083
		cfm	9,534	10,770	10,593	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.6	11.7	11.4	11.7	11.7	11.7
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection		Over-current protection	
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	277 (611)	293 (646)	277 (611)	293 (646)	293 (646)	293 (646)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P950YSNW-A1 (-BS)	PUHY-P1000YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	108.0	113.0
		BTU / h	368,500	385,600
	Power input	kW	29.91	32.01
	Current input	A	50.4-47.9-46.2	54.0-51.3-49.4
	EER	kW / kW	3.61	3.53
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	119.5	127.0
		BTU / h	407,700	433,300
	Power input	kW	30.40	33.42
	Current input	A	51.3-48.7-46.9	56.4-53.5-51.6
	COP	kW / kW	3.93	3.80
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	66.0/68.0	68.0/69.5
Sound power level (measured in anechoic room) *4		dB <A>	84/87	85/88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P250YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P250YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	185	270	270	185	270	300
		L/s	3,083	4,500	4,500	3,083	4,500	5,000
		cfm	6,532	9,534	9,534	6,532	9,534	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.92 x 1	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.3	8.6	8.6	5.3	8.6	11.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight		kg (lbs)	213 (470)	277 (611)	277 (611)	213 (470)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P1050YSNW-A1 (-BS)	PUHY-P1100YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	118.0	124.0
		BTU / h	402,600	423,100
	Power input	kW	34.10	35.53
	Current input	A	57.5-54.6-52.7	59.9-56.9-54.9
	EER	kW / kW	3.46	3.49
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	132.0	140.0
		BTU / h	450,400	477,700
	Power input	kW	35.86	37.43
	Current input	A	60.5-57.5-55.4	63.1-60.0-57.8
	COP	kW / kW	3.68	3.74
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.5/70.5	68.5/70.0
Sound power level (measured in anechoic room) *4		dB <A>	86/90	86/89
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P250YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P350YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	185	300	300	270	270	300
		L/s	3,083	5,000	5,000	4,500	4,500	5,000
		cfm	6,532	10,593	10,593	9,534	9,534	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.3	11.4	11.4	8.6	8.6	11.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight		kg (lbs)	213 (470)	277 (611)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P1150YSNW-A1 (-BS)	PUHY-P1200YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	130.0	136.0
		BTU / h	443,600	464,000
	Power input	kW	37.90	40.35
	Current input	A	63.9-60.7-58.5	68.1-64.7-62.3
	EER	kW / kW	3.43	3.37
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	145.0	150.0
		BTU / h	494,700	511,800
	Power input	kW	39.94	42.37
	Current input	A	67.4-64.0-61.7	71.5-67.9-65.4
	COP	kW / kW	3.63	3.54
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	69.0/71.0	70.0/72.0
Sound power level (measured in anechoic room) *4		dB <A>	86/90	87/91
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P350YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	300	300	300	300	300
		L/s	4,500	5,000	5,000	5,000	5,000	5,000
		cfm	9,534	10,593	10,593	10,593	10,593	10,593
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.6	11.4	11.4	11.4	11.4	11.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P1250YSNW-A1 (-BS)	PUHY-P1300YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	140.0	146.0
		BTU / h	477,700	498,200
	Power input	kW	41.91	44.10
	Current input	A	70.7-67.2-64.7	74.4-70.7-68.1
	EER	kW / kW	3.34	3.31
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	156.5	163.0
		BTU / h	534,000	556,200
	Power input	kW	45.23	48.08
	Current input	A	76.3-72.5-69.9	81.1-77.1-74.3
	COP	kW / kW	3.46	3.39
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	70.0/73.0	70.0/73.5
Sound power level (measured in anechoic room) *4		dB <A>	88/92	88/93
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-P400YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P400YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	300	300	305	300	305	305
		L/s	5,000	5,000	5,083	5,000	5,083	5,083
		cfm	10,593	10,593	10,770	10,593	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.4	11.4	11.7	11.4	11.7	11.7
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	293 (646)	277 (611)	293 (646)	293 (646)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series Standard

PUHY-P YSNW-A1(-BS) NEW

Model			PUHY-P1350YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	150.0
		BTU / h	511,800
	Power input	kW	45.73
	Current input	A	77.1-73.3-70.6
	EER	kW / kW	3.28
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	168.0
		BTU / h	573,200
	Power input	kW	50.60
	Current input	A	85.4-81.1-78.2
	COP	kW / kW	3.32
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	70.5/74.5
Sound power level (measured in anechoic room) *4		dB <A>	89/94
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PUHY-P450YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)	PUHY-P450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	305	305	305
		L/s	5,083	5,083	5,083
		cfm	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	11.7	11.7	11.7
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	293 (646)	293 (646)	293 (646)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YNW-A1(-BS) NEW

Model			PUHY-EP200YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)	PUHY-EP300YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.07	6.73	8.52
	Current input	A	8.5-8.1-7.8	11.3-10.7-10.4	14.3-13.6-13.1
	EER	kW / kW	4.41	4.16	3.93
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	5.35	7.01	8.78
	Current input	A	9.0-8.5-8.2	11.8-11.2-10.8	14.8-14.0-13.5
	COP	kW / kW	4.67	4.49	4.27
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	58.0/59.0	60.0/61.0	61.0/64.5
Sound power level (measured in anechoic room) *4		dB <A>	75/78	78/80	80/84
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.4	5.1	6.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	228 (503)	228 (503)	231 (510)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YNW-A1(-BS) NEW

Model			PUHY-EP350YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP500YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
	Power input	kW	10.38	12.19	13.40	16.00
	Current input	A	17.5-16.6-16.0	20.5-19.5-18.8	22.6-21.4-20.7	27.0-25.6-24.7
	EER	kW / kW	3.85	3.69	3.73	3.50
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	45.0	50.0	56.0	63.0
		BTU / h	153,500	170,600	191,100	215,000
	Power input	kW	11.47	13.05	15.01	15.00
	Current input	A	19.3-18.3-17.7	22.0-20.9-20.1	25.3-24.0-23.2	25.3-24.0-23.1
	COP	kW / kW	3.92	3.83	3.73	4.20
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.0/63.5	65.0/65.5	65.5/69.5	63.5/66.5
Sound power level (measured in anechoic room) *4		dB <A>	80/83	82/84	84/88	82/85
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	270	305	365
		L/s	4,500	4,500	5,083	6,083
		cfm	9,534	9,534	10,770	12,888
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	9.8	11.1	12.5
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	282 (622)	303 (668)	303 (668)	342 (754)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP400YSNW-A1 (-BS)	PUHY-EP450YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	45.0	50.0
		BTU / h	153,500	170,600
	Power input	kW	10.53	12.07
	Current input	A	17.7-16.8-16.2	20.3-19.3-18.6
	EER	kW / kW	4.27	4.14
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	50.0	56.0
		BTU / h	170,600	191,100
	Power input	kW	11.06	12.64
	Current input	A	18.6-17.7-17.0	21.3-20.2-19.5
	COP	kW / kW	4.52	4.43
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	61.0/62.0	62.0/63.0
Sound power level (measured in anechoic room) *4		dB <A>	78/81	80/82
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-EP200YNW-A1 (-BS)	PUHY-EP200YNW-A1 (-BS)	PUHY-EP200YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.4	3.4	3.4	5.1
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	228 (503)	228 (503)	228 (503)	228 (503)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP500YSNW-A1 (-BS)	PUHY-EP550YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	56.0	63.0
		BTU / h	191,100	215,000
	Power input	kW	13.89	16.11
	Current input	A	23.4-22.2-21.4	27.1-25.8-24.9
	EER	kW / kW	4.03	3.91
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	63.0	69.0
		BTU / h	215,000	235,400
	Power input	kW	14.48	16.31
	Current input	A	24.4-23.2-22.3	27.5-26.1-25.2
	COP	kW / kW	4.35	4.23
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/1~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	63.0/64.0	63.5/66.0
Sound power level (measured in anechoic room) *4		dB <A>	81/83	82/85
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-EP250YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)	PUHY-EP300YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.1	5.1	5.1	6.1
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight		kg (lbs)	228 (503)	228 (503)	228 (503)	231 (510)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP600YSNW-A1 (-BS)	PUHY-EP650YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	69.0	73.0
		BTU / h	235,400	249,100
	Power input	kW	18.11	19.46
	Current input	A	30.5-29.0-27.9	32.8-31.2-30.0
	EER	kW / kW	3.81	3.75
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	76.5	81.5
		BTU / h	261,000	278,100
	Power input	kW	18.47	20.58
	Current input	A	31.1-29.6-28.5	34.7-33.0-31.8
	COP	kW / kW	4.14	3.96
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	64.0/67.5	66.5/67.0
Sound power level (measured in anechoic room) *4		dB <A>	83/87	83/ 85
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PUHY-EP300YNW-A1 (-BS)	PUHY-EP300YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	240	240	185	270
		L/s	4,000	4,000	3,083	4,500
		cfm	8,474	8,474	6,532	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.1	6.1	5.1	9.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	231 (510)	231 (510)	228 (503)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP700YSNW-A1 (-BS)	PUHY-EP750YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	80.0	85.0
		BTU / h	273,000	290,000
	Power input	kW	21.44	23.28
	Current input	A	36.1-34.3-33.1	39.3-37.3-35.9
	EER	kW / kW	3.73	3.65
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	88.0	95.0
		BTU / h	300,300	324,100
	Power input	kW	23.15	25.33
	Current input	A	39.0-37.1-35.7	42.7-40.6-39.1
	COP	kW / kW	3.80	3.75
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	65.0/66.5	67.0/67.5
Sound power level (measured in anechoic room) *4		dB <A>	83/86	84/87
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PUHY-EP350YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	270	270	270
		L/s	4,500	4,500	4,500	4,500
		cfm	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	7.7	7.7	9.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	282 (622)	282 (622)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP800YSNW-A1 (-BS)	PUHY-EP850YSNW-A1 (-BS)	PUHY-EP900YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	90.0	96.0	101.0
		BTU / h	307,100	327,600	344,600
	Power input	kW	24.59	26.74	27.97
	Current input	A	41.5-39.4-38.0	45.1-42.8-41.3	47.2-44.8-43.2
	EER	kW / kW	3.66	3.59	3.61
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	100.0	108.0	113.0
		BTU / h	341,200	368,500	385,600
	Power input	kW	27.10	29.50	31.30
	Current input	A	45.7-43.4-41.8	49.8-47.3-45.6	52.8-50.1-48.3
	COP	kW / kW	3.69	3.66	3.61
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	67.5/70.5	68.5/71.0	68.5/72.5
Sound power level (measured in anechoic room) *4		dB <A>	85/89	86/89	87/91
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-EP350YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	305	270	305	305	305
		L/s	4,500	5,083	4,500	5,083	5,083	5,083
		cfm	9,534	10,770	9,534	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	11.1	9.8	11.1	11.1	11.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection		Over-current protection	
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	282 (622)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP950YSNW-A1 (-BS)	PUHY-EP1000YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	108.0	113.0
		BTU / h	368,500	385,600
	Power input	kW	28.34	30.21
	Current input	A	47.8-45.4-43.8	50.9-48.4-46.6
	EER	kW / kW	3.81	3.74
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	119.5	127.0
		BTU / h	407,700	433,300
	Power input	kW	30.32	32.56
	Current input	A	51.1-48.6-46.8	54.9-52.2-50.3
	COP	kW / kW	3.94	3.90
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	66.0/67.5	68.0/68.5
Sound power level (measured in anechoic room) *4		dB <A>	84/87	85/87
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-EP250YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP250YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	185	270	270	185	270	270
		L/s	3,083	4,500	4,500	3,083	4,500	4,500
		cfm	6,532	9,534	9,534	6,532	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.92 x 1	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.1	7.7	7.7	5.1	7.7	9.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	228 (503)	282 (622)	282 (622)	228 (503)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP1050YSNW-A1 (-BS)	PUHY-EP1100YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	118.0	124.0
		BTU / h	402,600	423,100
	Power input	kW	32.06	33.78
	Current input	A	54.1-51.4-49.5	57.0-54.1-52.2
	EER	kW / kW	3.68	3.67
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	132.0	140.0
		BTU / h	450,400	477,700
	Power input	kW	34.19	37.13
	Current input	A	57.7-54.8-52.8	62.6-59.5-57.3
	COP	kW / kW	3.86	3.77
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.5/69.0	68.5/69.0
Sound power level (measured in anechoic room) *4		dB <A>	86/88	86/88
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-EP250YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP350YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	185	270	270	270	270	270
		L/s	3,083	4,500	4,500	4,500	4,500	4,500
		cfm	6,532	9,534	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.1	9.8	9.8	7.7	7.7	9.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 6.5 kg (15 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	228(503)	303 (668)	303 (668)	282 (622)	282 (622)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP1150YSNW-A1 (-BS)	PUHY-EP1200YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	130.0	136.0
		BTU / h	443,600	464,000
	Power input	kW	35.91	38.09
	Current input	A	60.6-57.5-55.5	64.3-61.0-58.8
	EER	kW / kW	3.62	3.57
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	145.0	150.0
		BTU / h	494,700	511,800
	Power input	kW	38.77	40.43
	Current input	A	65.4-62.1-59.9	68.2-64.8-62.4
	COP	kW / kW	3.74	3.71
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	69.0/69.5	70.0/70.5
Sound power level (measured in anechoic room) *4		dB <A>	86/88	87/89
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-EP350YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	270	270	270	270	270
		L/s	4,500	4,500	4,500	4,500	4,500	4,500
		cfm	9,534	9,534	9,534	9,534	9,534	9,534
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	9.8	9.8	9.8	9.8	9.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 9.8 kg (22 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	282 (622)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP1250YSNW-A1 (-BS)	PUHY-EP1300YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	140.0	146.0
		BTU / h	477,700	498,200
	Power input	kW	38.99	40.55
	Current input	A	65.8-62.5-60.2	68.4-65.0-62.6
	EER	kW / kW	3.59	3.60
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	156.5	163.0
		BTU / h	534,000	556,200
	Power input	kW	42.52	44.78
	Current input	A	71.7-68.1-65.7	75.5-71.8-69.2
	COP	kW / kW	3.68	3.64
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	70.0/72.0	70.0/73.5
Sound power level (measured in anechoic room) *4		dB <A>	88/91	88/92
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PUHY-EP400YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP400YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	270	270	305	270	305	305
		L/s	4,500	4,500	5,083	4,500	5,083	5,083
		cfm	9,534	9,534	10,770	9,534	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	9.8	9.8	11.1	9.8	11.1	11.1
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection			Over-current protection		
	Compressor		–	–	–	–	–	–
	Fan motor		–	–	–	–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O). Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Y-Series High efficiency

PUHY-EP YSNW-A1(-BS) NEW

Model			PUHY-EP1350YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	150.0
		BTU / h	511,800
	Power input	kW	41.55
	Current input	A	70.1-66.6-64.2
	EER	kW / kW	3.61
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	168.0
		BTU / h	573,200
	Power input	kW	46.53
	Current input	A	78.5-74.6-71.9
	COP	kW / kW	3.61
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	70.5/74.5
Sound power level (measured in anechoic room) *4		dB <A>	89/93
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PUHY-EP450YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)	PUHY-EP450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	305	305	305
		L/s	5,083	5,083	5,083
		cfm	10,770	10,770	10,770
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	11.1	11.1	11.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	303 (668)	303 (668)	303 (668)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Optional parts

• For Y-Series

Description	Model	Remarks
Panel heater kit *1	PAC-PH01EHY-E	For S module
	PAC-PH02EHY-E	For L module
	PAC-PH03EHY-E	For XL module
Twinning kit	CMY-Y100VBK3	For PUHY-(E)P400-(E)P650YSNW-A1
	CMY-Y200VBK2	For PUHY-(E)P700-(E)P900YSNW-A1
	CMY-Y300VBK3	For PUHY-(E)P950-(E)P1350YSNW-A1
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below(Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400(Total capacity of indoor unit)
	CMY-Y202S-G2	401-650(Total capacity of indoor unit)
	CMY-Y302S-G2	651-above(Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Fin Guard	PAC-FG01S-E	For side surfaces of S and L modules (a set of two pieces)
	PAC-FG02S-E	For side surfaces of XL modules (a set of two pieces)
	PAC-FG01B-E	For rear surface of S module
	PAC-FG02B-E	For rear surface of L module (a set of two pieces)
	PAC-FG03B-E	For rear surface of XL module (a set of two pieces)

*1. If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a panel heater is recommended.
For details, refer to the installation manual for the panel heater.

R2-Series Standard

PURY-P YNW-A1(-BS) NEW

Model			PURY-P200YNW-A1 (-BS)	PURY-P250YNW-A1 (-BS)	PURY-P300YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.62	7.46	9.15
	Current input	A	9.4-9.0-8.6	12.5-11.9-11.5	15.4-14.6-14.1
	EER	kW / kW	3.98	3.75	3.66
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	5.98	7.68	9.97
	Current input	A	10.0-9.5-9.2	12.9-12.3-11.8	16.8-15.9-15.4
	COP	kW / kW	4.18	4.10	3.76
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150%	50~150%
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	59.0/59.0	60.5/61.0	61.0/67.0
Sound power level (measured in anechoic room) *4		dB <A>	76/78	78/80	80/86
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.7	5.5	7.3
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	219 (483)	228 (503)	232 (512)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*Fin guards (four side) equipped as standard for PURY-P YNW-A1(-BS).

R2-Series Standard

PURY-P YNW-A1(-BS) NEW

Model			PURY-P350YNW-A1 (-BS)	PURY-P400YNW-A1 (-BS)	PURY-P450YNW-A1 (-BS)	PURY-P500YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
	Power input	kW	10.86	12.93	14.92	16.23
	Current input	A	18.3-17.4-16.7	21.8-20.7-19.9	25.1-23.9-23.0	27.3-26.0-25.0
	EER	kW / kW	3.68	3.48	3.35	3.45
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	45.0	50.0	56.0	63.0
		BTU / h	153,500	170,600	191,100	215,000
	Power input	kW	11.50	13.92	16.47	16.23
	Current input	A	19.4-18.4-17.7	23.4-22.3-21.5	27.8-26.4-25.4	27.3-26.0-25.0
	COP	kW / kW	3.91	3.59	3.40	3.88
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150%	50~150%	50~150%
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.5/64.0	65 .0/69.0	65.5/70.0	63.5/64.5
Sound power level (measured in anechoic room) *4		dB <A>	81/83	83/88	83/89	82/84
Refrigerant piping diameter	High pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	250	315	315	295
		L/s	4,167	5,250	5,250	4,917
		cfm	8,828	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.7	11.7	12.4	14.2
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	296 (653)	340 (750)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*Fin guards (four side) equipped as standard for PURY-P YNW-A1(-BS).

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P400YSNW-A1 (-BS)	PURY-P450YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	45.0	50.0
		BTU / h	153,500	170,600
	Power input	kW	11.65	13.33
	Current input	A	19.6-18.6-18.0	22.5-21.3-20.6
	EER	kW / kW	3.86	3.75
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	50.0	56.0
		BTU / h	170,600	191,100
	Power input	kW	12.34	13.93
	Current input	A	20.8-19.7-19.0	23.5-22.3-21.5
	COP	kW / kW	4.05	4.02
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.0/62.0	63.0/63.5
Sound power level (measured in anechoic room) *4		dB <A>	79/81	81/83
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P200YNW-A1 (-BS)	PURY-P200YNW-A1 (-BS)	PURY-P200YNW-A1 (-BS)	PURY-P250YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.7	3.7	3.7	5.5
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	219 (483)	219 (483)	219 (483)	228 (503)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P500YSNW-A1 (-BS)	PURY-P550YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	56.0	63.0
		BTU / h	191,100	215,000
	Power input	kW	15.38	17.54
	Current input	A	25.9-24.6-23.7	29.6-28.1-27.1
	EER	kW / kW	3.64	3.59
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	63.0	69.0
		BTU / h	215,000	235,400
	Power input	kW	15.82	18.11
	Current input	A	26.7-25.3-24.4	30.5-29.0-27.9
	COP	kW / kW	3.98	3.81
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/1~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	63.5/64.0	64.0/68.0
Sound power level (measured in anechoic room) *4		dB <A>	81/83	83/87
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P250YNW-A1 (-BS)	PURY-P250YNW-A1 (-BS)	PURY-P250YNW-A1 (-BS)	PURY-P300YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	7.3
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	228 (503)	228 (503)	228 (503)	232 (512)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*When the high pressure piping length is 65 m or less, use 7/8 (22.2) pipe. When the high pressure piping length exceeds 65 m, use 7/8 (22.2) pipe until 65 m, use 1-1/8 (28.58) pipe for the part that exceeds 65 m. (Only PURY-P550YSNW-A (-BS))

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P600YSNW-A1 (-BS)	PURY-P650YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	69.0	73.0
		BTU / h	235,400	249,100
	Power input	kW	19.43	20.50
	Current input	A	32.8-31.1-30.0	34.6-32.8-31.6
	EER	kW / kW	3.55	3.56
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	76.5	81.5
		BTU / h	261,000	278,100
	Power input	kW	20.95	21.90
	Current input	A	35.3-33.5-32.3	36.9-35.1-33.8
	COP	kW / kW	3.65	3.72
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	64.0/70.0	65.0/69.0
Sound power level (measured in anechoic room) *4		dB <A>	83/89	84/88
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-P300YNW-A1 (-BS)	PURY-P300YNW-A1 (-BS)	PURY-P300YNW-A1 (-BS)	PURY-P350YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	240	240	240	250
		L/s	4,000	4,000	4,000	4,167
		cfm	8,474	8,474	8,474	8,828
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.3	7.3	7.3	8.7
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	232 (512)	232 (512)	232 (512)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*When the high pressure piping length is 65 m or less, use 7/8 (22.2) pipe. When the high pressure piping length exceeds 65 m, use 7/8 (22.2) pipe until 65 m, use 1-1/8 (28.58) pipe for the part that exceeds 65 m. (Only PURY-P600YSNW-A (-BS))

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P700YSNW-A1 (-BS)	PURY-P750YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	80.0	85.0
		BTU / h	273,000	290,000
	Power input	kW	22.47	24.56
	Current input	A	37.9-36.0-34.7	41.4-39.3-37.9
	EER	kW / kW	3.56	3.46
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	88.0	95.0
		BTU / h	300,300	324,100
	Power input	kW	23.21	26.09
	Current input	A	39.1-37.2-35.8	44.0-41.8-40.3
	COP	kW / kW	3.79	3.64
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	65.5/67.0	67.0/70.5
Sound power level (measured in anechoic room) *4		dB <A>	84/86	86/90
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PURY-P350YNW-A1 (-BS)	PURY-P350YNW-A1 (-BS)	PURY-P350YNW-A1 (-BS)	PURY-P400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	250	250	250	315
		L/s	4,167	4,167	4,167	5,250
		cfm	8,828	8,828	8,828	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.7	8.7	8.7	11.7
	Case heater	kW	–	–	—	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	277 (611)	277 (611)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P800YSNW-A1 (-BS)	PURY-P850YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	90.0	96.0
		BTU / h	307,100	327,600
	Power input	kW	26.62	29.00
	Current input	A	44.9-42.6-41.1	48.9-46.5-44.8
	EER	kW / kW	3.38	3.31
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	100.0	108.0
		BTU / h	341,200	368,500
	Power input	kW	28.73	31.85
	Current input	A	48.5-46.0-44.4	53.7-51.0-49.2
	COP	kW / kW	3.48	3.39
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.0/72.0	68.5/72.5
Sound power level (measured in anechoic room) *4		dB <A>	86/91	86/92
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-P400YNW-A1 (-BS)	PURY-P400YNW-A1 (-BS)	PURY-P400YNW-A1 (-BS)	PURY-P450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	315	315	315	315
		L/s	5,250	5,250	5,250	5,250
		cfm	11,123	11,123	11,123	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.7	11.7	11.7	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	277 (611)	277 (611)	277 (611)	296 (653)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P900YSNW-A1 (-BS)	PURY-P950YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	101.0	108.0
		BTU / h	344,600	368,500
	Power input	kW	31.07	33.23
	Current input	A	52.4-49.8-48.0	56.0-53.2-51.3
	EER	kW / kW	3.25	3.25
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	113.0	119.5
		BTU / h	385,600	407,700
	Power input	kW	34.24	33.85
	Current input	A	57.8-54.9-52.9	57.1-54.2-52.3
	COP	kW / kW	3.30	3.53
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.5/73.0	68.0/71.5
Sound power level (measured in anechoic room) *4		dB <A>	86/92	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-P450YNW-A1 (-BS)	PURY-P450YNW-A1 (-BS)	PURY-P450YNW-A1 (-BS)	PURY-P500YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	315	315	315	295
		L/s	5,250	5,250	5,250	4,917
		cfm	11,123	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4	12.4	14.2
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	296 (653)	296 (653)	296 (653)	340 (750)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P1000YSNW-A1 (-BS)	PURY-P1050YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	113.0	118.0
		BTU / h	385,600	402,600
	Power input	kW	33.73	39.73
	Current input	A	56.9-54.0-52.1	67.0-63.7-61.4
	EER	kW / kW	3.35	2.97
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	127.0	132.0
		BTU / h	433,300	450,400
	Power input	kW	33.77	39.52
	Current input	A	57.0-54.1-52.2	66.7-63.3-61.0
	COP	kW / kW	3.76	3.34
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	66.5/67.5	68.0/73.0
Sound power level (measured in anechoic room) *4		dB <A>	85/87	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-P500YNW-A1 (-BS)	PURY-P500YNW-A1 (-BS)	PURY-P500YNW-A1 (-BS)	PURY-P550YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	295	295	295	410
		L/s	4,917	4,917	4,917	6,833
		cfm	10,416	10,416	10,416	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	14.2	14.2	14.2	17.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	340 (750)	340 (750)	340 (750)	340 (750)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series Standard

PURY-P YSNW-A1(-BS) NEW

Model			PURY-P1100YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	124.0
		BTU / h	423,100
	Power input	kW	47.69
	Current input	A	80.5-76.4-73.7
	EER	kW / kW	2.60
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	140.0
		BTU / h	477,700
	Power input	kW	47.94
	Current input	A	80.9-76.8-74.1
	COP	kW / kW	2.92
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	69.0/73.0
Sound power level (measured in anechoic room) *4		dB <A>	86/92
Refrigerant piping diameter	High pressure	mm (in.)	34.93 (1-3/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PURY-P550YNW-A1 (-BS)	PURY-P550YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	410	410
		L/s	6,833	6,833
		cfm	14,477	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter
	Motor output	kW	17.4	17.4
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection	
	Compressor		–	–
	Fan motor		–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	340 (750)	340 (750)
Heat exchanger			Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YNW-A1(-BS) NEW

Model			PURY-EP200YNW-A1 (-BS)	PURY-EP250YNW-A1 (-BS)	PURY-EP300YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	22.4	28.0	33.5
		BTU / h	76,400	95,500	114,300
	Power input	kW	5.38	7.00	8.98
	Current input	A	9.0-8.6-8.3	11.8-11.2-10.8	15.1-14.4-13.8
	EER	kW / kW	4.16	4.00	3.73
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	25.0	31.5	37.5
		BTU / h	85,300	107,500	128,000
	Power input	kW	5.88	7.59	9.94
	Current input	A	9.9-9.4-9.0	12.8-12.1-11.7	16.7-15.9-15.3
	COP	kW / kW	4.25	4.15	3.77
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150%	50~150%
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	59.0/59.0	60.5/61.0	61.0/67.0
Sound power level (measured in anechoic room) *4		dB <A>	76/78	78/80	80/86
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	185	240
		L/s	2,833	3,083	4,000
		cfm	6,003	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	3.6	5.5	7.3
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–
	Fan motor		–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	219 (483)	228 (503)	230 (508)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YNW-A1(-BS) NEW

Model			PURY-EP350YNW-A1 (-BS)	PURY-EP400YNW-A1 (-BS)	PURY-EP450YNW-A1 (-BS)	PURY-EP500YNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	40.0	45.0	50.0	56.0
		BTU / h	136,500	153,500	170,600	191,100
	Power input	kW	10.49	12.82	13.55	16.09
	Current input	A	17.7-16.8-16.2	21.6-20.5-19.8	22.8-21.7-20.9	27.1-25.8-24.8
	EER	kW / kW	3.81	3.51	3.69	3.48
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	45.0	50.0	56.0	63.0
		BTU / h	153,500	170,600	191,100	215,000
	Power input	kW	11.59	13.26	15.86	15.14
	Current input	A	19.5-18.5-17.9	22.3-21.2-20.4	26.7-25.4-24.5	25.5-24.2-23.4
	COP	kW / kW	3.88	3.77	3.53	4.16
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150%	50~150%	50~150%	50~150%
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.5/64.0	65.0/69.0	65.5/70.0	63.5/64.5
Sound power level (measured in anechoic room) *4		dB <A>	81/83	83/88	83/89	82/84
Refrigerant piping diameter	High pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	250	315	315	295
		L/s	4,167	5,250	5,250	4,917
		cfm	8,828	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.7	10.8	11.7	13.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection	Over-current protection
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	275 (607)	276 (609)	301 (664)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP400YSNW-A1 (-BS)	PURY-EP450YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	45.0	50.0
		BTU / h	153,500	170,600
	Power input	kW	11.13	12.62
	Current input	A	18.7-17.8-17.2	21.3-20.2-19.5
	EER	kW / kW	4.04	3.96
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	50.0	56.0
		BTU / h	170,600	191,100
	Power input	kW	12.13	13.75
	Current input	A	20.4-19.4-18.7	23.2-22.0-21.2
	COP	kW / kW	4.12	4.07
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	62.0/62.0	63.0/63.5
Sound power level (measured in anechoic room) *4		dB <A>	79/81	81/83
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-EP200YNW-A1 (-BS)	PURY-EP200YNW-A1 (-BS)	PURY-EP200YNW-A1 (-BS)	PURY-EP250YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	170	170	170	185
		L/s	2,833	2,833	2,833	3,083
		cfm	6,003	6,003	6,003	6,532
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	3.6	3.6	3.6	5.5
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	219 (483)	219 (483)	219 (483)	228 (503)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP500YSNW-A1 (-BS)	PURY-EP550YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	56.0	63.0
		BTU / h	191,100	215,000
	Power input	kW	14.43	16.80
	Current input	A	24.3-23.1-22.3	28.3-26.9-25.9
	EER	kW / kW	3.88	3.75
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	63.0	69.0
		BTU / h	215,000	235,400
	Power input	kW	15.63	17.96
	Current input	A	26.3-25.0-24.1	30.3-28.8-27.7
	COP	kW / kW	4.03	3.84
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/1~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	63.5/64.0	64.0/68.0
Sound power level (measured in anechoic room) *4		dB <A>	81/83	83/87
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-EP250YNW-A1 (-BS)	PURY-EP250YNW-A1 (-BS)	PURY-EP250YNW-A1 (-BS)	PURY-EP300YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	185	185	240
		L/s	3,083	3,083	3,083	4,000
		cfm	6,532	6,532	6,532	8,474
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	7.3
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)
Net weight		kg (lbs)	228 (503)	228 (503)	228 (503)	230 (508)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*When the high pressure piping length is 65 m or less, use 7/8 (22.2) pipe. When the high pressure piping length exceeds 65 m, use 7/8 (22.2) pipe until 65 m, use 1-1/8 (28.58) pipe for the part that exceeds 65 m. (Only PURY-EP550YSNW-A (-BS))

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP600YSNW-A1 (-BS)	PURY-EP650YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	69.0	73.0
		BTU / h	235,400	249,100
	Power input	kW	19.06	19.94
	Current input	A	32.1-30.5-29.4	33.6-31.9-30.8
	EER	kW / kW	3.62	3.66
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	76.5	81.5
		BTU / h	261,000	278,100
	Power input	kW	20.90	21.96
	Current input	A	35.2-33.5-32.3	37.0-35.2-33.9
	COP	kW / kW	3.66	3.71
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	64.0/70.0	65.0/69.0
Sound power level (measured in anechoic room) *4		dB <A>	83/89	84/88
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PURY-EP300YNW-A1 (-BS)	PURY-EP300YNW-A1 (-BS)	PURY-EP300YNW-A1 (-BS)	PURY-EP350YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	240	240	240	250
		L/s	4,000	4,000	4,000	4,167
		cfm	8,474	8,474	8,474	8,828
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.3	7.3	7.3	8.7
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 920 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 5.2 kg (12 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	230 (508)	230 (508)	230 (508)	275 (607)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R100VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.
*When the high pressure piping length is 65 m or less, use 7/8 (22.2) pipe. When the high pressure piping length exceeds 65 m, use 7/8 (22.2) pipe until 65 m, use 1-1/8 (28.58) pipe for the part that exceeds 65 m. (Only PURY-EP600YSNW-A (-BS))

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP700YSNW-A1 (-BS)	PURY-EP750YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	80.0	85.0
		BTU / h	273,000	290,000
	Power input	kW	21.62	23.94
	Current input	A	36.4-34.6-33.4	40.4-38.3-37.0
	EER	kW / kW	3.70	3.55
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	88.0	95.0
		BTU / h	300,300	324,100
	Power input	kW	23.40	25.60
	Current input	A	39.5-37.5-36.1	43.2-41.0-39.5
	COP	kW / kW	3.76	3.71
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	65.5/67.0	67.0/70.5
Sound power level (measured in anechoic room) *4		dB <A>	84/86	86/90
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PURY-EP350YNW-A1 (-BS)	PURY-EP350YNW-A1 (-BS)	PURY-EP350YNW-A1 (-BS)	PURY-EP400YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	250	250	250	315
		L/s	4,167	4,167	4,167	5,250
		cfm	8,828	8,828	8,828	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.7	8.7	8.7	10.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	275 (607)	275 (607)	275 (607)	276 (609)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP800YSNW-A1 (-BS)	PURY-EP850YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	90.0	96.0
		BTU / h	307,100	327,600
	Power input	kW	26.47	27.50
	Current input	A	44.6-42.4-40.9	46.4-44.1-42.5
	EER	kW / kW	3.40	3.49
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	100.0	108.0
		BTU / h	341,200	368,500
	Power input	kW	27.32	30.50
	Current input	A	46.1-43.8-42.2	51.4-48.9-47.1
	COP	kW / kW	3.66	3.54
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.0/72.0	68.5/72.5
Sound power level (measured in anechoic room) *4		dB <A>	86/91	86/92
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-EP400YNW-A1 (-BS)	PURY-EP400YNW-A1 (-BS)	PURY-EP400YNW-A1 (-BS)	PURY-EP450YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	315	315	315	315
		L/s	5,250	5,250	5,250	5,250
		cfm	11,123	11,123	11,123	11,123
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.46 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	10.8	10.8	11.7
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	276 (609)	276 (609)	276 (609)	301 (664)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP900YSNW-A1 (-BS)	PURY-EP950YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	101.0	108.0
		BTU / h	344,600	368,500
	Power input	kW	28.21	30.16
	Current input	A	47.6-45.2-43.6	50.9-48.3-46.6
	EER	kW / kW	3.58	3.58
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	113.0	119.5
		BTU / h	385,600	407,700
	Power input	kW	33.04	32.03
	Current input	A	55.7-52.9-51.0	54.0-51.3-49.5
	COP	kW / kW	3.42	3.73
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	68.5/73.0	68.0/71.5
Sound power level (measured in anechoic room) *4		dB <A>	86/92	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-EP450YNW-A1 (-BS)	PURY-EP450YNW-A1 (-BS)	PURY-EP450YNW-A1 (-BS)	PURY-EP500YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	315	315	315	295
		L/s	5,250	5,250	5,250	4,917
		cfm	11,123	11,123	11,123	10,416
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.7	11.7	11.7	13.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	301 (664)	301 (664)	301 (664)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP1000YSNW-A1 (-BS)	PURY-EP1050YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	113.0	118.0
		BTU / h	385,600	402,600
	Power input	kW	33.43	37.57
	Current input	A	56.4-53.6-51.6	63.4-60.2-58.0
	EER	kW / kW	3.38	3.14
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	127.0	132.0
		BTU / h	433,300	450,400
	Power input	kW	31.43	37.28
	Current input	A	53.0-50.4-48.5	62.9-59.7-57.6
	COP	kW / kW	4.04	3.54
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	66.5/67.5	68.0/73.0
Sound power level (measured in anechoic room) 4		dB <A>	85/87	86/91
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PURY-EP500YNW-A1 (-BS)	PURY-EP500YNW-A1 (-BS)	PURY-EP500YNW-A1 (-BS)	PURY-EP550YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	295	295	295	410
		L/s	4,917	4,917	4,917	6,833
		cfm	10,416	10,416	10,416	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	13.8	13.8	13.8	17.2
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		–	–	–	–
	Fan motor		–	–	–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	346 (763)	346 (763)	346 (763)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1		Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

R2-Series High efficiency

PURY-EP YSNW-A1(-BS) NEW

Model			PURY-EP1100YSNW-A1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity *1,*3		kW	124.0
		BTU / h	423,100
	Power input	kW	42.75
	Current input	A	72.1-68.5-66.0
	EER	kW / kW	2.90
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity *2,*3		kW	140.0
		BTU / h	477,700
	Power input	kW	46.05
	Current input	A	77.7-73.8-71.1
	COP	kW / kW	3.04
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity
	Model / Quantity		P10~P250/3~50
Sound pressure level (measured in anechoic room) *4,*5		dB <A>	69.0/73.0
Sound power level (measured in anechoic room) 4		dB <A>	86/92
Refrigerant piping diameter	High pressure	mm (in.)	34.93 (1-3/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PURY-EP550YNW-A1 (-BS)	PURY-EP550YNW-A1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	410	410
		L/s	6,833	6,833
		cfm	14,477	14,477
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Starting method		Inverter	Inverter
	Motor output	kW	17.2	17.2
	Case heater	kW	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD		mm	1,858 (1,798 without legs) x 1,750 x 740	1,858 (1,798 without legs) x 1,750 x 740
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		–	–
	Fan motor		–	–
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)	R410A x 10.8 kg (24 lbs)
Net weight		kg (lbs)	346 (763)	346 (763)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1	Outdoor Twinning kit: CMY-R200VBK4 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1

Notes:

*1,*2 Nominal conditions (subject to JIS B8615-1,-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 In case of connecting PLFY-P**VEM type indoor unit
*4 Cooling mode / Heating mode
*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH_2O, 6.1 mmH_2O, 8.2 mmH_2O).
Consult your dealer about the specification when setting External static pressure option.
*Due to continuing improvement, above specifications may be subject to change without notice.

Optional parts

• For R2-Series

Description		Model	Remarks
Panel heater kit *1		PAC-PH01EHY-E	For S module
		PAC-PH02EHY-E	For L module
		PAC-PH03EHY-E	For XL module
Twinning kit		CMY-R100VBK4	For PURY-(E)P400-(E)P650YSNW-A1
		CMY-R200VBK4	For PURY-(E)P700-(E)P1100YSNW-A1
For BC controller	2-Branch Joint Pipe	CMY-Y102SS-G2	200 or below(Total capacity of indoor unit)
		CMY-Y102LS-G2	201-400(Total capacity of indoor unit)
	Joint and Reducer	CMY-R201S-G	350 or below(Total capacity of indoor unit)
		CMY-R202S-G	351-600(Total capacity of indoor unit)
		CMY-R203S-G	601-650(Total capacity of indoor unit)
		CMY-R204S-G	651-1000(Total capacity of indoor unit)
		CMY-R205S-G	1001 or above(Total capacity of indoor unit)
	Reducer	CMY-R301S-G	For CMB-M104,106,108,1012,1016V-J1 (When the outdoor unit capacity is P200 to P300)
		CMY-R302S-G	For CMB-M108,1012,1016V-JA1 (When the outdoor unit capacity is P200 to P900)
		CMY-R303S-G	For CMB-M108,1012,1016V-JA1 and for use with sub BC controller
		CMY-R304S-G	For CMB-P1016V-KA1 (When the outdoor unit capacity is P200 to P1000)
		CMY-R305S-G	For CMB-P1016V-KA1 and for use with sub BC controller
		CMY-R306S-G	For CMB-M104,108V-KB1
	Branch pipe (Header)	CMY-R160-J1	Joint for connecting to two nozzles
Fin Guard *2		PAC-FG01S-E	For side surfaces of S and L modules (a set of two pieces)
		PAC-FG02S-E	For side surfaces of XL modules (a set of two pieces)
		PAC-FG01B-E	For rear surface of S module
		PAC-FG02B-E	For rear surface of L module (a set of two pieces)
		PAC-FG03B-E	For rear surface of XL module (a set of two pieces)

*1. If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a panel heater is recommended.
For details, refer to the installation manual for the panel heater.
*2 For PURY-EP YNW-A1(-BS). Fin guards (four side) equipped as standard for PURY-P YNW-A1(-BS).

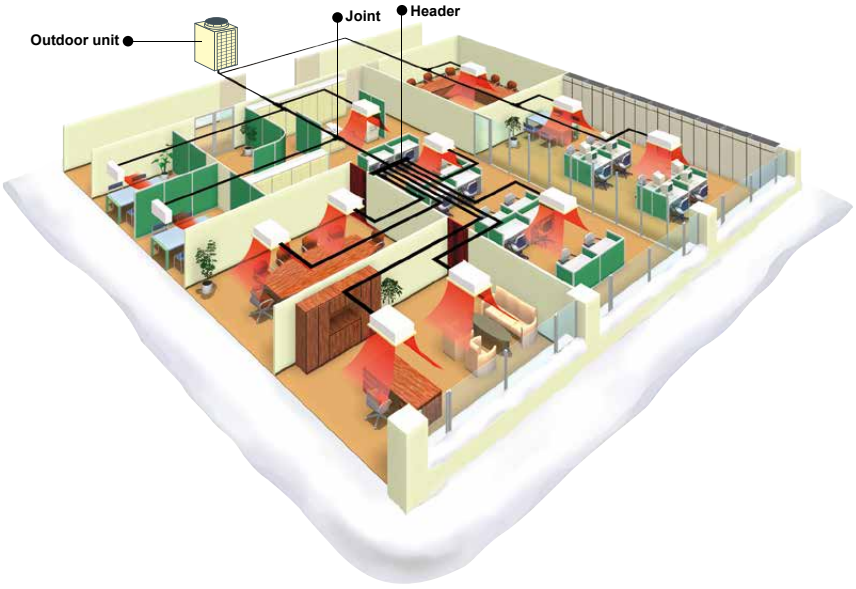
Heating or Cooling

ZUBADAN series — PUHY-HP YHM-A(-BS)
PUHY-HP YSHM-A(-BS)

Bringing year round comfort solutions to extreme climates

CITY MULTI ZUBADAN series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -25°C.
The technology behind this is a Flash Injection Circuit which provides the optimum amount of refrigerant to the system via a compressor through a specially designed injection port to ensure a particularly stable operation. With this, ZUBADAN can provide full heating performance even at -15°C and continuous heating for up to 250 minutes in one continuous cycle, ensuring phenomenal heating performance at low temperatures.

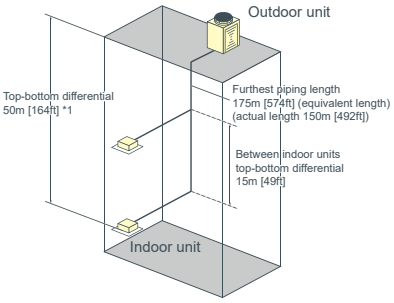
Installation image



System Pipe Lengths

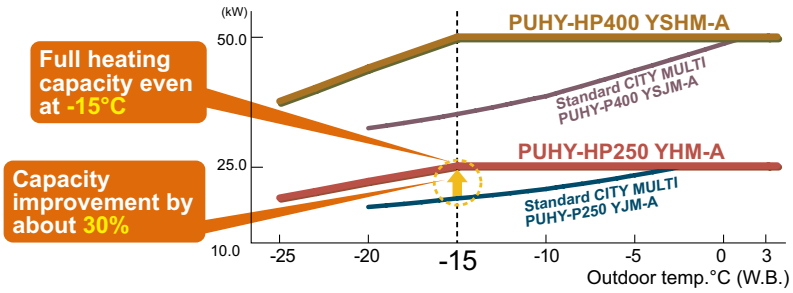
[8-10HP]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300 [984]
Maximum allowable length	150 (175equivalent) [492 (574)]
Farthest indoor from first branch	40 [131]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]



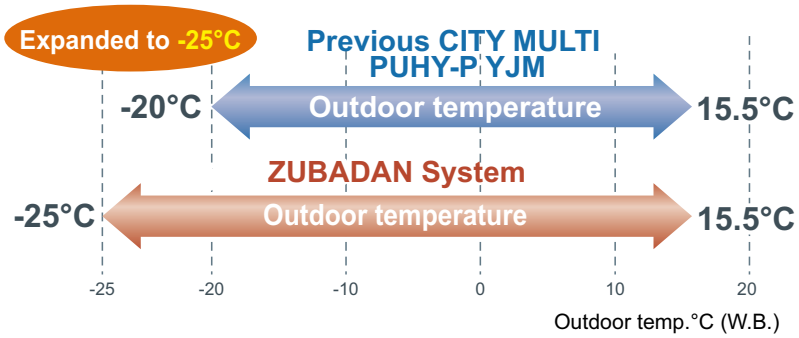
*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131 ft].

Stable Heating Performance Even at -15°C

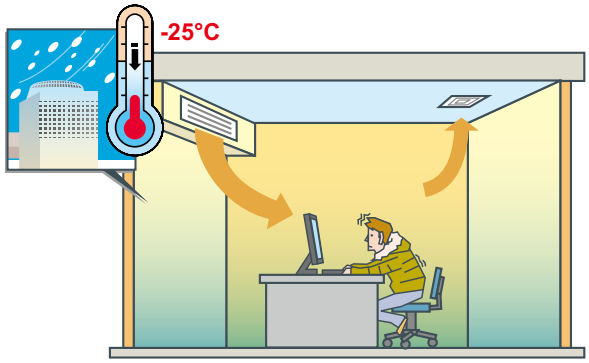


Using an industry first 'Flash-injection Circuit', the ZUBADAN System is able to provide FULL heating performance in ambient temperatures as low as -15°C.

Expanded Heating Operation Down to -25°C

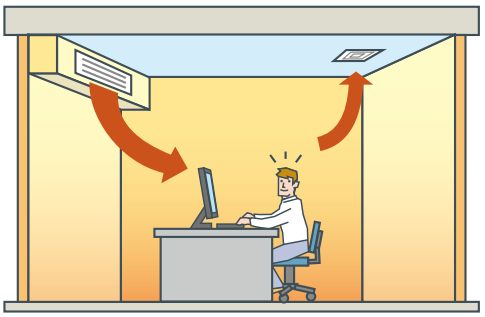


From a previous LOWEST operating ambient temperature of -20°C, the ZUBADAN System pushes the boundaries of technology to give heating in ambient temperatures as low as -25°C.



Previously, heating performance dropped off when the temperature fell below -20°C!

With ZUBADAN System



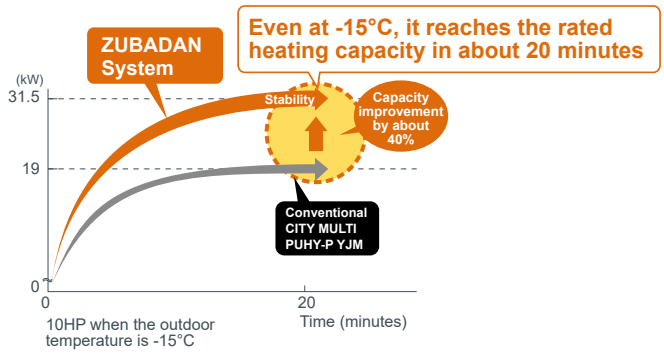
The new ZUBADAN System has no trouble keeping the occupants nice and warm at such temperatures.

High Static Pressure Setting

With our new ZUBADAN model, high static pressure setting up to 60Pa is available by setting the dip switch (0Pa at factory setting) making it an ideal and flexible solution for any type of application.

Shorter Warm-up in About 20 Minutes.

With its new improved startup performance, the ZUBADAN system achieves full heating capacity even when outdoor temperatures are as low as -15°C. Heating capacity, about 20 minutes after startup is improved by 40% compared to conventional models; ensuring occupants have an immediate comfortable air solution.



Heating capacity

Reliable and Long Product Life Cycle

Backup Function (HP400 and HP500 models)

The ZUBADAN system ensures an exceptionally high level of reliability by utilising a new backup function, which can be easily operated in the event of a malfunction from an indoor unit remote controller.

Rotation Function (HP400 and HP500 models)

Running outdoor units alternately using its newly developed 'Rotation Function', the system is able to ensure an optimum product life cycle for both of its component units.

Maximum Stable Operation

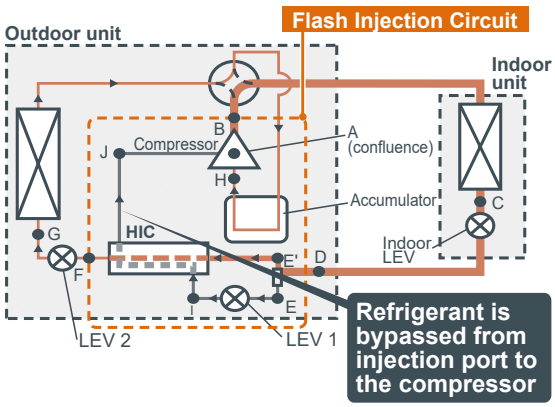
By utilising our advanced Flash Injection Circuit, the system can not only provide continuous heating for up to 250 minutes in one continuous cycle, but also significantly lessens defrost time to give exceptionally stable heating operation.

Heating up to 250 min. straight

Reduced Defrosting time

Startup Comfort

One of the key factors of the units' newly designed Flash Injection Circuit is that the optimal amount of refrigerant can be provided to the system via the compressor through a specially designed injection port to ensure particularly stable operation. In simple terms, the system allows a quick startup time and continuous heating; even in low ambient conditions.

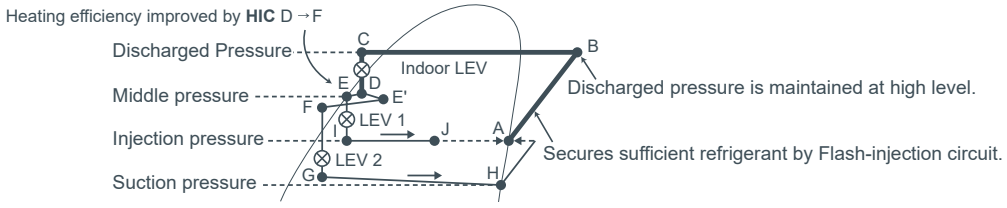


Note: **Heat Interchange Circuit (HIC)**
Heating efficiency is improved by enhancing the recollection of heat at the outdoor unit with the low temperature refrigerant from the HIC.

Constant Comfort

With its new highly effective defrost feature (which prevents automatic defrosting when it is not required), the ZUBADAN System can deliver conditioned heating operation for up to 250 minutes in one continuous cycle!

Heating capacity is maintained by the Flash-injection circuit.



[Pressure Enthalpy diagram showing HIC]

OUTDOOR UNIT
ZUBADAN (Heat Pump) Series(Y)
PUHY-HP Y(S)HM-A(-BS)

▸Specifications

Set name			PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP400YSHM-A(-BS)		PUHY-HP500YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1	kW	22.4	28.0	45.0		56.0	
	*1	BTU/h	76,400	95,500	153,500		191,100	
	Power input	kW	6.40	9.06	12.86		18.16	
	Current input	A	10.8-10.2-9.8	15.2-14.5-14.0	21.7-20.6-19.8		30.6-29.1-28.0	
	COP	kW/kW	3.50	3.09	3.49		3.08	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)					
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)					
Heating capacity (Nominal)	*2	kW	25.0	31.5	50.0		63.0	
	*2	BTU/h	85,300	107,500	170,600		215,000	
	Power input	kW	6.52	8.94	13.35		18.04	
	Current input	A	11.0-10.4-10.0	15.0-14.3-13.8	22.5-21.4-20.6		30.4-28.9-27.8	
	COP	kW/kW	3.83	3.52	3.74		3.49	
Temp. range of heating	Indoor	D.B.	15 ~ 27°C (59 ~ 81°F)					
	Outdoor	W.B.	-25 ~ 15.5°C (-13 ~ 60°F)					
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 1~17	P15 ~ P250 / 1 ~ 21	P15 ~ P250 / 1 ~ 34		P15 ~ P250 / 1 ~ 43	
Sound pressure level (measured in anechoic room)		dB<A>	56	57	59		60	
Diameter of refrigerant pipe	Liquid pipe	mm(in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas pipe	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			-		PUHY-HP200YHM-A(-BS)	PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP250YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D		mm	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760
		in.	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16
Net weight		kg(lbs)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			
	Starting method		Inverter		Inverter			
	Motor output	kW	5.3	6.7	5.3	5.3	6.7	6.7
FAN	*3 Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection		Over-heat protection			
Refrigerant	Type x Original charge		R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)
Pipe between unit distributor	Liquid pipe	mm(in.)	-	-	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas pipe	mm(in.)	-	-	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed
Optional parts			Joint : CMY-Y102SS-G2 Header : CMY-Y104/108/1010-G		Outdoor Twinning kit : CMY-Y100VBK2 Joint : CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header : CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

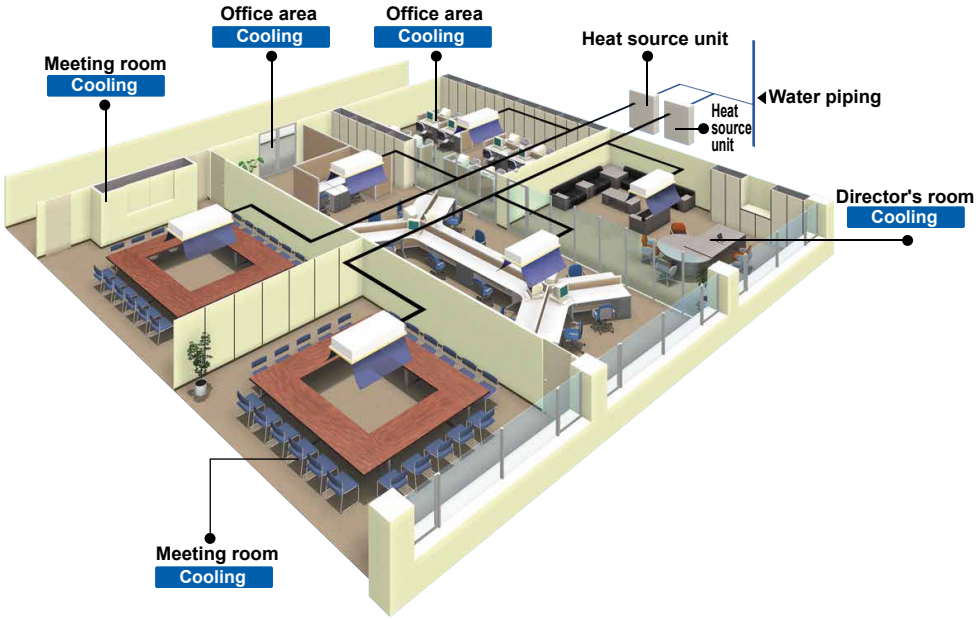
Cooling or Heating Heat pump

Inverter IPM PWM HIC IH warmer Low noise SCO Dual ET control High SHF Demand control Pump down Individual LEV

A water energy source system that allows switching between cooling and heating

The CITY MULTI WY-Series provides all the benefits of the Y-Series using water-cooled heat source units.
Heat source units can be situated indoors for greater design flexibility with no limitations on building size. Depending on capacity, up to 50 indoor units can be connected to a single heat source unit with individualized and/or centralized control. The two-pipe system allows all CITY MULTI units to switch between cooling and heating while maintaining a constant indoor temperature.

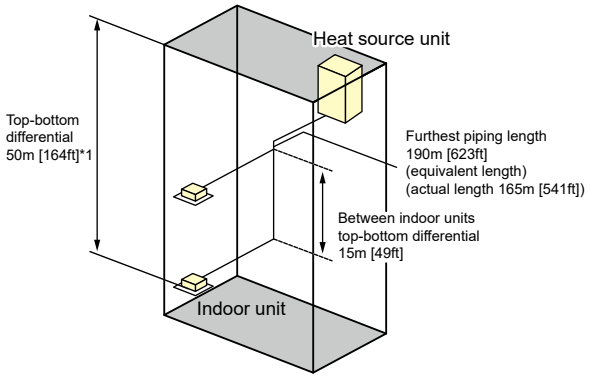
• Installation image (WY-Series)



• System pipe lengths [P200-P900]

Refrigerant piping lengths	Maximum meters [Feet]
Total length	300-500 [984-1640]
Maximum allowable length	165 (190 equivalent) [541(623)]
Furthest indoor unit from first branch	40 [131]*2

Vertical differentials between units	Maximum meters [Feet]
Indoor/heat source (heat source higher)	50 [164]
Indoor/heat source (heat source lower)	40 [131]
Indoor/indoor	15 [49]



*1 When the heat source unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*2 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.

WR2-Series

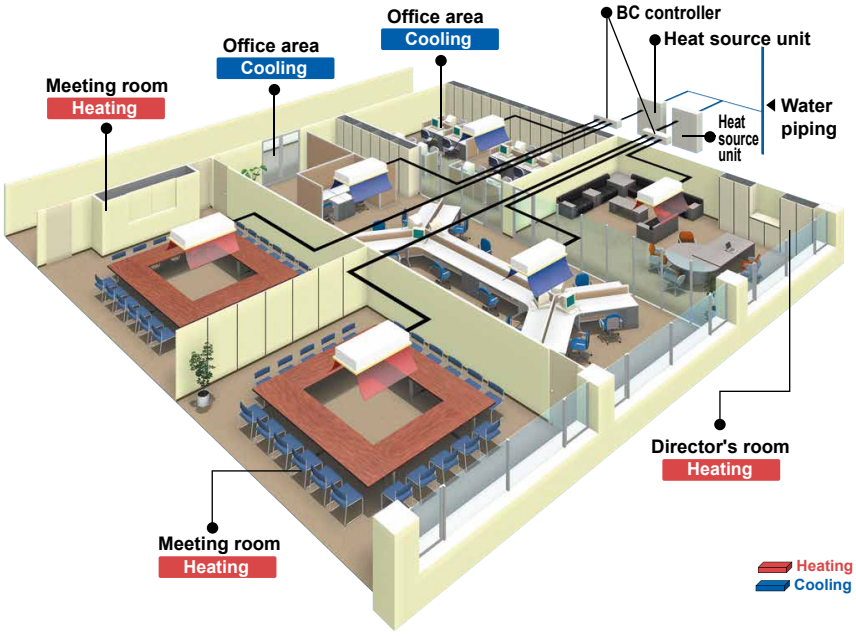
Simultaneous Cooling and Heating Heat recovery

Inverter | IPM | PWM | HIC | IH warmer | Low noise | Dual | ET control | High SHF | Demand control | Pump down | Individual LEV

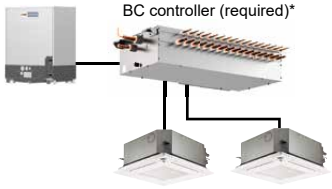
Advanced water heat source unit with the benefits of the R2-Series

The CITY MULTI WR2-Series provides all of the advantages of the R2-Series with the added benefits of a water heat source system, making it suitable for a wider range of applications in high-rise buildings, cold climates, coastal areas, etc.
Not only does it recover heat from the indoor units along the same 2-pipe refrigerant circuit, it also recovers heat via the water circuit between heat source units, making it a very economical system.

• Installation image (WR2-Series)

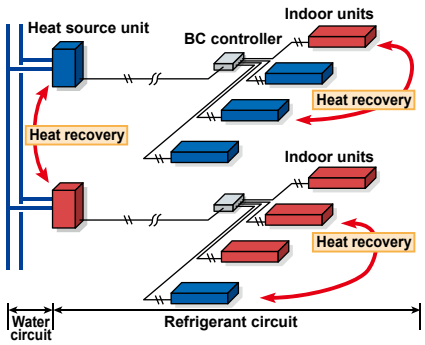


• System example



*WR2-Series systems require the use of BC controllers.

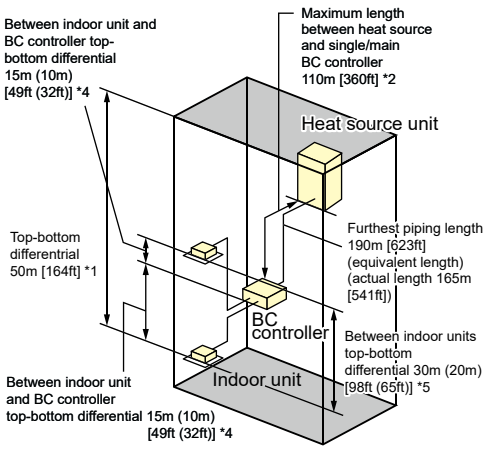
• Double heat recovery (WR2)



• System pipe lengths [P200-P900]

Refrigerant piping lengths	Maximum meters [Feet]
Total length	550-750 [1,804-2,460]
Maximum allowable length	165 (190 equivalent) [541 (623)]
Maximum length between heat source and single/main BC controller	110 [360]*2
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC controller.	
Maximum length between single/main BC controller and indoor	40 [131]*3

Vertical differentials between units	Maximum meters [Feet]
Indoor/ heat source (heat source higher)	50 [164]
Indoor/ heat source (heat source lower)	40 [131]
Indoor/BC controller (single/main)	15 [49]*4
Indoor/indoor	30 [98]*5
Main BC controller/Sub BC controller	15 [49]*6



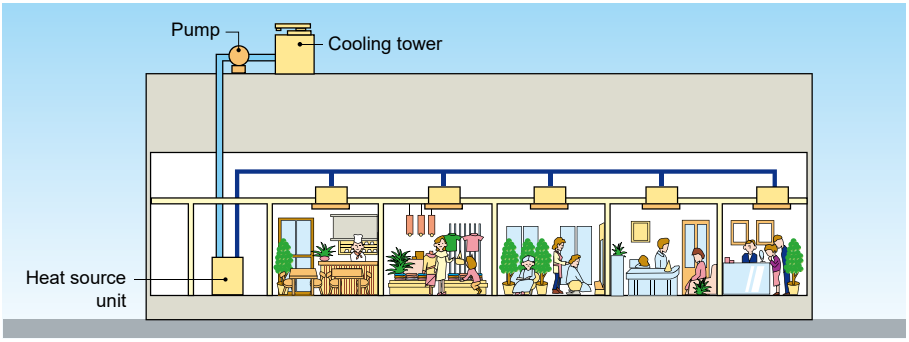
*1 When the heat source unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*2 Details refer to the DATA BOOK.
*3 Farthest Indoor from BC controller can exceed 40m [131ft.] till 60m [197ft.] if no Indoor sized P200, P250 connected. Details refer to the DATA BOOK.
*4 Distance of Indoor sized P200, P250 from BC must be less than 10m [32 ft.], if any.
*5 Distance of Indoor sized P200, P250 from indoor unit must be less than 20m [65 ft.], if any.
*6 Distance between BC (Main) and BC (Sub) must be less than 10m [32 ft.], if two BC (Sub) are installed or Indoor sized P200 and/or P250 is connected.

What is Water-Cooled?

A unique system from Mitsubishi Electric

It is possible now to combine the features of VRF with a water circuit using CITY MULTI WR2/WY. In this case, the heat is discharged to a water source rather than to the outside air.
The advantages of a water cooled system are that the water can be delivered at optimized temperatures and volumes, which allows even greater flexibility and increased COP.

Water cooled systems are ideal for use in temperate and cooler climates, since it does not involve heat exchange with the outside air.



Water cooled systems can be used even in buildings that are taller than 50 m by running a main water pipe through each floor.

Any heat source system that can supply heat source water between 10°C~45°C can be used.

Simultaneous heating and cooling operation is possible. (WR2-Series)

Water cooled systems are recommended for use in buildings that have the following heating and cooling needs.

- Buildings that require year-round cooling

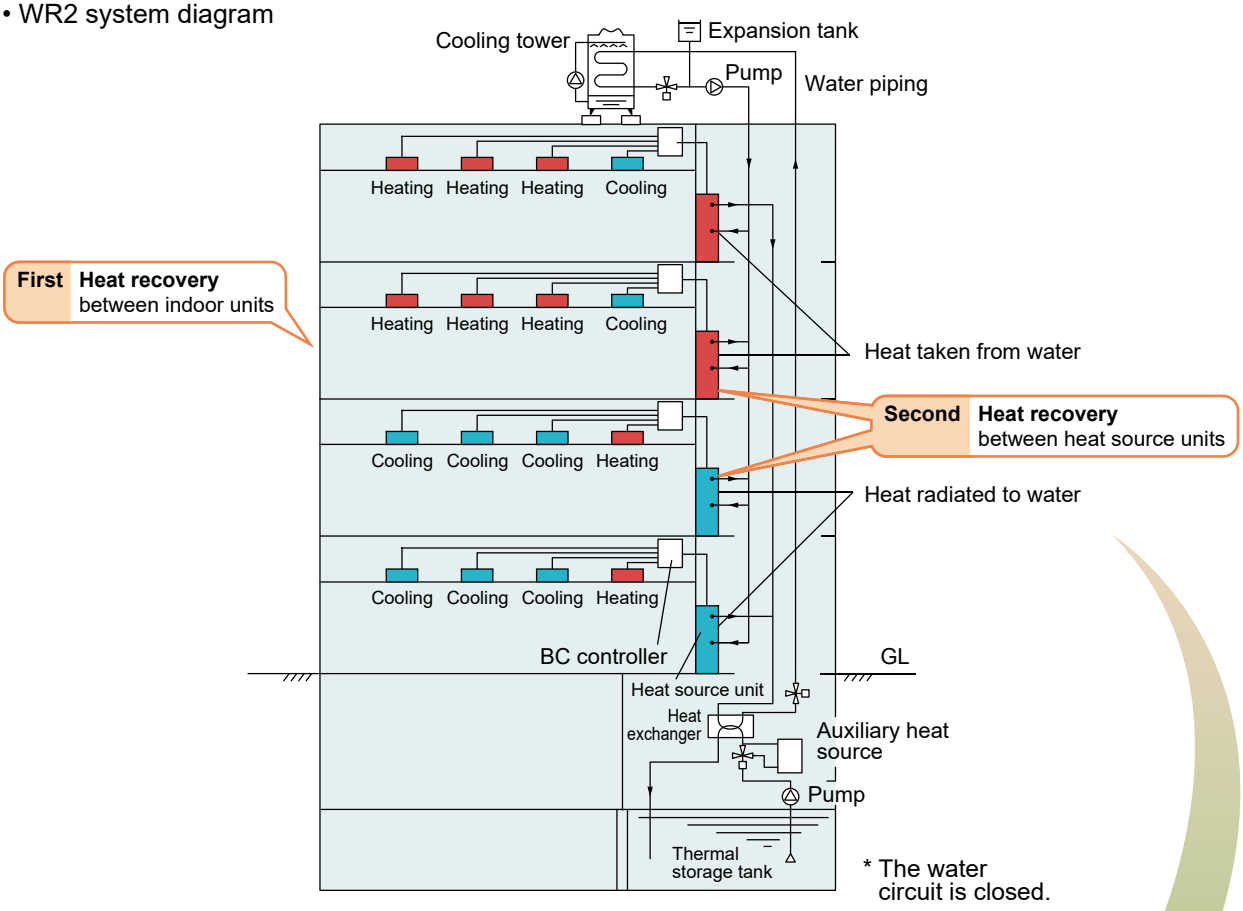
  For example,
  - Tenant buildings in which kitchens and offices exist together
  - Buildings in which equipment rooms and offices exist together
- Buildings in which there are large room temperature differences between sunny and unsunny rooms
- Hotels in which there are a lot of individual operation needs

- Installation image

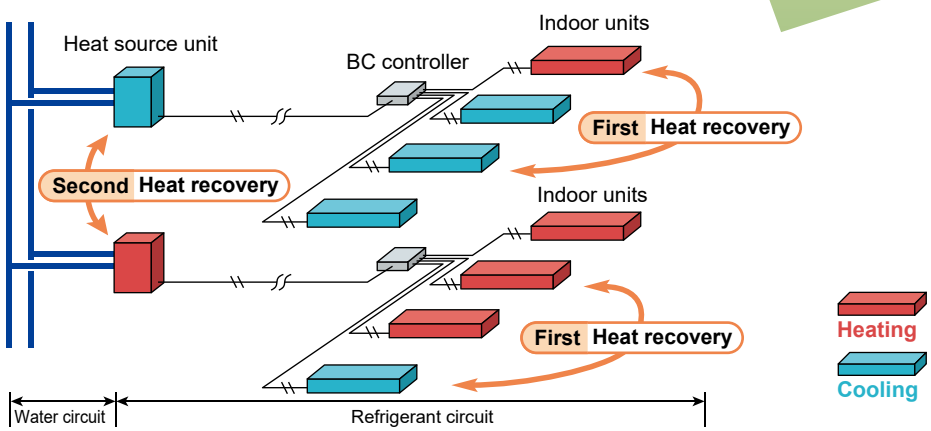
Double heat recovery (WR2-Series)

Mitsubishi Electric now offers double heat recovery operation.
The first heat recovery is within the refrigerant system. Heat is recovered between the indoor units to allow simultaneous cooling and heating operation.
The second heat recovery is within the water loop, where heat is recovered between the PQRY units.
This double heat recovery operation substantially improves energy efficiency and delivers an ideal solution to the requirements of modern office buildings, where some areas require cooling even in winter.

• WR2 system diagram



• Double heat recovery (WR2)



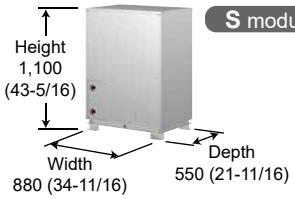
YLM-Series (WY/WR2)

A wide range of capacities are available, from single modules capable of up to P600 and combination modules up to P900.

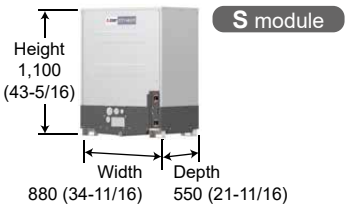
Single or combination module units are available to meet various installation conditions and capacity requirements.

Y(S)HM-A

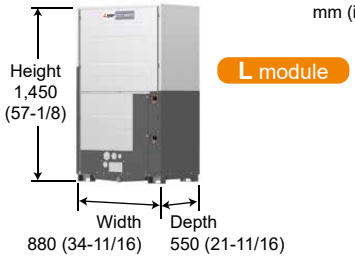
mm (in.)



Y(S)LM-A1



mm (in.)



<WY-Series>

Single module units up to P600

		P200	P250	P300	P350	P400	P450	P500	P550	P600	P650	P700	P750	P800	P850	P900
PQHY-P YLM-A1	Single	S	S	S	L	L	L	L	L	L						
PQHY-P YHM-A	Single	S	S	S												
PQHY-P YSLM-A1	Combination					S+S	S+S	S+S	S+S	S+S		L+L	L+L	L+L	L+L	L+L
PQHY-P YSHM-A	Combination					S+S	S+S	S+S	S+S	S+S	S+S+S	S+S+S	S+S+S	S+S+S	S+S+S	S+S+S

<WR2-Series>

Single module units up to P600 | Large capacities up to P900

		P200	P250	P300	P350	P400	P450	P500	P550	P600	P650	P700	P750	P800	P850	P900
PQRY-P YLM-A1	Single	S	S	S	L	L	L	L	L	L						
PQRY-P YHM-A	Single	S	S	S												
PQRY-P YSLM-A1	Combination					S+S	S+S	S+S	S+S	S+S		L+L	L+L	L+L	L+L	L+L
PQRY-P YSHM-A	Combination					S+S	S+S	S+S	S+S	S+S						

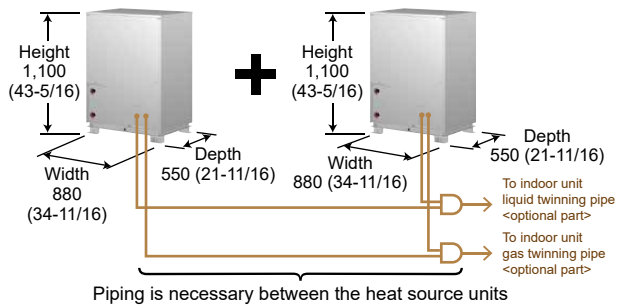
Advantages of single modules in a wide range of capacities

• Less piping

Capable of covering up to P600 (24 HP) with a single module.

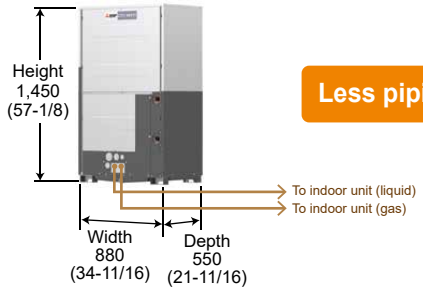
P400YSHM (WY/WR2-Series)

mm (in.)



P400YLM (WY/WR2-Series)

mm (in.)

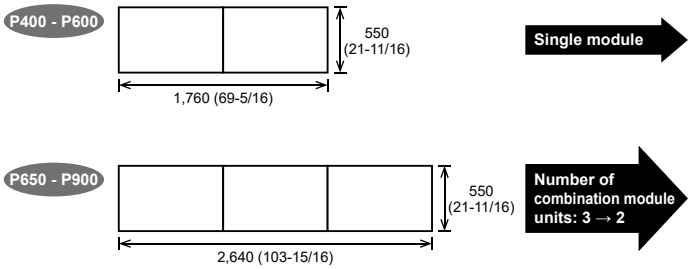


• Smaller footprint

Reduced footprint due to the enhanced lineup of single module units.

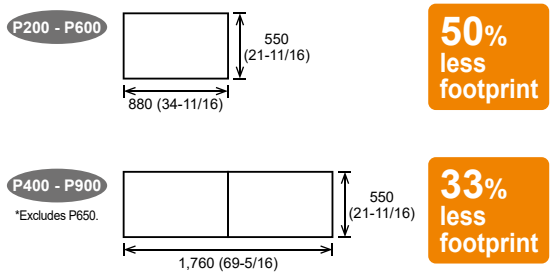
PQHY-P YSHM-A

mm (in.)



PQHY-P Y(S)LM-A1

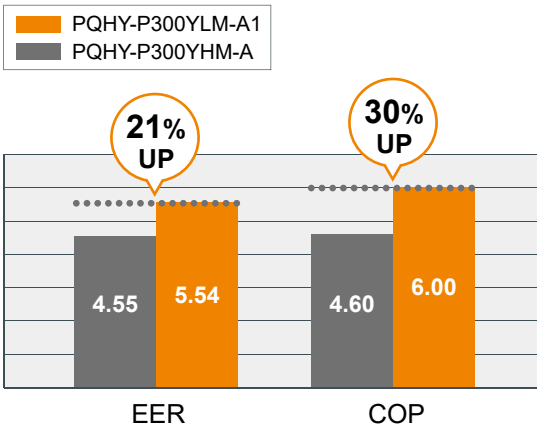
mm (in.)



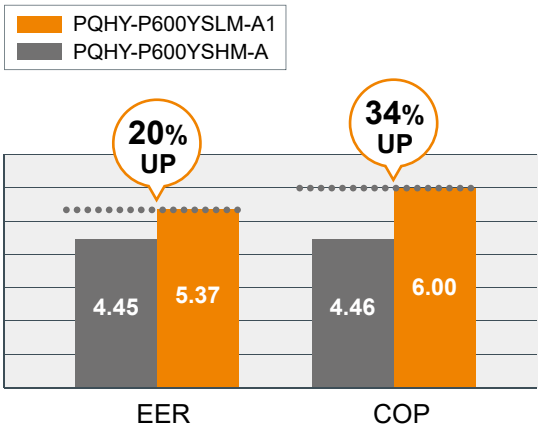
High energy efficiency

High EER and COP compared to conventional models

• Comparison of single module P300 units



• Comparison of combination module P600 units

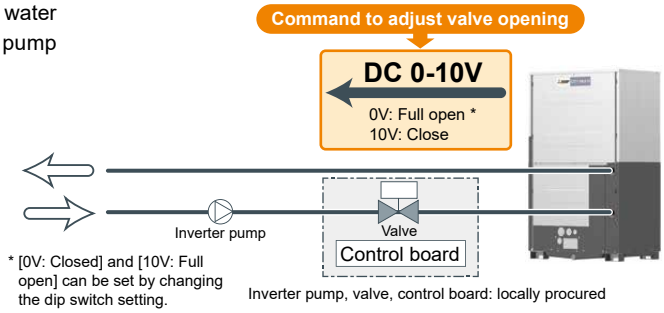


Water flow rate control

System energy consumption can be improved by changing the water flow volume during partial load and thereby reducing water pump consumption.

• Control of water flow rate
Control output voltage (0-10V) to adjust valve opening [0V: Full open,10V: Closed]
Voltage at 0 volt: Even when power is down, water will continue to circulate.

*When using "water flow rate control," the pump needs to be controlled by inverter.
*Pump interlock is required.

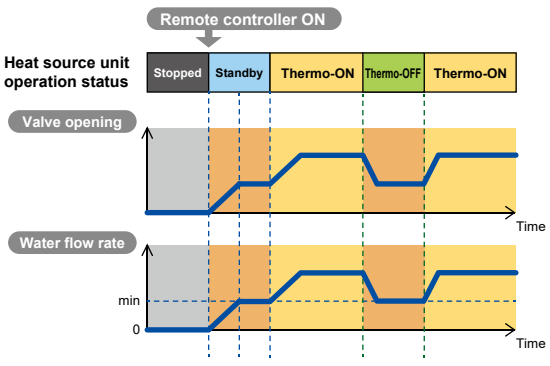


Power-save function

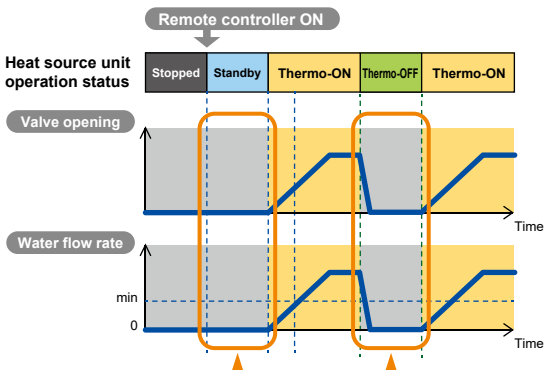
PQHY-P Y(S)LM-A1, PQRY-P Y(S)LM-A1

In previous models (A type), the pump was operated at a constant flow rate during standby and Thermo-OFF.
In the A1 type models, the water control valve is closed during standby and Thermo-OFF to reduce the circulating water flow rate and reduce the power consumption of the pump.

Standard



Power-save settings for the pump



The valve closes and stops the water flow during standby and Thermo-OFF to reduce the energy consumption of the pump.

WY-Series

PQHY-P YLM-A1

Model			PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P300YLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		kcal / h	20,000	25,000	30,000
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	3.71	4.90	6.04
	Current input	A	6.2-5.9-5.7	8.2-7.8-7.5	10.1-9.6-9.3
	EER	kW / kW	6.03	5.71	5.54
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
		kcal / h	21,500	27,100	32,300
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	3.97	5.08	6.25
	Current input	A	6.7-6.3-6.1	8.5-8.1-7.8	10.5-10.0-9.6
	COP	kW / kW	6.29	6.20	6.00
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room)		dB <A>	46	48	54
Sound power level (measured in anechoic room)		dB <A>	60	62	68
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	Gas pipe	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Circulating water	Water flow rate	m^3 / h	5.76	5.76	5.76
		L/min	96	96	96
		cfm	3.4	3.4	3.4
	Pressure drop	kPa	24	24	24
	Operating volume range	m^3 / h	3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.8	6.2	7.7
	Case heater	kW	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)
Net weight		kg (lbs)	170 (375)	170 (375)	170 (375)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104, 108, 1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YLM-A1

Model			PQHY-P350YLM-A1	PQHY-P400YLM-A1	PQHY-P450YLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0
		kcal / h	35,000	40,000	45,000
	*1	BTU / h	136,500	153,500	170,600
	Power input	kW	7.14	8.03	9.29
	Current input	A	12.0-11.4-11.0	13.5-12.8-12.4	15.6-14.8-14.3
	EER	kW / kW	5.60	5.60	5.38
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	45.0	50.0	56.0
		kcal / h	40,000	45,000	50,000
	*2	BTU / h	153,500	170,600	191,100
	Power input	kW	7.53	8.37	9.79
	Current input	A	12.7-12.0-11.6	14.1-13.4-12.9	16.5-15.7-15.1
	COP	kW / kW	5.97	5.97	5.72
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room)		dB <A>	52	52	54
Sound power level (measured in anechoic room)		dB <A>	66	66	70
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Circulating water	Water flow rate	m^3 / h	7.20	7.20	7.20
		L/min	120	120	120
		cfm	4.2	4.2	4.2
	Pressure drop	kPa	44	44	44
	Operating volume range	m^3 / h	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	9.5	10.7	11.6
	Case heater	kW	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	214 (472)	214 (472)	214 (472)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YLM-A1

Model			PQHY-P500YLM-A1	PQHY-P550YLM-A1	PQHY-P600YLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	56.0	63.0	69.0
		kcal / h	50,000	55,000	60,000
	*1	BTU / h	191,100	215,000	235,400
	Power input	kW	11.17	12.54	14.49
	Current input	A	18.8-17.9-17.2	21.1-20.1-19.3	24.4-23.2-22.3
	EER	kW / kW	5.01	5.02	4.76
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	63.0	69.0	76.5
		kcal / h	55,000	60,000	65,800
	*2	BTU / h	215,000	235,400	261,000
	Power input	kW	11.43	12.27	14.51
	Current input	A	19.2-18.3-17.6	20.7-19.6-18.9	24.4-23.2-22.4
	COP	kW / kW	5.51	5.62	5.27
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/1~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	54	56.5	56.5
Sound power level (measured in anechoic room)		dB <A>	70.5	71.5	73
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Circulating water	Water flow rate	m^3 / h	7.20	11.52	11.52
		L/min	120	192	192
		cfm	4.2	6.8	6.8
	Pressure drop	kPa	44	45	45
	Operating volume range	m^3 / h	4.5 ~ 11.6	6.0 ~ 14.4	6.0 ~ 14.4
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	13.0	15.0	16.1
	Case heater	kW	–	0.045 (240 V)	0.045 (240 V)
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 11.7 kg (26 lbs)	R410A x 11.7 kg (26 lbs)
Net weight		kg (lbs)	214 (472)	243 (536)	243 (536)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	10.0	10.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YSLM-A1

Model			PQHY-P400YSLM-A1	PQHY-P450YSLM-A1	PQHY-P500YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
		kcal / h	40,000	45,000	50,000
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	7.70	8.78	10.12
	Current input	A	12.9-12.3-11.9	14.8-14.0-13.5	17.0-16.2-15.6
	EER	kW / kW	5.84	5.69	5.53
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
		kcal / h	45,000	50,000	55,000
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	7.94	8.97	10.16
	Current input	A	13.4-12.7-12.2	15.1-14.3-13.8	17.1-16.2-15.7
	COP	kW / kW	6.29	6.24	6.20
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room)		dB <A>	49	50	51
Sound power level (measured in anechoic room)		dB <A>	63	64	65
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PQHY-P200YLM-A1	PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P250YLM-A1
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	24	24	24	24	24	24
	Operating volume range	m^3 / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	4.8	4.8	6.2	4.8	6.2	6.2
	Case heater	kW	–	–	–	–	–	–
External finish			Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)
Net weight		kg (lbs)	170 (375)	170 (375)	170 (375)	170 (375)	170 (375)	170 (375)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YSLM-A1

Model			PQHY-P550YSLM-A1	PQHY-P600YSLM-A1	PQHY-P700YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0	80.0
		kcal / h	55,000	60,000	68,800
	*1	BTU / h	215,000	235,400	273,000
	Power input	kW	11.55	12.84	14.73
	Current input	A	19.4-18.5-17.8	21.6-20.5-19.8	24.8-23.6-22.7
	EER	kW / kW	5.45	5.37	5.43
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5	88.0
		kcal / h	60,000	65,800	75,700
	*2	BTU / h	235,400	261,000	300,300
	Power input	kW	11.31	12.75	14.73
	Current input	A	19.0-18.1-17.4	21.5-20.4-19.7	24.8-23.6-22.7
	COP	kW / kW	6.10	6.00	5.97
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	55	57	55
Sound power level (measured in anechoic room)		dB <A>	69	71	69
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PQHY-P300YLM-A1	PQHY-P250YLM-A1	PQHY-P300YLM-A1	PQHY-P300YLM-A1	PQHY-P350YLM-A1	PQHY-P350YLM-A1
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		7.20 + 7.20	
		L/min	96 + 96		96 + 96		120 + 120	
		cfm	3.4 + 3.4		3.4 + 3.4		4.2 + 4.2	
	Pressure drop	kPa	24	24	24	24	44	44
	Operating volume range	m^3 / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	6.2	7.7	7.7	9.5	9.5
	Case heater	kW	–	–	–	–	–	–
External finish			Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	170 (375)	170 (375)	170 (375)	170 (375)	214 (472)	214 (472)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202, 302S-G2 Header: CMY-Y104, 108, 1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YSLM-A1

Model			PQHY-P750YSLM-A1	PQHY-P800YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	85.0	90.0
		kcal / h	73,100	77,400
	*1	BTU / h	290,000	307,100
	Power input	kW	15.64	16.57
	Current input	A	26.4-25.0-24.1	27.9-26.5-25.6
	EER	kW / kW	5.43	5.43
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	95.0	100.0
		kcal / h	81,700	86,000
	*2	BTU / h	324,100	341,200
	Power input	kW	15.90	16.75
	Current input	A	26.8-25.4-24.5	28.2-26.8-25.8
	COP	kW / kW	5.97	5.97
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	55	55
Sound power level (measured in anechoic room)		dB <A>	69	69
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PQHY-P400YLM-A1	PQHY-P350YLM-A1	PQHY-P400YLM-A1	PQHY-P400YLM-A1
Circulating water	Water flow rate	m^3 / h	7.20 + 7.20		7.20 + 7.20	
		L/min	120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2	
	Pressure drop	kPa	44	44	44	44
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.7	9.5	10.7	10.7
	Case heater	kW	–	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	214 (472)	214 (472)	214 (472)	214 (472)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202, 302S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202, 302S-G2 Header: CMY-Y104, 108, 1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WY-Series

PQHY-P YSLM-A1

Model			PQHY-P850YSLM-A1	PQHY-P900YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
		kcal / h	82,600	86,900
	*1	BTU / h	327,600	344,600
	Power input	kW	18.03	19.38
	Current input	A	30.4-28.9-27.8	32.7-31.0-29.9
	EER	kW / kW	5.32	5.21
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	108.0	113.0
		kcal / h	92,900	97,200
	*2	BTU / h	368,500	385,600
	Power input	kW	18.49	19.74
	Current input	A	31.2-29.6-28.5	33.3-31.6-30.5
	COP	kW / kW	5.84	5.72
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~130% of heat source unit capacity	50~130% of heat source unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	56	57
Sound power level (measured in anechoic room)		dB <A>	71.5	73
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model			PQHY-P450YLM-A1	PQHY-P400YLM-A1	PQHY-P450YLM-A1	PQHY-P450YLM-A1
Circulating water	Water flow rate	m^3 / h	7.20 + 7.20		7.20 + 7.20	
		L/min	120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2	
	Pressure drop	kPa	44	44	44	44
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	11.6	10.7	11.6	11.6
	Case heater	kW	–	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	214 (472)	214 (472)	214 (472)	214 (472)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202, 302S-G2 Header: CMY-Y104, 108, 1010-G		Heat Source Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202, 302S-G2 Header: CMY-Y104, 108, 1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

Optional parts

• For PQHY-Series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201~400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401~650 (Total capacity of indoor unit)
		The first branch of P450-P650
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK3	For PQHY-P400~P600YSLM-A1
	CMY-Y200VBK2	For PQHY-P700~P900YSLM-A1

WR2-Series

PQRY-P YLM-A1

Model			PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		kcal / h	20,000	25,000	30,000
	*1	BTU / h	76,400	95,500	114,300
	Power input	kW	3.71	4.90	6.04
	Current input	A	6.2-5.9-5.7	8.2-7.8-7.5	10.1-9.6-9.3
	EER	kW / kW	6.03	5.71	5.54
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
		kcal / h	21,500	27,100	32,300
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	3.97	5.08	6.25
	Current input	A	6.7-6.3-6.1	8.5-8.1-7.8	10.5-10.0-9.6
	COP	kW / kW	6.29	6.20	6.00
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity		P10~P250/1~20	P10~P250/1~25	P10~P250/1~30
Sound pressure level (measured in anechoic room)		dB <A>	46	48	54
Sound power level (measured in anechoic room)		dB <A>	60	62	68
Refrigerant piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Circulating water	Water flow rate	m^3 / h	5.76	5.76	5.76
		L/min	96	96	96
		cfm	3.4	3.4	3.4
	Pressure drop	kPa	24	24	24
	Operating volume range	m^3 / h	3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.8	6.2	7.7
	Case heater	kW	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)
Net weight		kg (lbs)	173 (382)	173 (382)	173 (382)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YLM-A1

Model			PQRY-P350YLM-A1	PQRY-P400YLM-A1	PQRY-P450YLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	40.0	45.0	50.0
		kcal / h	35,000	40,000	45,000
	*1	BTU / h	136,500	153,500	170,600
	Power input	kW	7.14	8.03	9.29
	Current input	A	12.0-11.4-11.0	13.5-12.8-12.4	15.6-14.8-14.3
	EER	kW / kW	5.60	5.60	5.38
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	45.0	50.0	56.0
		kcal / h	40,000	45,000	50,000
	*2	BTU / h	153,500	170,600	191,100
	Power input	kW	7.53	8.37	9.79
	Current input	A	12.7-12.0-11.6	14.1-13.4-12.9	16.5-15.7-15.1
	COP	kW / kW	5.97	5.97	5.72
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity		P10~P250/1~35	P10~P250/1~40	P10~P250/1~45
Sound pressure level (measured in anechoic room)		dB <A>	52	52	54
Sound power level (measured in anechoic room)		dB <A>	66	66	70
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Circulating water	Water flow rate	m^3 / h	7.20	7.20	7.20
		L/min	120	120	120
		cfm	4.2	4.2	4.2
	Pressure drop	kPa	44	44	44
	Operating volume range	m^3 / h	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	9.5	10.7	11.6
	Case heater	kW	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	217 (479)	217 (479)	217 (479)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YLM-A1

Model				PQRY-P500YLM-A1	PQRY-P550YLM-A1	PQRY-P600YLM-A1
Power source				3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)		*1	kW	56.0	63.0	69.0
			kcal / h	50,000	55,000	60,000
		*1	BTU / h	191,100	215,000	235,400
	Power input		kW	11.17	12.54	14.49
	Current input		A	18.8-17.9-17.2	21.1-20.1-19.3	24.4-23.2-22.3
	EER		kW / kW	5.01	5.02	4.76
Temp. range of cooling	Indoor		W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water		°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)		*2	kW	63.0	69.0	76.5
			kcal / h	55,000	60,000	65,800
		*2	BTU / h	215,000	235,400	261,000
	Power input		kW	11.43	12.27	14.51
	Current input		A	19.2-18.3-17.6	20.7-19.6-18.9	24.4-23.2-22.4
	COP		kW / kW	5.51	5.62	5.27
Temp. range of heating	Indoor		D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water		°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity			50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity			P10~P250/1~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)			dB <A>	54	56.5	56.5
Sound power level (measured in anechoic room)			dB <A>	70.5	71.5	73
Refrigerant piping diameter	High pressure		mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)
	Low pressure		mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
Circulating water	Water flow rate		m^3 / h	7.20	11.52	11.52
			L/min	120	192	192
			cfm	4.2	6.8	6.8
	Pressure drop		kPa	44	45	45
	Operating volume range		m^3 / h	4.5 ~ 11.6	6.0 ~ 14.4	6.0 ~ 14.4
Compressor	Type			Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method			Inverter	Inverter	Inverter
	Motor output		kW	13.0	15.0	16.1
	Case heater		kW	–	0.045 (240 V)	0.045 (240 V)
External finish				Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD			mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
			in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)			Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor			Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge			R410A x 6.0 kg (14 lbs)	R410A x 11.7 kg (26 lbs)	R410A x 11.7 kg (26 lbs)
Net weight			kg (lbs)	217 (479)	247 (545)	247 (545)
Heat exchanger				plate type	plate type	plate type
	Water volume in plate		L	5.0	10.0	10.0
	Water pressure Max.		MPa	2.0	2.0	2.0
Optional parts				Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Joint: CMY-Y102SS/LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YSLM-A1

Model			PQRY-P400YSLM-A1	PQRY-P450YSLM-A1	PQRY-P500YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0
		kcal / h	40,000	45,000	50,000
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	7.70	8.78	10.12
	Current input	A	12.9-12.3-11.9	14.8-14.0-13.5	17.0-16.2-15.6
	EER	kW / kW	5.84	5.69	5.53
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
		kcal / h	45,000	50,000	55,000
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	7.94	8.97	10.16
	Current input	A	13.4-12.7-12.2	15.1-14.3-13.8	17.1-16.2-15.7
	COP	kW / kW	6.29	6.24	6.20
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity		P10~P250/1~40	P10~P250/1~45	P10~P250/1~50
Sound pressure level (measured in anechoic room)		dB <A>	49	50	51
Sound power level (measured in anechoic room)		dB <A>	63	64	65
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model			PQRY-P200YLM-A1	PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P250YLM-A1
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	24	24	24	24	24	24
	Operating volume range	m^3 / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	4.8	4.8	6.2	4.8	6.2	6.2
	Case heater	kW	–	–	–	–	–	–
External finish			Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)
Net weight		kg (lbs)	173 (382)	173 (382)	173 (382)	173 (382)	173 (382)	173 (382)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q100CBK2 Joint: CMY-Y102SS/LS-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q100CBK2 Joint: CMY-Y102SS/LS-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q100CBK2 Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YSLM-A1

Model			PQRY-P550YSLM-A1	PQRY-P600YSLM-A1	PQRY-P700YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0	80.0
		kcal / h	55,000	60,000	68,800
	*1	BTU / h	215,000	235,400	273,000
	Power input	kW	11.55	12.84	14.73
	Current input	A	19.4-18.5-17.8	21.6-20.5-19.8	24.8-23.6-22.7
	EER	kW / kW	5.45	5.37	5.43
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5	88.0
		kcal / h	60,000	65,800	75,700
	*2	BTU / h	235,400	261,000	300,300
	Power input	kW	11.31	12.75	14.73
	Current input	A	19.0-18.1-17.4	21.5-20.4-19.7	24.8-23.6-22.7
	COP	kW / kW	6.10	6.00	5.97
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	55	57	55
Sound power level (measured in anechoic room)		dB <A>	69	71	69
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	22.2 (7/8) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PQRY-P300YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1	PQRY-P300YLM-A1	PQRY-P350YLM-A1	PQRY-P350YLM-A1
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76		7.20 + 7.20	
		L/min	96 + 96		96 + 96		120 + 120	
		cfm	3.4 + 3.4		3.4 + 3.4		4.2 + 4.2	
	Pressure drop	kPa	24	24	24	24	44	44
	Operating volume range	m^3 / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.7	6.2	7.7	7.7	9.5	9.5
	Case heater	kW	–	–	–	–	–	–
External finish			Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension HxWxD		mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 5.0 kg (12 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	173 (382)	173 (382)	173 (382)	173 (382)	217 (479)	217 (479)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q100CBK2 Joint: CMY-Y102SS/LS-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q100CBK2 Joint: CMY-Y102SS/LS-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YSLM-A1

Model			PQRY-P750YSLM-A1	PQRY-P800YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	85.0	90.0
		kcal / h	73,100	77,400
	*1	BTU / h	290,000	307,100
	Power input	kW	15.64	16.57
	Current input	A	26.4-25.0-24.1	27.9-26.5-25.6
	EER	kW / kW	5.43	5.43
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	95.0	100.0
		kcal / h	81,700	86,000
	*2	BTU / h	324,100	341,200
	Power input	kW	15.90	16.75
	Current input	A	26.8-25.4-24.5	28.2-26.8-25.8
	COP	kW / kW	5.97	5.97
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity
	Model / Quantity		P10~P250/2~50	P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	55	55
Sound power level (measured in anechoic room)		dB <A>	69	69
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model			PQRY-P400YLM-A1	PQRY-P350YLM-A1	PQRY-P400YLM-A1	PQRY-P400YLM-A1
Circulating water	Water flow rate	m^3 / h	7.20 + 7.20		7.20 + 7.20	
		L/min	120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2	
	Pressure drop	kPa	44	44	44	44
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.7	9.5	10.7	10.7
	Case heater	kW	–	–	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	217 (479)	217 (479)	217 (479)	217 (479)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YSLM-A1

Model			PQRY-P850YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	96.0
		kcal / h	82,600
	*1	BTU / h	327,600
	Power input	kW	18.03
	Current input	A	30.4-28.9-27.8
	EER	kW / kW	5.32
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	108.0
		kcal / h	92,900
	*2	BTU / h	368,500
	Power input	kW	18.49
	Current input	A	31.2-29.6-28.5
	COP	kW / kW	5.84
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity
	Model / Quantity		P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	56
Sound power level (measured in anechoic room)		dB <A>	71.5
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PQRY-P450YLM-A1	PQRY-P400YLM-A1
Circulating water	Water flow rate	m^3 / h	7.20 + 7.20	7.20 + 7.20
		L/min	120 + 120	120 + 120
		cfm	4.2 + 4.2	4.2 + 4.2
	Pressure drop	kPa	44	44
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	11.6	10.7
	Case heater	kW	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	217 (479)	217 (479)
Heat exchanger			plate type	plate type
	Water volume in plate	L	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

WR2-Series

PQRY-P YSLM-A1

Model			PQRY-P900YSLM-A1
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	101.0
		kcal / h	86,900
	*1	BTU / h	344,600
	Power input	kW	19.38
	Current input	A	32.7-31.0-29.9
	EER	kW / kW	5.21
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)
Heating capacity (Nominal)	*2	kW	113.0
		kcal / h	97,200
	*2	BTU / h	385,600
	Power input	kW	19.74
	Current input	A	33.3-31.6-30.5
	COP	kW / kW	5.72
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Inlet water	°C	10.0~45.0°C (50~113°F)
Indoor unit connectable	Total capacity		50~150% of heat source unit capacity
	Model / Quantity		P10~P250/2~50
Sound pressure level (measured in anechoic room)		dB <A>	57
Sound power level (measured in anechoic room)		dB <A>	73
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed
	Low pressure	mm (in.)	41.28 (1-5/8) Brazed

Set Model			PQRY-P450YLM-A1	PQRY-P450YLM-A1
Circulating water	Water flow rate	m^3 / h	7.20 + 7.20	7.20 + 7.20
		L/min	120 + 120	120 + 120
		cfm	4.2 + 4.2	4.2 + 4.2
	Pressure drop	kPa	44	44
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	11.6	11.6
	Case heater	kW	–	–
External finish			Galvanized steel sheets	Galvanized steel sheets
External dimension HxWxD		mm	1,450 x 880 x 550	1,450 x 880 x 550
		in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP.)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection
Refrigerant	Type x original charge		R410A x 6.0 kg (14 lbs)	R410A x 6.0 kg (14 lbs)
Net weight		kg (lbs)	217 (479)	217 (479)
Heat exchanger			plate type	plate type
	Water volume in plate	L	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1	Heat Source Twinning kit: CMY-Q200CBK Joint: CMY-Y102SS/LS-G2, CMY-R160-J1

Notes:

*1,*2 Nominal conditions

	Indoor	Inlet water temperature	Pipe length	Level difference
Cooling	27ºCD.B./19ºCW.B. (81ºFD.B./66ºFW.B.)	30ºC (86ºF)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºCD.B. (68ºFD.B.)	20ºC (68ºF)		

*The ambient temperature of the heat source unit needs to be kept below 40ºCD.B.
*The ambient relative humidity of the heat source unit needs to be kept below 80%.
*The heat source unit should not be installed at outdoor.
*Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

Optional parts

• For PQRY-Series

Description		Model	Remarks
Branch pipe (Joint)		CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
		CMY-Y102LS-G2	201~400 (Total capacity of indoor unit)
Twinning kit		CMY-Q100CBK2	For PQRY-P400~P600YSLM-A1
		CMY-Q200CBK	For PQRY-P700~P900YSLM-A1
For BC controller	2-Branch Joint Pipe	CMY-Y102SS-G2	200 or below(Total capacity of indoor unit)
		CMY-Y102LS-G2	201-400(Total capacity of indoor unit)
	Joint and Reducer	CMY-R201S-G	350 or below(Total capacity of indoor unit)
		CMY-R202S-G	351-600(Total capacity of indoor unit)
		CMY-R203S-G	601-650(Total capacity of indoor unit)
		CMY-R204S-G	651-1000(Total capacity of indoor unit)
		CMY-R205S-G	1001 or above(Total capacity of indoor unit)
	Reducer	CMY-R301S-G	For CMB-M104,106,108,1012,1016V-J1 (When the heat source unit capacity is P200 to P300)
		CMY-R302S-G	For CMB-M108,1012,1016V-JA1 (When the heat source unit capacity is P200 to P900)
		CMY-R303S-G	For CMB-M108,1012,1016V-JA1 and for use with sub BC controller
		CMY-R304S-G	For CMB-P1016V-KA1(When the heat source unit capacity is P200 to P1000)
		CMY-R305S-G	For CMB-P1016V-KA1 and for use with sub BC controller
		CMY-R306S-G	For CMB-M104,108V-KB1
	Branch pipe (Header)	CMY-R160-J1	Joint for connecting to two nozzles

S-Series

Cooling or Heating Heat pump

NEW

Cooling/heating changeover system with horizontal airflow for small offices and stores

The CITY MULTI S-Series (for small applications) makes use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an inverter-driven compressor for effective energy use.
With a wide lineup of indoor units connected to a flexible piping system, the CITY MULTI Series can be configured to suit diverse applications. Thanks to the individual operation of up to 12 units* and a group change function, the CITY MULTI S-Series can flexibly accommodate layout changes in stores and offices.

*For P140 and P200 models

• Small offices

• System Pipe Lengths

[SP80~140(VKMD-A/YKMD-A)]

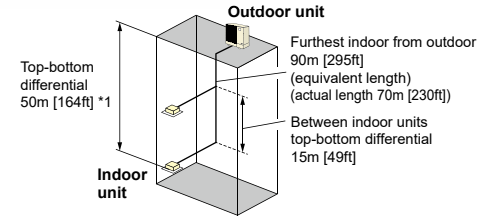
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	120 [394]
Furthest indoor from outdoor	70 (90 equivalent) [230 (295)]
Furthest indoor from first branch	50 [164] *4
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	30 [98]
Indoor/indoor	15 [49]

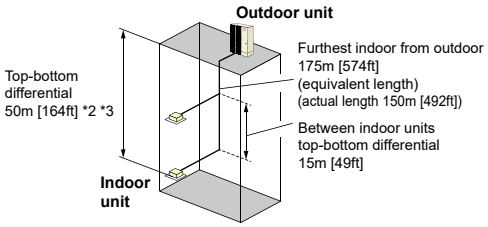
[P112~140(VKM5/YKM4)]

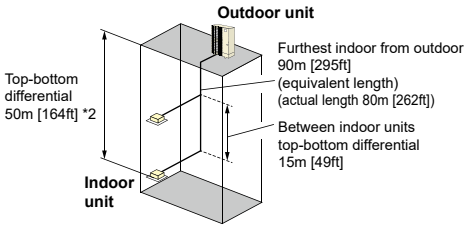
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300 [984]
Furthest indoor from outdoor	150 (175 equivalent) [492(574)]
Furthest indoor from first branch	30 [98]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131] *3
Indoor/indoor	15 [49]

[P200YKMD-A]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	150 [492]
Furthest indoor from outdoor	80 (90 equivalent) [262(295)]
Furthest indoor from first branch	30 [98]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]







*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 30m [98ft].
*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*3 30m [98ft] or less if PKFY-P*VLM, PFFY-P*VKM, PFFY-P*VL* type of indoor units are included.
*4 Use liquid pipe of ø9.52 for less than P50 indoor units, when farthest length from the first joint exceeds 30 m.

VKM/YKM-Series

Lineup of the VKM/YKM-Series

A compact single-fan unit is available to better suit individual installation conditions.

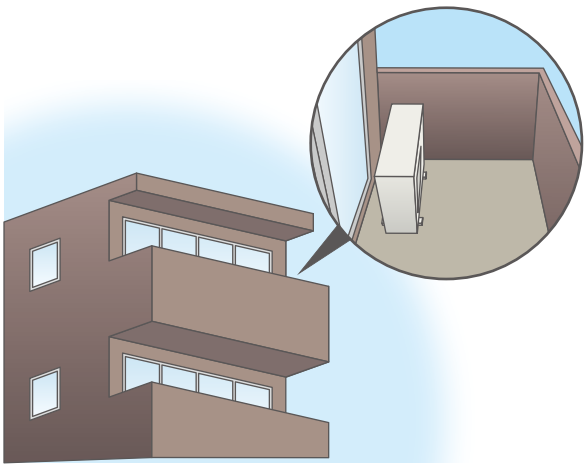
1-fan type PUMY-SP80, 112, 125, 140VKMD-A/ YKMD-A (-BS)

VKMD model…Single-phase type
YKMD model…Three-phase type

Unit: mm [in.]

The 1-fan type is 981 mm [38-5/8] high and stays hidden behind balcony walls.

• Installation image*



*Refer to the installation manual for installation restrictions and requirements.

2-fan type PUMY-P112, 125, 140VKM5/YKM4 (-BS) NEW
PUMY-P200YKMD-A (-BS)

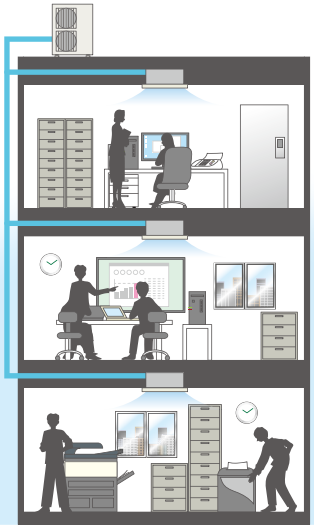
VKM model…Single-phase type
YKM, YKMD model…Three-phase type

Unit: mm [in.]

The 2-fan type accommodates a maximum total piping length of 300 m* and can be installed in a remote location such as on the roof.

*150 m for the PUMY-P200YKMD-A model

• Installation image*

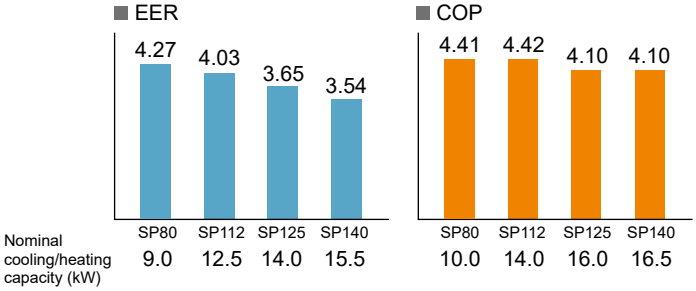


Highly energy efficient

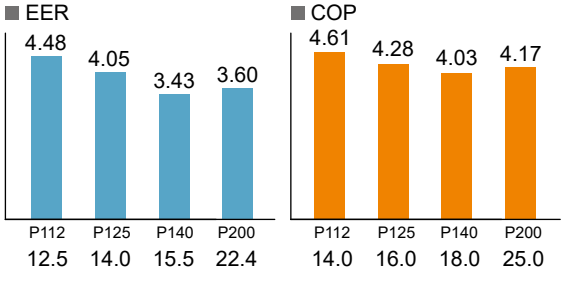
Even with its compact size and light weight, the PUMY-Series has high EER and COP. Costs are reduced with the industry's top-class energy saving abilities.*

*As of Sept. 2017, among 1-fan VRF outdoor units (in-house investigation).

1-fan type



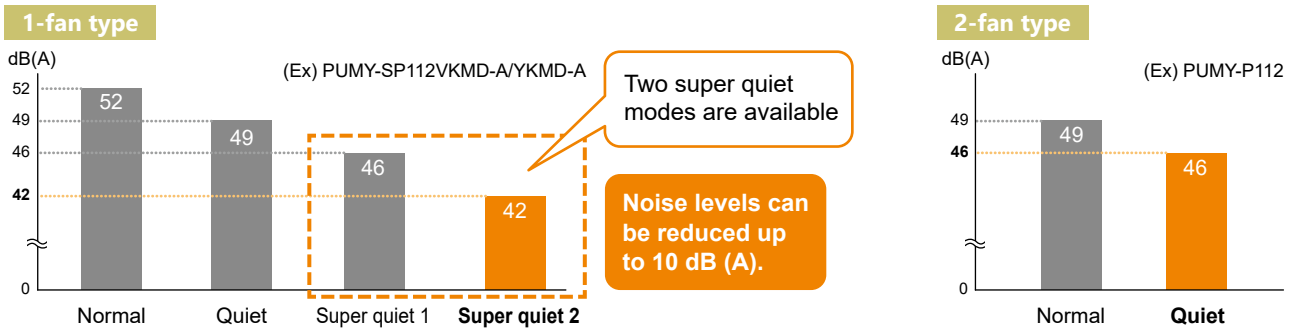
2-fan type



Flexible noise setting

The 2-fan models have a quiet noise mode, and the 1-fan models have two super quiet modes in addition to the general quiet mode, so a suitable noise level can be selected. The pattern can be selected according to customer needs for low-noise operation.

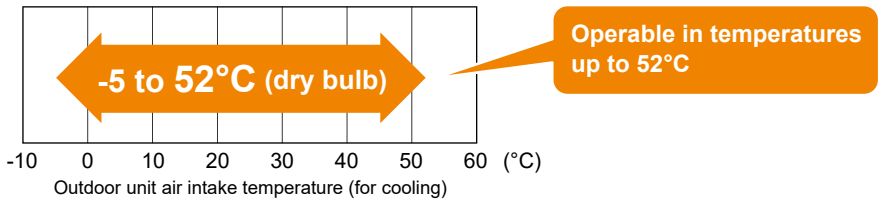
* Capacity reduction differs according to the mode setting.
* PAC-SC36NA-E is required to activate quiet or super quiet mode.



Wide operation range 1-fan type 2-fan type

The PUMY-Series has an expanded guaranteed cooling operation range of up to **52°C**, so it can be used reliably even if the outdoor air temperature rises abnormally during the hot summer daytime.
- Inverter technology allows units to operate at outdoor air temperatures as high as 52°C.
- Performs well even in narrow spaces and in multiple installations where heated air may stagnate.

• Cooling operation temperature range



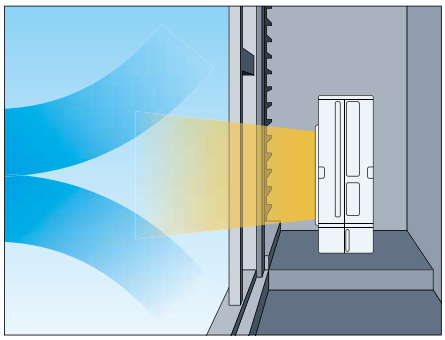
* Depending on the types of indoor units used, the operable temperature range may be between 10°C and 52°C. Refer to the DATA BOOK for details.
* Use of the Air Protect Guide [PAC-SH95AG-E] (optional part) increases the operable temperature range to between -15°C and +52°C. Refer to the DATA BOOK for details.

External static pressure of 30 Pa 1-fan type 2-fan type

(P112-140VKM5/YKM4)

An external static pressure of 30 Pa allows flexible installation.
The outdoor unit can be installed in locations that were not possible before.

It can be installed on balconies in high-rise buildings or spaces near louvers.
*Noise level will increase when using this function.

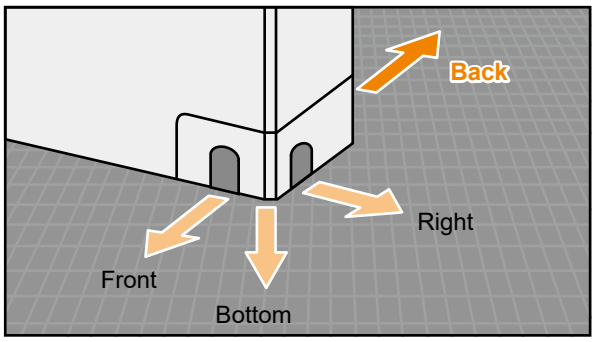


* To change the external static pressure of PUMY-P112-140VKM5/YKM4, a fan motor [PAC-SJ71FM-E] (optional part) is required.

Rear piping is possible 1-fan type 2-fan type

• Flexible 4 way layout for easier connection

The indoor unit allows piping from any of four directions: front, back, bottom, or right. This enables easier horizontal connection for collective layouts.
The outdoor unit also allows expanded piping layout flexibility to greatly improve piping workability.



Optional parts

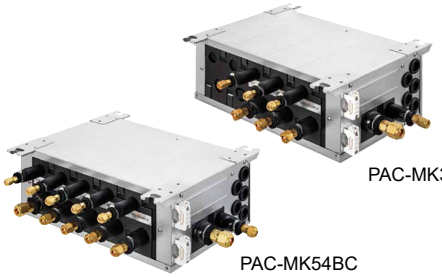
• For the PUMY-Series

Description	Model	Remarks
Branch box	PAC-MK34BC	For PUMY-SP VKMD-A/YKMD-A, PUMY-P VKM5/YKM4/YKMD-A
	PAC-MK54BC	For PUMY-SP VKMD-A/YKMD-A, PUMY-P VKM5/YKM4/YKMD-A
Branch (2 Branch)	CMY-Y62-G-E	For PUMY-SP VKMD-A/YKMD-A, PUMY-P VKM5/YKM4/YKMD-A
Header	CMY-Y64-G-E	For PUMY-SP VKMD-A/YKMD-A, PUMY-P VKM5/YKM4/YKMD-A
	CMY-Y68-G-E	For PUMY-SP VKMD-A/YKMD-A, PUMY-P VKM5/YKM4/YKMD-A

For PUMY Series

Features of the Branch Box

Connecting a branch box makes it possible to connect to Mitsubishi Electric indoor units (room air conditioners, Mr. SLIM) that do not normally support M-NET connections.

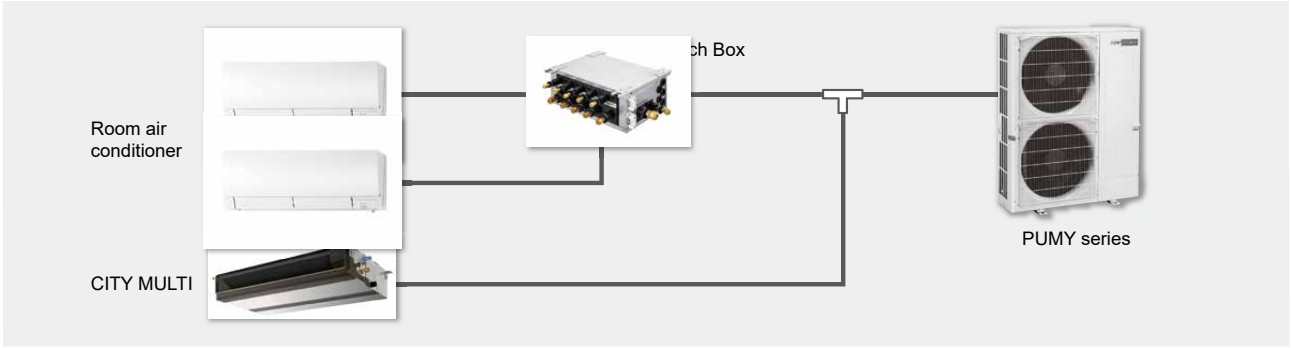


PAC-MK34BC

PAC-MK54BC

System example

Using a branch box with a PUMY-Series device makes it possible to connect not only to CITY MULTI indoor units but also to Mitsubishi Electric indoor units that do not normally support M-NET connections. Thus it is possible to connect to room air conditioners and Mr. SLIM indoor units, allowing for a selection specifically designed to suit how the room is being used.

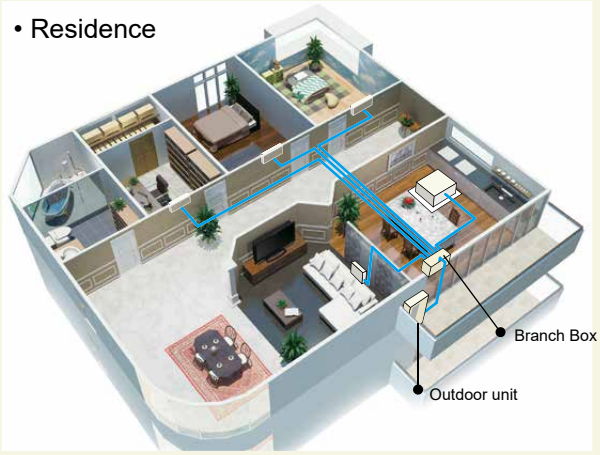


Specifications

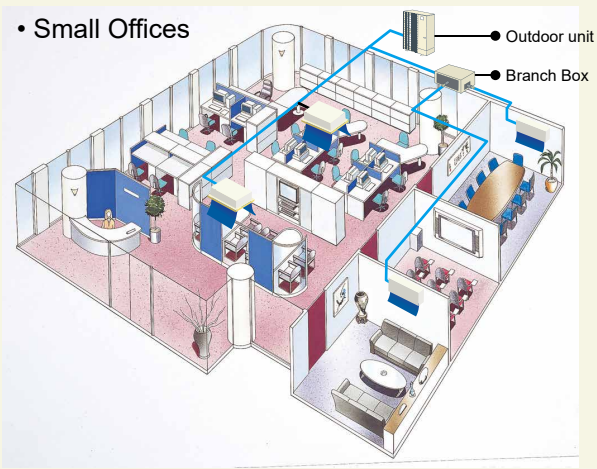
Model				PAC-MK54BC	PAC-MK34BC
Connectable Number of Indoor Units				Max. 5	Max. 3
Power Supply	Source			Outdoor power supply, Branch Box / Outdoor separate power supply	
	Outdoor (V/Phase/Hz)			1-phase, 220/230/240V, 50Hz, 1-phase, 220/230V, 60Hz	
Total Input			kW	0.003	
Operating Current			A	0.05	
Dimensions H x W x D			mm	170 × 450 × 280	
Weight			kg	7.4	6.7
Piping (diameter)	Branch (Indoor Side)	Liquid	mm	6.35 × 5	6.35 × 3
		Gas	mm	9.52 × 4, 12.7 × 1	9.52 × 3
	Main (Outdoor Side)	Liquid	mm	9.52	
		Gas	mm	15.88	
	Connection Method			Flared	
Wiring	to Indoor Unit			3-wire + Earth wire	
	to Outdoor Unit			3-wire + Earth wire	

Installation image

• Residence



• Small Offices



Consolidating heat sources for room air conditioners, which require a 1:1 connection between the outdoor unit and indoor unit, and reducing installation space is possible.
Because the branch box can be installed indoors or outdoors and mounted on a wall, ceiling, or floor, it is possible to meet the requirements of various installation situations flexibly.

*Please refer to installation manual for installation restrictions.

Precautions for system design

- The capacity and number of indoor units when using a branch box differs from situations when no branch box is used. Refer to the installation manual for each outdoor unit for more information. Moreover, the indoor unit lineup varies from country to country, so contact your local distributor for details.
- Capacity calculations for the entire system will depend on the connected indoor unit. Refer to the installation manual for more information.
- Piping lengths also differ when using a branch box. Refer to the installation manual for each outdoor unit for more information.

Comparison of Piping Lengths for PUMY-Series Models

			Maximum Meter			
			Only City Multi *1 Indoor Unit	Only Branch Box Connection	Mixed System (City Multi *1 Indoor Unit + Branch Box)	
					City Multi *1 Indoor Unit	Via Branch Box
P112/125/140	Refrigerant Piping Length	Total Length	300	150	300 (with 1 branch box) 240 (with 2 branch boxes)	150
		Maximum Allowable Length	150 (175 equivalent)	80	85	80
		Farthest Indoor From First Branch	30	30 *2	30	30 *2
	Vertical Differentials Between Units	Indoor/Outdoor(Outdoor higher)	50	50	50	
		Indoor/Outdoor(Outdoor lower)	40	40	40	
		Indoor/Indoor	15	15 *4	15 *4	
	Refrigerant Piping Length	Total branch pipe length	-	95	-	95
		Farthest branch pipe length	-	25	-	25
		Total main pipe length	-	55	-	55
		Farthest main pipe length	-	55	-	55
	Vertical Differentials Between Units	Branch box/Indoor	-	15	-	15
		Branch box/Branch box	-	15	-	15
P200	Refrigerant Piping Length	Total Length	150	150	150	
		Maximum Allowable Length	80 (90 equivalent) *5	80 *5	80 (90 equivalent) *5	80 *5
		Farthest Indoor From First Branch	30	30 *2	30	30 *2
	Vertical Differentials Between Units	Indoor/Outdoor(Outdoor higher)	50	50	50	
		Indoor/Outdoor(Outdoor Lower)	40	40	40	
		Indoor/Indoor	15	15 *4	15 *4	
	Refrigerant Piping Length	Total branch pipe length	—	95	—	95
		Farthest branch pipe length	—	25	—	25
		Total main pipe length	—	55	—	55
		Farthest main pipe length	—	55 *5	—	55 *5
	Vertical Differentials Between Units	Branch box/Indoor	—	15	—	15
		Branch box/Branch box	—	15	—	15
SP80/112/125/145	Refrigerant Piping Length	Total Length	120	120	120	
		Maximum Allowable Length	70 (90 equivalent)	80	70 (90 equivalent)	80
		Farthest Indoor From First Branch	50 *6	50 *2	50 *6	50 *2 *6
	Vertical Differentials Between Units	Indoor/Outdoor(Outdoor higher)	50	50	50	
		Indoor/Outdoor(Outdoor Lower)	30	30	30	
		Indoor/Indoor	15	15 *4	15 *4	
	Refrigerant Piping Length	Total branch pipe length	—	95	—	95
		Farthest branch pipe length	—	25	—	25
		Total main pipe length	—	55	—	55
		Farthest main pipe length	—	55	—	55
	Vertical Differentials Between Units	Branch box/Indoor	—	15	—	15
		Branch box/Branch box	—	15	—	15

*1 Include system with connection kit
*2 Farthest branch box from first branch.
*3 In case of including PKFY or PFFY, height between units is 30m.
*4 In case of branch box connection : 12m
*5 Liquid pipe diameter: 12.7 mm, in case of further piping length is longer than 60 m, or the farthest length of main pipe between outdoor unit and branch box is longer than 20 m in branch box system.
*6 Use liquid pipe of ø9.52 for less than P50 indoor units, when farthest length from the first joint exceeds 30m.

S-Series

PUMY-SP VKMD-A(-BS)

Model							PUMY-SP80VKMD-A(-BS)	PUMY-SP112VKMD-A(-BS)	PUMY-SP125VKMD-A(-BS)	PUMY-SP140VKMD-A(-BS)
Power source							1-phase 220-230-240 V, 50 Hz; 1-phase 220 V, 60 Hz	1-phase 220-230-240 V, 50 Hz; 1-phase 220 V, 60 Hz	1-phase 220-230-240 V, 50 Hz; 1-phase 220 V, 60 Hz	1-phase 220-230-240 V, 50 Hz; 1-phase 220 V, 60 Hz
Cooling capacity (Nominal)	*1	kW					9.0	12.5	14.0	15.5
	*1	Btu/h					30,700	42,700	47,800	52,900
	Power input	kW					2.11	3.10	3.84	4.38
	Current input	A					9.79-9.36-8.97	14.38-13.75-13.18	17.81-17.04-16.33	20.32-19.43-18.62
	COP	kW/kW					4.27	4.03	3.65	3.54
Temp. range of cooling	Indoor	W.B.					15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)
	Outdoor	D.B.					-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)
Heating capacity (Nominal)	*2	kW					10.0	14.0	16.0	16.5
	*2	Btu/h					34,100	47,800	54,600	56,300
	Power input	kW					2.27	3.17	3.90	4.02
	Current input	A					10.53-10.07-9.65	14.70-14.06-13.48	18.09-17.30-16.58	18.65-17.83-17.09
	COP	kW/kW					4.41	4.42	4.10	4.10
Temp. range of heating	Indoor	D.B.					15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)
	Outdoor	W.B.					-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)
Indoor unit connectable	Total capacity						50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity
	Model/ Quantity	CITY MULTI					P10-P100/9	P10-P140/12	P10-P140/12	P10-P140/12
		Branch box					P22-P80/5	P22-P100/7	P22-P100/8	P22-P100/8
		Mixed system	Branch box 1 unit	CITY MULTI			P10-P100 5 4 2	P10-P140 5 4	P10-P140/5	P10-P140/5
				Branch box			P22-P100 2 3 4	P22-P100 4 5	P22-P100/5	P22-P100/5
			Branch box 2 units	CITY MULTI			P10-P100 3 2	P10-P140 3 2	P10-P140 3 2	P10-P140 3 2
				Branch box			P22-P100 3 4	P22-P100 5 6	P22-P100 6 7	P22-P100 7 8
Sound pressure level (measured in anechoic room)		dB <A>					51/54	52/54	53/56	54/56
Refrigerant piping diameter	Liquid pipe	mm (inch)					9.52 (3/8) Flare	9.52 (3/8) Flare	9.52 (3/8) Flare	9.52 (3/8) Flare
	Gas pipe	mm (inch)					15.88 (5/8) Flare	15.88 (5/8) Flare	15.88 (5/8) Flare	15.88 (5/8) Flare
Fan	Type × Quantity						Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1
	Airflow rate	m^3/min					75/75	77/75	81/83	81/83
		L/s					1250/1250	1283/1250	1350/1383	1350/1383
		cfm					2649/2649	2719/2649	2861/2931	2861/2931
	Motor output	kW					0.20 × 1	0.20 × 1	0.20 × 1	0.20 × 1
Compressor	Type × Quantity						Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1
	Starting method						Inverter	Inverter	Inverter	Inverter
	Motor output	kW					2.1	3.1	3.5	3.7
External finish							Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension H × W × D		mm					981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)
		inch					38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)
Protection devices	High pressure protection						High pressure Switch	High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)						Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)
	Compressor						Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection
	Fan motor						Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type × original charge						R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)
Net weight		kg (lb)					93 (205)*5	93 (205)*5	93 (205)*5	93 (205)*5
Heat exchanger							Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
Defrosting method							Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts							Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C(D.B.): When connecting following models such as PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLE(R)M, PFFY-P20/25/32VKM, and M series, S series, and P series type indoor unit.
*4 −15 to 52°C(D.B.): When using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in *3.
*5 94 (207), for PUMY-SP80/112/125/140VKMD-A-BS.
*Nominal conditions *1,*2 are subject to ISO 15042.
*Due to continuing improvement, above specifications may be subject to change without notice.

S-Series

PUMY-SP YKMD-A(-BS)

Model						PUMY-SP80YKMD-A(-BS)	PUMY-SP112YKMD-A(-BS)	PUMY-SP125YKMD-A(-BS)	PUMY-SP140YKMD-A(-BS)
Power source						3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz	3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz	3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz	3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz
Cooling capacity (Nominal)	*1	kW				9.0	12.5	14.0	15.5
	*1	Btu/h				30,700	42,700	47,800	52,900
	Power input	kW				2.11	3.10	3.84	4.38
	Current input	A				3.37-3.21-3.09	4.96-4.71-4.54	6.14-5.83-5.62	7.00-6.65-6.41
	COP	kW/kW				4.27	4.03	3.65	3.54
Temp. range of cooling	Indoor	W.B.				15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)	15 to 24°C (59 to 75°F)
	Outdoor	D.B.				-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)	-5 to 52°C *3,*4 (23 to 126°F)
Heating capacity (Nominal)	*2	kW				10.0	14.0	16.0	16.5
	*2	Btu/h				34,100	47,800	54,600	56,300
	Power input	kW				2.27	3.17	3.90	4.02
	Current input	A				3.63-3.45-3.32	5.07-4.82-4.64	6.24-5.93-5.71	6.43-6.11-5.89
	COP	kW/kW				4.41	4.42	4.10	4.10
Temp. range of heating	Indoor	D.B.				15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)	15 to 27°C (59 to 81°F)
	Outdoor	W.B.				-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)	-20 to 15°C (-4 to 59°F)
Indoor unit connectable	Total capacity					50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity	50 to 130% of outdoor unit capacity
	Model/ Quantity	CITY MULTI				P10-P100/9	P10-P140/12	P10-P140/12	P10-P140/12
		Branch box				P22-P80/5	P22-P100/7	P22-P100/8	P22-P100/8
		Mixed system	Branch box 1 unit	CITY MULTI		P10-P100 5 4 2	P10-P140 5 4	P10-P140/5	P10-P140/5
				Branch box		P22-P100 2 3 4	P22-P100 4 5	P22-P100/5	P22-P100/5
			Branch box 2 units	CITY MULTI		P10-P100 3 2	P10-P140 3 2	P10-P140 3 2	P10-P140 3 2
				Branch box		P22-P100 3 4	P22-P100 5 6	P22-P100 6 7	P22-P100 7 8
Sound pressure level (measured in anechoic room)		dB <A>				51/54	52/54	53/56	54/56
Refrigerant piping diameter	Liquid pipe	mm (inch)				9.52 (3/8) Flare	9.52 (3/8) Flare	9.52 (3/8) Flare	9.52 (3/8) Flare
	Gas pipe	mm (inch)				15.88 (5/8) Flare	15.88 (5/8) Flare	15.88 (5/8) Flare	15.88 (5/8) Flare
Fan	Type × Quantity					Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1
	Airflow rate	m^3/min				75/75	77/75	81/83	81/83
		L/s				1250/1250	1283/1250	1350/1383	1350/1383
		cfm				2649/2649	2719/2649	2861/2931	2861/2931
	Motor output	kW				0.20 × 1	0.20 × 1	0.20 × 1	0.20 × 1
Compressor	Type × Quantity					Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1	Twin rotary hermetic compressor × 1
	Starting method					Inverter	Inverter	Inverter	Inverter
	Motor output	kW				2.1	3.1	3.5	3.7
External finish						Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension H × W × D		mm				981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)	981 × 1,050 × 330 (+25)
		inch				38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)	38-5/8 × 41-3/8 × 13 (+1)
Protection devices	High pressure protection					High pressure Switch	High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)					Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)	Overcurrent detection, Overheat detection(Heat sink thermistor)
	Compressor					Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection
	Fan motor					Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type × original charge					R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)	R410A × 3.5 kg (8 lb)
Net weight		kg (lb)				94 (207) *5	94 (207) *5	94 (207) *5	94 (207) *5
Heat exchanger						Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
Defrosting method						Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts						Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C(D.B.): When connecting following models such as PKFY-P10/15/20/25/32VLM, PFFY- P20/25/32VLE(R)M, PFFY-P20/25/32VKM, and M series, S series, and P series type indoor unit.
*4 −15 to 52°C(D.B.): When using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in *3.
*5 95 (209), for PUMY-SP80/112/125/140YKMD-A-BS.
*Nominal conditions *1,*2 are subject to ISO 15042.
*Due to continuing improvement, above specifications may be subject to change without notice.

S-Series

PUMY-P VKM5(-BS) NEW

Model					PUMY-P112VKM5 (-BS)	PUMY-P125VKM5 (-BS)	PUMY-P140VKM5 (-BS)
Power source					1-phase 220-230-240V 50Hz, 220-230V 60Hz	1-phase 220-230-240V 50Hz, 220-230V 60Hz	1-phase 220-230-240V 50Hz, 220-230V 60Hz
Cooling capacity (Nominal)	*1			kW	12.5	14.0	15.5
	*1			BTU / h	42,650	47,768	52,886
	Power input			kW	2.79	3.46	4.52
	Current input			A	12.87-12.32-11.80, 12.87-12.32	15.97-15.27-14.64, 15.97-15.27	20.86-19.95-19.12, 20.86-19.95
	EER			kW / kW	4.48	4.05	3.43
Temp. range of cooling	Indoor temp.			W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor temp.*3,*4			D.B.	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)
Heating capacity (Nominal)	*2			kW	14.0	16.0	18.0
	*2			BTU / h	47,768	54,592	61,416
	Power input			kW	3.04	3.74	4.47
	Current input			A	14.03-13.42-12.86, 14.03-13.42	17.26-16.51-15.82, 17.26-16.51	20.63-19.73-18.91, 20.63-19.73
	COP			kW / kW	4.61	4.28	4.03
Temp. range of heating	Indoor temp.			D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor temp.			W.B.	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)
Indoor unit connectable	Total capacity				50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity	CITY MULTI			P10-P140/9	P10-P140/10	P10-P140/12
		Branch box		*8	P15-P100/8	P15-P100/8	P15-P100/8
		Mixed system	Branch box 1 unit *8	CITY MULTI	P15-P140/5	P15-P140/5	P15-P140/5
				Branch box	P15-P100/5	P15-P100/5	P15-P100/5
			Branch box 2 units *8	CITY MULTI	P15-P140/3 or 2 *7	P15-P140/3	P15-P140/3
				Branch box	P15-P100/7 or 8 *7	P15-P100/8	P15-P100/8
Sound pressure level (measured in anechoic room)	*5			dB <A>	49/51	50/52	51/53
Sound power level (measured in anechoic room)	*5			dB <A>	69/71	70/72	71/73
Refrigerant piping diameter	Liquid pipe			mm (in.)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas pipe			mm (in.)	15.88(5/8)	15.88(5/8)	15.88(5/8)
FAN	Type x Quantity				Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate			m^3/min	110	110	110
				L/s	1,833	1,833	1,833
				cfm	3,884	3,884	3,884
	Motor output			kW	0.074 + 0.074	0.074 + 0.074	0.074 + 0.074
*6	External static press.				0	0	0
Compressor	Type x Quantity				Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method				Inverter	Inverter	Inverter
	Motor output			kW	2.9	3.5	3.9
External finish					Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD				mm	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)
				in.	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)
Protection devices	High pressure protection				High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)				Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)
	Compressor				Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection	Compressor thermistor, Overcurrent detection
	Fan motor				Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection
Refrigerant	Type x original charge				R410A 4.8kg	R410A 4.8kg	R410A 4.8kg
Net weight				kg (lbs)	123(271)	123(271)	123(271)
Heat exchanger					Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
HIC circuit (HIC: Heat Inter-Changer)					HIC circuit	HIC circuit	HIC circuit
Defrosting method					Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts					Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E

Notes:

*1,*2 Nominal conditions

Indoor Outdoor Pipe length Level difference

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52ºC D.B. [50 to 126ºF D.B.], when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLE(R)M and PEFY-P25/32/40VMA3; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52ºC D.B. [5 to 126ºF D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH2O). To use this option, PAC-SJ71FM-E is needed.

*7 When connecting 7 indoor units via branch box, connectable CITY MULTI indoor units are 3; connecting 8 indoor units via branch box, connectable CITY MULTI indoor units are 2.

*8 At least two indoor unit must be connected when using branch box.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

S-Series

PUMY-P YKM4(-BS) NEW
PUMY-P YKMD-A(-BS)

Model					PUMY-P112YKM4 (-BS)	PUMY-P125YKM4 (-BS)	PUMY-P140YKM4 (-BS)	PUMY-P200YKMD-A (-BS)
Power source					3-phase 380-400-415V 50Hz, 380V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	3-phase 380-400-415V, 50Hz; 3-phase 380V, 60Hz
Cooling capacity (Nominal)	*1		kW		12.5	14.0	15.5	22.4
	*1		BTU / h		42,650	47,768	52,886	76,400
	Power input		kW		2.79	3.46	4.52	6.22
	Current input		A		4.99-4.74-4.57, 4.99	5.84-5.55-5.35, 5.84	7.23-6.87-6.62, 7.23	10.16-9.65-9.30, 10.16
	EER		kW / kW		4.48	4.05	3.43	3.60
Temp. range of cooling	Indoor temp.		W.B.		15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15~24°C (59~75°F)
	Outdoor temp.*3,*4		D.B.		-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5~52°C (23~126°F) *3
Heating capacity (Nominal)	*2		kW		14.0	16.0	18.0	25.0
	*2		BTU / h		47,768	54,592	61,416	85,300
	Power input		kW		3.04	3.74	4.47	6.00
	Current input		A		5.43-5.16-4.98, 5.43	6.31-6.00-5.78, 6.31	7.15-6.79-6.55, 7.15	9.80-9.31-8.98, 9.80
	COP		kW / kW		4.61	4.28	4.03	4.17
Temp. range of heating	Indoor temp.		D.B.		15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15~27°C(59~81°F)
	Outdoor temp.		W.B.		-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20~15°C(-4~59°F)
Indoor unit connectable	Total capacity				50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity	CITY MULTI			P10-P140/9	P10-P140/10	P10-P140/12	P10-P200/12
		Branch box		*8	P15-P100/8	P15-P100/8	P15-P100/8	P22-P100/8
		Mixed system	Branch box 1 unit *8	CITY MULTI Branch box	P15-P140/5	P15-P140/5	P15-P140/5	P15-P200/5
					P15-P100/5	P15-P100/5	P15-P100/5	P22-P100/5
			Branch box 2 units *8	CITY MULTI Branch box	P15-P140/3 or 2 *7	P15-P140/3	P15-P140/3	P15-P200/3
					P15-P100/7 or 8 *7	P15-P100/8	P15-P100/8	P22-P100/8
Sound pressure level (measured in anechoic room)	*5		dB <A>		49/51	50/52	51/53	57/61
Sound power level (measured in anechoic room)	*5		dB <A>		69/71	70/72	71/73	-
Refrigerant piping diameter	Liquid pipe		mm (in.)		9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas pipe		mm (in.)		15.88(5/8)	15.88(5/8)	15.88(5/8)	19.05(3/4)
FAN	Type x Quantity				Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate		m^3/min		110	110	110	134
			L/s		1,833	1,833	1,833	2,233
			cfm		3,884	3,884	3,884	4,732
	Motor output		kW		0.074 + 0.074	0.074 + 0.074	0.074 + 0.074	0.20 + 0.20
	External static press.				0 *6	0 *6	0 *6	0
Compressor	Type x Quantity				Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method				Inverter	Inverter	Inverter	Inverter
	Motor output		kW		2.9	3.5	3.9	5.3
External finish					Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD			mm		1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+40)	1,338 x 1,050 x 330 (+25)
			in.		52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1-9/16)	52-11/16 x 41-11/32 x 13 (+1)
Protection devices	High pressure protection				High pressure Switch	High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)				Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heat sink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)
	Compressor				Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection
	Fan motor				Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection, Overcurrent detection	Overheating, Voltage protection
Refrigerant	Type x original charge				R410A 4.8kg	R410A 4.8kg	R410A 4.8kg	R410A 7.3kg
Net weight			kg (lbs)		125 (276)	125 (276)	125 (276)	138(305)*9
Heat exchanger					Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
HIC circuit (HIC: Heat Inter-Changer)					HIC circuit	HIC circuit	HIC circuit	-
Defrosting method					Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts					Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E Air protect guide: PAC-SH95AG-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

Notes:

*1,*2 Nominal conditions

Indoor Outdoor Pipe length Level difference

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB(95ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB(68ºF DB)	7ºC DB/6ºC WB(45ºF DB/43ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52ºC D.B. [50 to 126ºF D.B.], when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLE(R)M and PEFY-P25/32/40VMA3; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52ºC D.B. [5 to 126ºF D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH2O). To use this option, PAC-SJ71FM-E is needed.

*7 When connecting 7 indoor units via branch box, connectable CITY MULTI indoor units are 3; connecting 8 indoor units via branch box, connectable CITY MULTI indoor units are 2.

*8 At least two indoor unit must be connected when using branch box.

*9 139 (306), for PUMY-P200YKMD-A-BS

*Nominal condition *1,*2 are subject to ISO 15042.

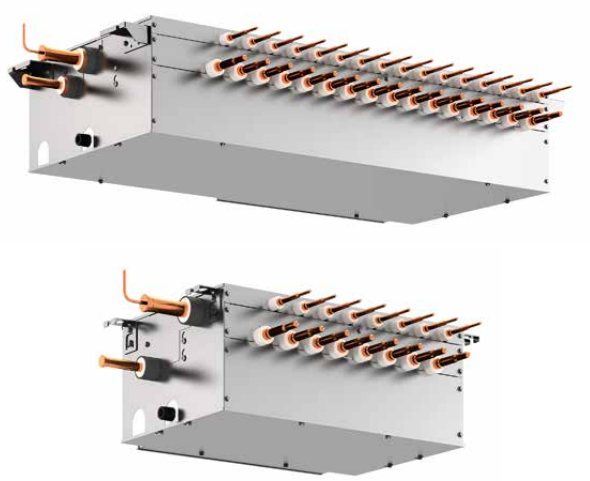
*Due to continuing improvement, above specification may be subject to change without notice.

BC Controllers

The secret of CITY MULTI heat recovery systems lies in the

BC Controller

The BC controller houses a liquid/gas separator, allowing the outdoor/heat source unit to deliver a mixture (2-phase) of hot gas for heating and liquid for cooling, all through the same pipe. The three pipe system allocates a pipe to each of these phases. When this mixture arrives at the BC controller, it is separated, and the correct phase is delivered to each indoor unit according to the individual requirement for either heating or cooling.



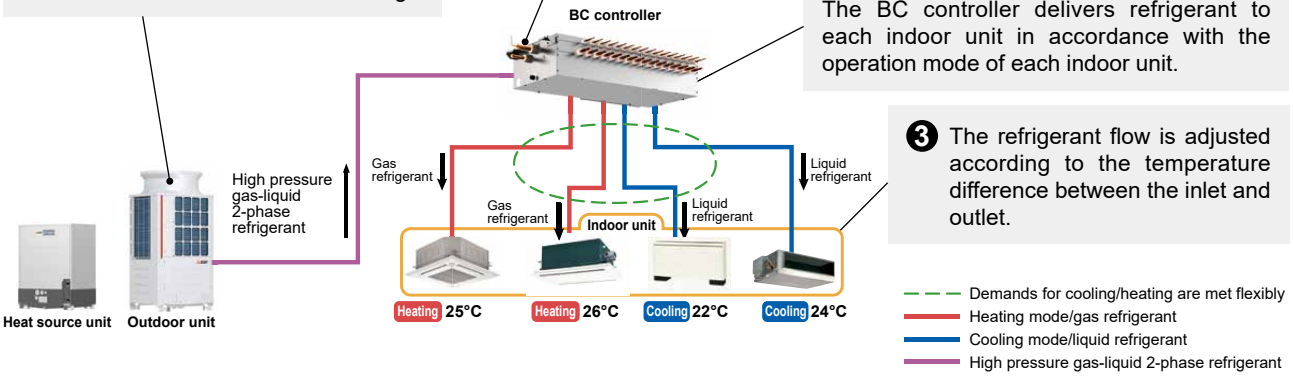
❶ High pressure and low pressure decides the compressor frequency, the mode of heat exchange, and controls the amount of heat exchange.

❷ R2/WR2 Refrigerant Circuit

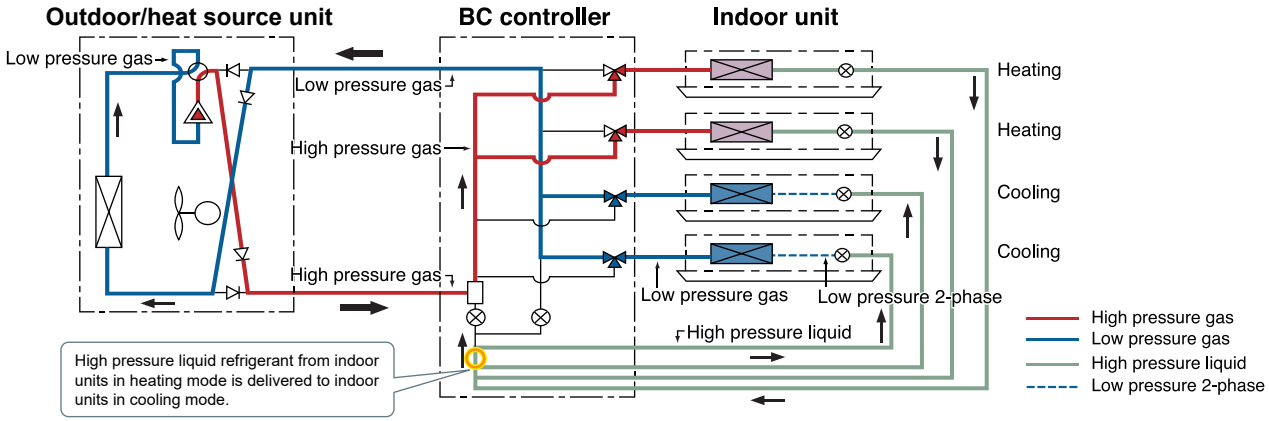
Gas-liquid 2-phase refrigerant from the outdoor/heat source unit is separated into gas refrigerant and liquid refrigerant by a gas-liquid separator in the BC controller.

The BC controller delivers refrigerant to each indoor unit in accordance with the operation mode of each indoor unit.

❸ The refrigerant flow is adjusted according to the temperature difference between the inlet and outlet.



• Total heat recovery operation



Lineup

Conventional model		Latest model		
Type	Model name	Type	Model name	Usage
J	CMB-P**V-J	J1	CMB-M**V-J1	Main BC controller
JA	CMB-P**V-JA	JA1	CMB-M**V-JA1	Main BC controller with sub BC controller
KA	CMB-P**V-KA	KA1	CMB-P**V-KA1	Main BC controller with sub BC controller
KB	CMB-P**V-KB	KB1	CMB-M**V-KB1	Sub BC controller

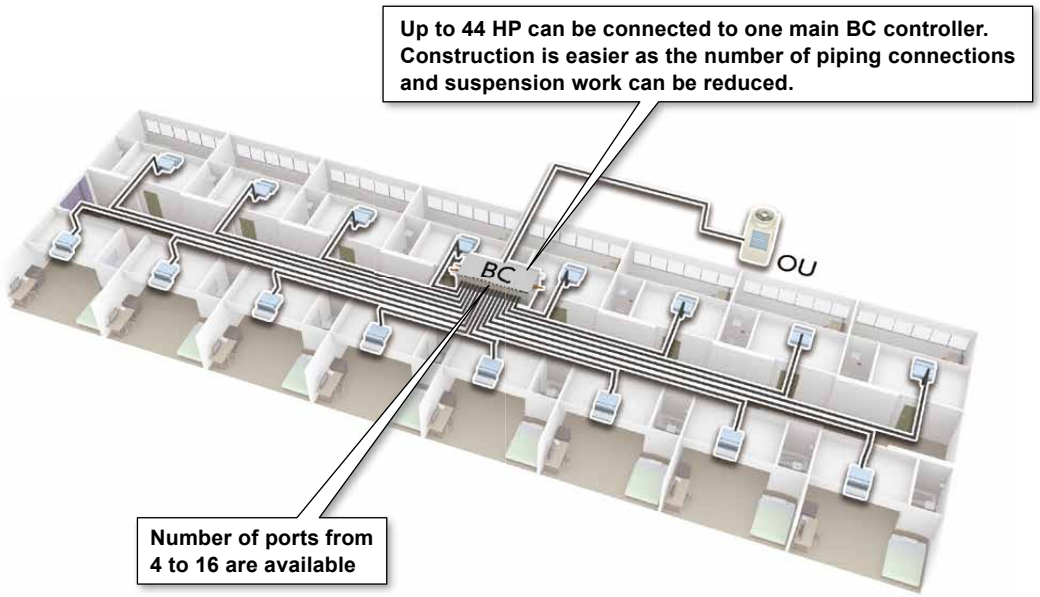
*When mixing the use of a conventional (J/JA/KA/KB type) and latest (J1/JA1/KA1/KB1 type) BC controller, please refer to the DATABOOK for details.

• System with a main BC controller

*This image shows the J1 type.

Main BC controller (J1 type)

Model	CMB-M104V-J1	CMB-M106V-J1	CMB-M108V-J1	CMB-M1012V-J1	CMB-M1016V-J1
Number of branches	4	6	8	12	16
Connectable outdoor/heat source unit capacity	(E)P200 to (E)P350				



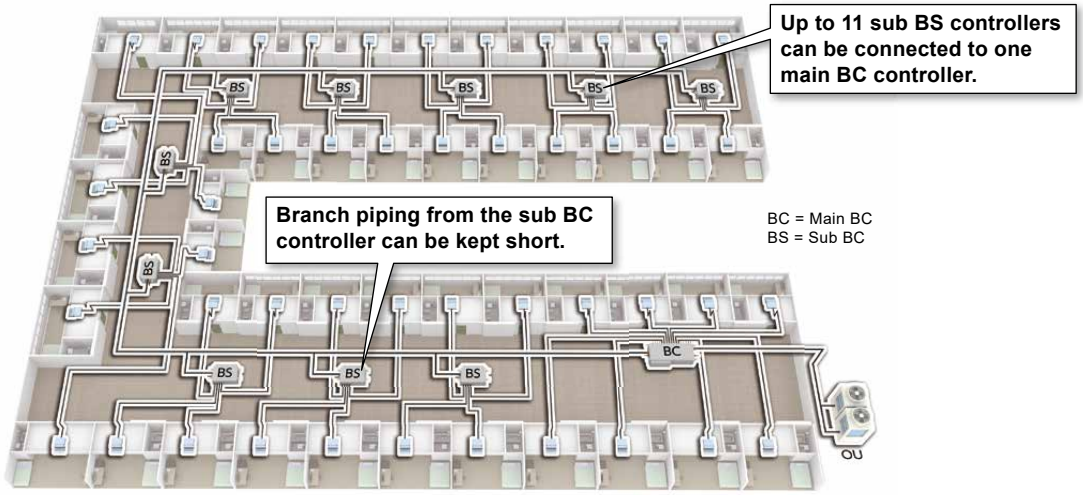
• System with multiple BC controllers

Main BC controller used with sub BC controller (JA1 and KA1 types)

Model	CMB-M108V-JA1	CMB-M1012V-JA1	CMB-M1016V-JA1	CMB-P1016V-KA1
Number of branches	8	12	16	16
Connectable outdoor/heat source unit capacity	(E)P200 to (E)P900			(E)P200 to (E)P1100

Sub BC controller (KB1 type)

Model	CMB-M104V-KB1	CMB-M108V-KB1
Number of branches	4	8
Connectable main BC controller	CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1	



*When installing a sub BC controller, refer to the DATA BOOK for full details.
*The main BC controller has two ports for sub BC controllers. A low pressure pipe needs to be branched from the outdoor unit.

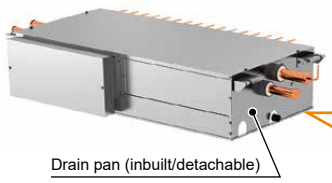
Features

• Drain pan design

Conventional model *CMB-P V-J/V-JA/V-KA/V-KB

The drain pan is externally attached to the BC controller.

Latest model *CMB-M V-J1/V-JA1/V-KB1, CMB-P V-KA1

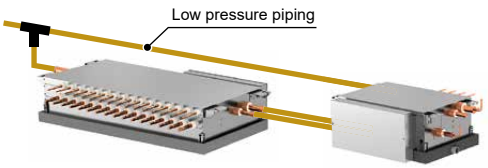


The drain pan on the latest BC controller is inbuilt and can be detached from the bottom for easier maintenance.

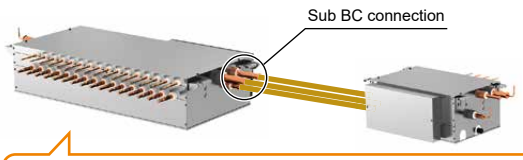
Easier maintenance with inbuilt detachable drain pan.

• Piping

Conventional model *CMB-P V-JA/V-KA/V-KB



Latest model *CMB-M V-JA1/V-KB1, CMB-P V-KA1



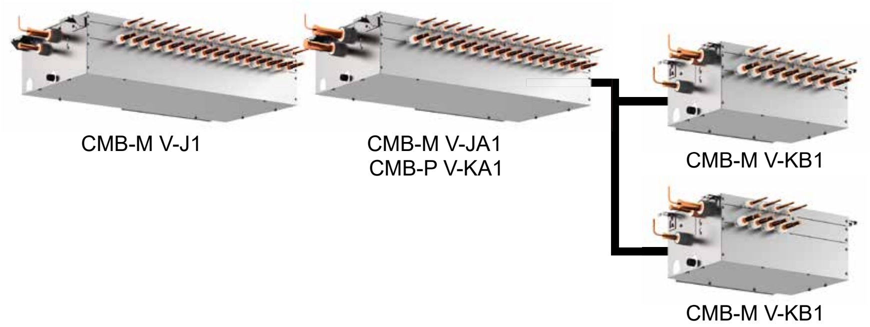
Low pressure piping connected to a sub BC make installation easier.

Optional parts

• For BC controllers

Branch pipe (Header)	CMY-R160-J1	Joint for connecting to two nozzles

CMB-M V-J1
CMB-M V-JA1
CMB-P V-KA1
CMB-M V-KB1



J1 type

CMB-M V-J1

Model			CMB-M104V-J1		CMB-M106V-J1		CMB-M108V-J1	
Number of branch			4		6		8	
Power source			1-phase 220-230-240 V					
			50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Power input (220/230/240)	Cooling	kW	0.067/0.076/0.085	0.054/0.061/0.067	0.097/0.110/0.123	0.078/0.088/0.097	0.127/0.144/0.161	0.102/0.115/0.127
	Heating	kW	0.030/0.034/0.038	0.024/0.027/0.030	0.045/0.051/0.057	0.036/0.041/0.045	0.060/0.068/0.076	0.048/0.054/0.060
Current input (220/230/240)	Cooling	A	0.31/0.34/0.36	0.25/0.27/0.28	0.45/0.48/0.52	0.36/0.39/0.41	0.58/0.63/0.68	0.47/0.50/0.53
	Heating	A	0.14/0.15/0.16	0.11/0.12/0.13	0.21/0.23/0.24	0.17/0.18/0.19	0.28/0.30/0.32	0.22/0.24/0.25
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)					
Connectable outdoor/heat source unit capacity			P200 to P350					
Indoor unit capacity connectable to 1 branch *13			Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)					
External dimension HxWxD		mm	250 x 596 x 476		250 x 596 x 476		250 x 596 x 476	
		in.	9-7/8 x 23-1/2 x 18-3/4		9-7/8 x 23-1/2 x 18-3/4		9-7/8 x 23-1/2 x 18-3/4	
Refrigerant piping diameter								
To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe	High press. pipe	Low press. pipe	High press. pipe	Low press. pipe
	P200	mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	P250/P300	mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	P350 *14	mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
To indoor unit			Liquid pipe	Gas pipe	Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		O.D. 32 (1-1/4)		O.D. 32 (1-1/4)	
Net weight		kg (lbs)	26 (58)		29 (64)		33 (73)	
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		59		59	
	Defrost	dB <A>	71		71		71	
Sound pressure level (measured in anechoic room) *15	Rated operation	dB <A>	40		40		40	
	Defrost	dB <A>	53		53		53	
Accessories			Drain Connection pipe, Washer, Tie band					

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
   The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
14. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.

J1 type

CMB-M V-J1

Model			CMB-M1012V-J1		CMB-M1016V-J1	
Number of branch			12		16	
Power source			1-phase 220-230-240 V			
			50 Hz	60 Hz	50 Hz	60 Hz
Power input (220/230/240)	Cooling	kW	0.186/0.211/0.236	0.150/0.168/0.186	0.246/0.279/0.312	0.198/0.222/0.246
	Heating	kW	0.090/0.102/0.114	0.072/0.081/0.090	0.119/0.135/0.151	0.096/0.108/0.119
Current input (220/230/240)	Cooling	A	0.85/0.92/0.99	0.69/0.74/0.78	1.12/1.22/1.30	0.90/0.97/1.03
	Heating	A	0.42/0.44/0.48	0.33/0.36/0.38	0.55/0.59/0.63	0.44/0.47/0.50
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P350			
Indoor unit capacity connectable to 1 branch *13			Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)			
External dimension HxWxD		mm	252 x 911 x 622		252 x 1,135 x 622	
		in.	9-15/16 x 35-7/8 x 24-1/2		9-15/16 x 44-11/16 x 24-1/2	
Refrigerant piping diameter						
To outdoor/heat source unit			High press. pipe	Low press. pipe	High press. pipe	Low press. pipe
Connectable unit capacity						
P200		mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
P250/P300		mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
P350 *14		mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
To indoor unit			Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		O.D. 32 (1-1/4)	
Net weight		kg (lbs)	49 (109)		59 (131)	
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		59	
	Defrost	dB <A>	71		71	
Sound pressure level (measured in anechoic room) *15	Rated operation	dB <A>	40		40	
	Defrost	dB <A>	53		53	
Accessories			Drain Connection pipe, Washer, Tie band			

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
   The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
14. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.

JA1 type

CMB-M V-JA1

Model			CMB-M108V-JA1		CMB-M1012V-JA1	
Number of branch			8		12	
Power source			1-phase 220-230-240 V			
			50 Hz	60 Hz	50 Hz	60 Hz
Power input (220/230/240)	Cooling	kW	0.127/0.144/0.161	0.102/0.115/0.127	0.186/0.211/0.236	0.150/0.168/0.186
	Heating	kW	0.060/0.068/0.076	0.048/0.054/0.060	0.090/0.102/0.114	0.072/0.081/0.090
Current input (220/230/240)	Cooling	A	0.58/0.63/0.68	0.47/0.50/0.53	0.85/0.92/0.99	0.69/0.74/0.78
	Heating	A	0.28/0.30/0.32	0.22/0.24/0.25	0.42/0.44/0.48	0.33/0.36/0.38
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P900			
Indoor unit capacity connectable to 1 branch *13			Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)			
External dimension HxWxD		mm	252 x 911 x 622		252 x 1,135 x 622	
		in.	9-15/16 x 35-7/8 x 24-1/2		9-15/16 x 44-11/16 x 24-1/2	
Refrigerant piping diameter						
To outdoor/heat source unit			High press. pipe	Low press. pipe	High press. pipe	Low press. pipe
Connectable unit capacity						
P200		mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
P250/P300		mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
P350	*14	mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
P400 to P500		mm(in.) O.D.	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
P550	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
P600	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed
P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
P700 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
P850 to P900		mm(in.) O.D.	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed
To indoor unit			Liquid pipe	Gas pipe	Liquid pipe	Gas pipe
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
To other BC controller			High press. pipe	Liquid pipe / Low press. pipe	High press. pipe	Liquid pipe / Low press. pipe
Total down-stream Indoor unit capacity						
to P200		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed / 19.05 (3/4) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed / 19.05 (3/4) Brazed
P201 to P300		mm(in.) O.D.	19.05 (3/4) Brazed	9.52 (3/8) Brazed / 22.2 (7/8) Brazed	19.05 (3/4) Brazed	9.52 (3/8) Brazed / 22.2 (7/8) Brazed
P301 to P350		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed / 28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed / 28.58 (1-1/8) Brazed
P351 to P400		mm(in.) O.D.	22.2 (7/8) Brazed	12.7 (1/2) Brazed / 28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	12.7 (1/2) Brazed / 28.58 (1-1/8) Brazed
P401 to P600		mm(in.) O.D.	22.2 (7/8) Brazed	15.88 (5/8) Brazed / 28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed / 28.58 (1-1/8) Brazed
P601 to P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed / 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed / 28.58 (1-1/8) Brazed
P651 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed / 34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed / 34.93 (1-3/8) Brazed
P801 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed / 41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed / 41.28(1-5/8) Brazed
P1001 or above		mm(in.) O.D.	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed / 41.28(1-5/8) Brazed	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed / 41.28(1-5/8) Brazed
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		O.D. 32 (1-1/4)	
Net weight		kg (lbs)	48 (106)		60 (133)	
Sound power level (measured in anechoic room)	Rated operation	dB <A>	68		68	
	Defrost	dB <A>	74		74	
Sound pressure level (measured in anechoic room) *15	Rated operation	dB <A>	50		50	
	Defrost	dB <A>	56		56	
Accessories			Drain Connection pipe, Washer, Tie band			

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
   The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
14. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.

JA1 type

CMB-M V-JA1

Model			CMB-M1016V-JA1		
Number of branch			16		
Power source			1-phase 220-230-240 V		
			50 Hz	60 Hz	
Power input (220/230/240)	Cooling	kW	0.246/0.279/0.312	0.198/0.222/0.246	
	Heating	kW	0.119/0.135/0.151	0.096/0.108/0.119	
Current input (220/230/240)	Cooling	A	1.12/1.22/1.30	0.90/0.97/1.03	
	Heating	A	0.55/0.59/0.63	0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P200 to P900		
Indoor unit capacity connectable to 1 branch		*13	Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)		
External dimension HxWxD		mm	252 x 1,135 x 622		
		in.	9-15/16 x 44-11/16 x 24-1/2		
Refrigerant piping diameter					
To outdoor/heat source unit			High press. pipe	Low press. pipe	
Connectable unit capacity					
P200		mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
P250/P300		mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
P350	*14	mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
P400 to P500		mm(in.) O.D.	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
P550	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
P600	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	
P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
P700 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P850 to P900		mm(in.) O.D.	28.58 (1-1/8) Brazed	41.28(1-5/8) Brazed	
To indoor unit			Liquid pipe	Gas pipe	
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	
To other BC controller			High press. pipe	Liquid pipe	Low press. pipe
Total down-stream Indoor unit capacity					
to P200		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
P201 to P300		mm(in.) O.D.	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
P301 to P350		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
P351 to P400		mm(in.) O.D.	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
P401 to P600		mm(in.) O.D.	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
P601 to P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
P651 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
P801 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed
P1001 or above		mm(in.) O.D.	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		
Net weight		kg (lbs)	68 (150)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	68		
	Defrost	dB <A>	74		
Sound pressure level (measured in anechoic room)	*15 Rated operation	dB <A>	50		
	Defrost	dB <A>	56		
Accessories			Drain Connection pipe, Washer, Tie band		

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
   The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
14. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.

KA1 type

CMB-P V-KA1

Model			CMB-P1016V-KA1		
Number of branch			16		
Power source			1-phase 220-230-240 V		
			50Hz	60Hz	
Power input (220/230/240)	Cooling	kW	0.246/0.279/0.312	0.198/0.222/0.246	
	Heating	kW	0.119/0.135/0.151	0.096/0.108/0.119	
Current input (220/230/240)	Cooling	A	1.12/1.22/1.30	0.90/0.97/1.03	
	Heating	A	0.55/0.59/0.63	0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P200 to P1100		
Indoor unit capacity connectable to 1 branch		*13	Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81.)		
External dimension HxWxD		mm	250 x 1,135 x 622		
		in.	9-7/8 x 44-11/16 x 24-1/2		
Refrigerant piping diameter					
To outdoor/heat source unit			High press. pipe	Low press. pipe	
Connectable unit capacity					
P200		mm(in.) O.D.	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
P250/P300		mm(in.) O.D.	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
P350	*14	mm(in.) O.D.	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
P400 to P500		mm(in.) O.D.	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
P550	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
P600	*14	mm(in.) O.D.	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	
P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
P700 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
P850 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed	
P1050 to P1100		mm(in.) O.D.	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	
To indoor unit			Liquid pipe	Gas pipe	
		mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	
To other BC controller			High press. pipe	Liquid pipe	Low press. pipe
Total down-stream Indoor unit capacity					
to P200		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
P201 to P300		mm(in.) O.D.	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
P301 to P350		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
P351 to P400		mm(in.) O.D.	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
P401 to P600		mm(in.) O.D.	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
P601 to P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
P651 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
P801 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
P1001 or above		mm(in.) O.D.	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		
Net weight		kg (lbs)	69 (153)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	66		
	Defrost	dB <A>	73		
Sound pressure level (measured in anechoic room)	*15 Rated operation	dB <A>	48		
	Defrost	dB <A>	55		
Accessories			Drain Connection pipe, Washer, Tie band		

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. The ambient relative humidity of the BC controller needs to be kept below 80%.
13. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
14. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
15. The sound pressure level measured by the conventional method in JIS for reference purpose.

KB1 type

CMB-M V-KB1

Model				CMB-M104V-KB1			CMB-M108V-KB1		
Number of branch				4			8		
Power source				1-phase 220-230-240 V					
				50 Hz	60 Hz		50 Hz	60 Hz	
Power input (220/230/240)	Cooling		kW	0.060/0.068/0.076	0.048/0.054/0.060		0.119/0.135/0.151	0.096/0.108/0.119	
	Heating		kW	0.030/0.034/0.038	0.024/0.027/0.030		0.060/0.068/0.076	0.048/0.054/0.060	
Current input (220/230/240)	Cooling		A	0.28/0.30/0.32	0.22/0.24/0.25		0.55/0.59/0.63	0.44/0.47/0.50	
	Heating		A	0.14/0.15/0.16	0.11/0.12/0.13		0.28/0.30/0.32	0.22/0.24/0.25	
External finish				Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)					
Connectable Main BC controller				CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1					
The maximum number of connectable Sub BC controllers				11					
The maximum connectable capacity of indoor units				P350 for each					
External dimension HxWxD			mm	250 x 596 x 476			250 x 596 x 476		
			in.	9-7/8 x 23-1/2 x 18-3/4			9-7/8 x 23-1/2 x 18-3/4		
Refrigerant piping diameter									
To outdoor/heat source unit				High press. pipe	Low press. pipe		High press. pipe	Low press. pipe	
	Connectable unit capacity								
	-		mm(in.) O.D.	-	-		-	-	
To indoor unit				Liquid pipe	Gas pipe		Liquid pipe	Gas pipe	
			mm(in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	
To other BC controller				High press. pipe	Liquid pipe	Low press. pipe	High press. pipe	Liquid pipe	Low press. pipe
	Total down-stream Indoor unit capacity								
	to P200		mm(in.) O.D.	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
	P201 to P300		mm(in.) O.D.	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
	P301 to P350		mm(in.) O.D.	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
	P351 to P400		mm(in.) O.D.	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
	P401 to P600		mm(in.) O.D.	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
	P601 to P650		mm(in.) O.D.	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
	P651 to P800		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
	P801 to P1000		mm(in.) O.D.	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed
	P1001 or above		mm(in.) O.D.	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28(1-5/8) Brazed
Field drain pipe size			mm (in.)	O.D. 32 (1-1/4)			O.D. 32 (1-1/4)		
Net weight			kg (lbs)	23 (51)			31 (69)		
Sound power level (measured in anechoic room)	Rated operation		dB <A>	59			59		
	Defrost		dB <A>	71			71		
Sound pressure level (measured in anechoic room) *14	Rated operation		dB <A>	40			40		
	Defrost		dB <A>	53			53		
Accessories				Drain Connection pipe, Washer, Tie band					

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
   (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
   The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. Can't use singleness. (MAIN BC CONTROLLER is necessary)
13. The ambient relative humidity of the BC controller needs to be kept below 80%.
14. The sound pressure level measured by the conventional method in JIS for reference purpose.

CITY MULTI VRF

Indoor Units

Wide Selection of Indoor Units

Type		Ceiling cassette type				Ceiling concealed type	
		4-way airflow type	4-way airflow type	2-way airflow type	1-way airflow type	Low noise type	Compact depth type
Model		PLFY-P VEM-E/A	PLFY-P VFM-E1	PLFY-P VLMD-E	PMFY-P VBM-E	PEFY-P VMR-E-L/R	PEFY-P VMX(L)-E(1)
							
Line Up	P15		●				●
	P20	●	●	●	●	●	●
	P25	●	●	●	●	●	●
	P32	●	●	●	●	●	●
	P40	●	●	●	●		●
	P50	●	●	●			●
	P63	●		●			●
	P80	●		●			
	P100	●		●			
	P125	●		●			
Reference page		P.115	P.120	P.123	P.126	P.130	P.132

Type		Ceiling concealed type				
		Low static pressure type	Medium static pressure type	High static pressure type	Fresh air intake type	Fresh air intake type
Model		PEFY-P VMS1(L)-E	PEFY-P VMA(L)-E	PEFY-P VMHS-E	PEFY-P VMHS-E-F	PEFY-P VMH-E-F
						
Line Up	P15	●				
	P20	●	●			
	P25	●	●			
	P32	●	●			
	P40	●	●	●		
	P50	●	●	●		
	P63	●	●	●		
	P71		●	●		
	P80		●	●		●
	P100		●	●		
	P125		●	●	●	
	P140		●	●		●
	P200			●	●	●
	P250			●	●	●
Reference page		P.134	P.136	P.139	P.143	P.143

Type		Ceiling suspended type	Wall-mounted type		Floor standing type		
		PCFY-P VKM-E	PKFY-P VLM-E	PKFY-P VKM-E	PFFY-P VKM-E2	PFFY-P VLEM-E	PFFY-P VLRM-E PFFY-P VLRMM-E
Model							
Line Up	P10		●				
	P15		●				
	P20		●		●	●	●
	P25		●		●	●	●
	P32		●		●	●	●
	P40	●	●		●	●	●
	P50		●			●	●
	P63	●		●		●	●
	P100	●		●			
	P125	●					
Reference page		P.148	P.151	P.151	P.155	P.157	P.159

Ceiling Cassette Type
4-Way Airflow Type

Ceiling cassette type

4-way airflow type

PLFY-P VEM-E/A

• Technologies and functions P.167

i-see Sensor (Optional) · AUTO · Fan speed · Vane · SWING · Dry · Dual · Auto restoration · High efficiency (Optional) · Drain Lift Up · Filter sign

3D i-see Sensor and versatile airflow variation provide comfort to all corners of the room.

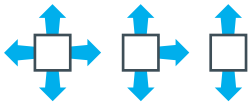
Optimum airflow

2-, 3-, 4-way airflow pattern selection

Three outlet options are available--bidirectional, three-way, and four-way--to suit different types of installation. Select, for example, the four-way pattern for installation in the center of the room and three-way pattern for installation in the corner.

2-, 3-, 4-way airflow pattern selection

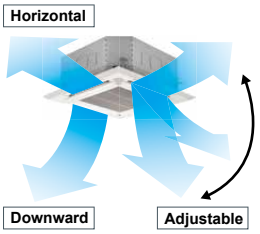
* Optional shuffle placement is required for 2- and 3-way patterns.



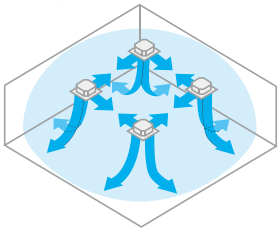
Individual vane angle settings

Vane direction can be changed or fixed from the remote controller to direct the supply air at or away from objects or occupants in the room.

The airflow direction of each vane can be set using the wired remote controller or wireless remote controller (PAR-SL100A-E).



Multi-directional air conditioning



2-, 3-, 4-way airflow pattern selection

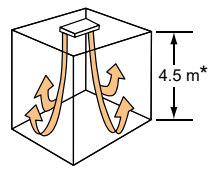
+

individual vane angle settings

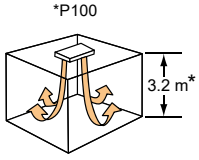
Combinations with individual vane settings enable an optimal outlet setting for each room layout to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

Equipped with high- and low-ceiling modes

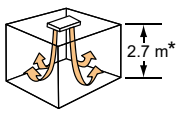
Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match the height of the room. Being able to choose the optimum airflow volume helps optimize the breezy sensation felt throughout the room.



4-way airflow with high-ceiling setting



4-way airflow with standard setting



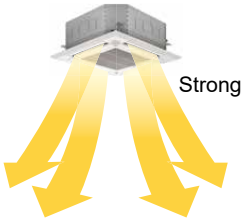
4-way airflow with low-ceiling setting

Airflow range

Model / Airflow pattern	P20–P80			P100/P125		
	High-ceiling setting	Standard setting	**Low-ceiling setting**	**High-ceiling setting**	Standard setting	**Low-ceiling setting**
4-way	**3.5 m**	2.7 m	**2.5 m**	**4.5 m**	3.2 m	**2.7 m**
3-way	**3.5 m**	3.0 m	**2.7 m**	**4.5 m**	3.6 m	**3.0 m**
2-way	**3.5 m**	3.3 m	**3.0 m**	**4.5 m**	4.0 m	**3.3 m**

Automatic air-speed adjustment

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment.



At the start of the heating/cooling operation, airflow is set to high speed to quickly heat/cool the room.

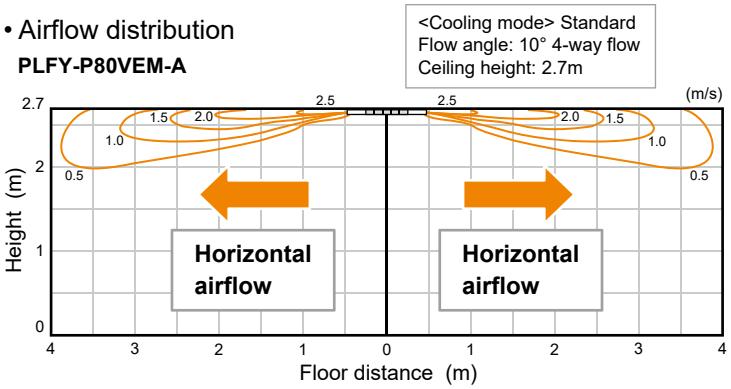
When the room temperature reaches the desired setting, the airflow speed is automatically decreased for stable and comfortable heating/cooling operation.

Horizontal airflow

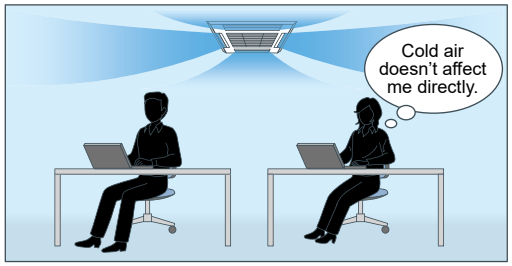
Supply air is horizontally fed into the room to reduce the cold draft feeling. This airflow is ideal for offices and restaurants.

• Airflow distribution

PLFY-P80VEM-A



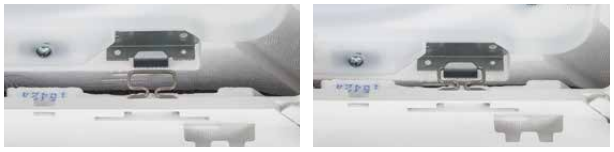
• Horizontal airflow



Easy installation

Temporary hanging hook

The structure of the panel has been redesigned and is now equipped with a temporary hanging hook.
This improves work efficiency during panel installation.



Electrical box wiring

After reviewing the power supply terminal position in the electrical box, the structure has been redesigned to improve connectivity. This makes complex wiring work easier.

• Conventional model

• Latest model

No need to remove screws

Installation is possible without removing the screws for the corner panel and the control box; they simply need to be loosened. This lowers the risk of losing screws.

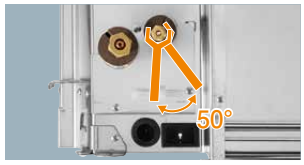
• Corner panel

• Control box cover

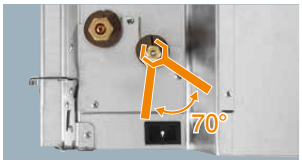
Increased space for plumbing work

The top and bottom positions of the liquid and gas pipes have been reversed to allow the gas pipe work, which requires more effort, to be completed first. Further, through structural innovations related to the space around the pipes, the area for the spanner has been increased, thus improving liquid piping work and enabling it to be completed smoothly.

• Conventional model

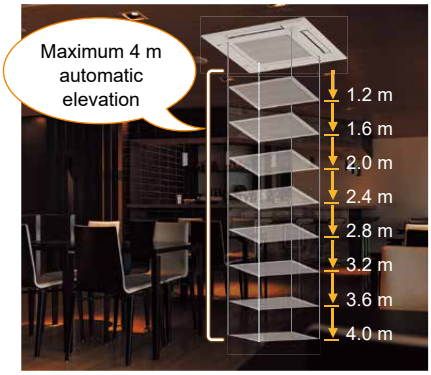


• Latest model



Easy cleaning

The automatic elevation panel makes cleaning the filter easy, even with high ceilings.



Ceiling cassette type
4-way airflow type PLFY-P VEM-E/A

			PLFY-P20VEM-E	PLFY-P25VEM-E
Power source			1-phase 220–240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity (Nominal)	*1	kW	2.2	2.8
	*1	BTU/h	7,500	9,600
	Power input	kW	0.03	0.03
	Current input	A	0.31	0.31
Heating capacity (Nominal)	*2	kW	2.5	3.2
	*2	BTU/h	8,500	10,900
	Power input	kW	0.03	0.03
	Current input	A	0.24	0.24
External finish			Galvanized steel sheet	
External dimension HxWxD		mm	258 x 840 x 840	
		in.	10-3/16 x 33-3/32 x 33-3/32	
Net weight		kg (lbs)	19 (42)	19 (42)
Decoration panel	model		PLP-6EA	PLP-6EA
	External finish		MUNSELL (1.0Y 9.2/0.2)	
	Dimension H x W x D	mm	40 x 950 x 950	
		in.	1-9/16 x 37-13/32 x 37-13/32	
	Net weight	kg (lbs)	5 (11)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		Turbo fan x 1	Turbo fan x 1
	External static press.	Pa	0	0
		mmH_2O	0	0
	Motor Type		DC motor	
	Motor output	kW	0.050	0.050
	Driving mechanism		Direct-drive	
	Air flow rate (Low-Mid2-Mid1-High)	m^3/min	12 - 13 - 14 - 15	12 - 13 - 14 - 15
		L/s	200 - 217 - 233 - 250	200 - 217 - 233 - 250
		cfm	424 - 459 - 494 - 530	424 - 459 - 494 - 530
Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)		dB<A>	24 - 26 - 27 - 29	24 - 26 - 27 - 29
Air filter			PP honeycomb	
Refrigerant piping diameter	Liquid	mm (in.)	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare
	Gas	mm (in.)	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare
Field drain pipe size		mm (in.)	O.D. ø32 (1-1/4) (VP-25)	

			PLFY-P32VEM-A	PLFY-P40VEM-A	PLFY-P50VEM-A	PLFY-P63VEM-A	PLFY-P80VEM-A	PLFY-P100VEM-A	PLFY-P125VEM-A
Power source			1-phase 220-240V 50Hz, 1-phase 220/230V 60Hz						
Cooling capacity (Nominal)	*1	kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0
	*1	kcal / h	3,100	3,900	4,800	6,100	7,700	9,600	12,000
	*1	BTU / h	12,300	15,400	19,100	24,200	30,700	38,200	47,800
	Power input	kW	0.03	0.03	0.03	0.03	0.05	0.07	0.11
	Current input	A	0.32	0.32	0.32	0.36	0.50	0.67	1.06
Heating capacity (Nominal)	*2	kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	*2	kcal / h	3,400	4,300	5,400	6,900	8,600	10,800	13,800
	*2	BTU / h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
	Power input	kW	0.03	0.03	0.03	0.03	0.05	0.07	0.11
	Current input	A	0.25	0.25	0.25	0.29	0.43	0.60	0.99
External finish			Galvanized steel sheet						
External dimension H x W x D		mm	258 x 840 x 840	258 x 840 x 840	258 x 840 x 840	258 x 840 x 840	258 x 840 x 840	298 x 840 x 840	298 x 840 x 840
		in.	10-3/16 x 33-3/32 x 33-3/32	10-3/16 x 33-3/32 x 33-3/32	10-3/16 x 33-3/32 x 33-3/32	10-3/16 x 33-3/32 x 33-3/32	10-3/16 x 33-3/32 x 33-3/32	11-3/4 x 33-3/32 x 33-3/32	11-3/4 x 33-3/32 x 33-3/32
Net weight		kg (lbs)	19 (42)	19 (42)	19 (42)	21 (46)	21 (46)	24 (53)	24(53)
Decoration panel	Model		PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
	External finish		MUNSELL (1.0Y 9.2/0.2)						
	Dimension H x W x D	mm	40 x 950 x 950						
		in.	1-9/16 x 37-13/32 x 37-13/32						
	Net weight	kg (lbs)	5 (11)	5 (11)	5 (11)	5 (11)	5 (11)	5 (11)	5 (11)
Heat exchanger			Micro slit fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1
	External static press.	Pa	0	0	0	0	0	0	0
		mmH_2O	0	0	0	0	0	0	0
	Motor type		DC motor						
	Motor output	kW	0.050	0.050	0.050	0.050	0.050	0.120	0.120
	Driving mechanism		Direct-drive						
	Airflow rate (Low-Mid2-Mid1-High)	m^3 / min	13 - 14 - 16 - 17	13 - 14 - 16 - 18	13 - 14 - 16 - 19	15 - 16 - 17 - 19	15 - 18 - 20 - 23	20 - 23 - 26 - 29	24 - 26 - 30 - 35
		L / s	217 - 233 - 267 - 283	217 - 233 - 267 - 300	217 - 233 - 267 - 317	250 - 267 - 283 - 317	250 - 300 - 333- 383	333 - 383 - 433 - 483	400 - 433 - 500 - 583
		cfm	459 - 494 - 565 - 600	459 - 494 - 565 - 636	459 - 494 - 565 - 671	530 - 565 - 600 - 671	530 - 636 - 706 - 812	706 - 812 - 918 - 1024	847 - 918 - 1060 - 1236
Sound pressure level (Low-Mid2-Mid1-High) (measured in anechoic room)		dB <A>	26 - 27 - 29 - 31	26 - 27 - 29 - 31	26 - 27 - 29 - 31	28 - 29 - 30 - 32	28 - 31 - 34 - 37	34 - 37 - 39 - 41	35 - 39 - 42 - 45
Air filter			PP honeycomb						
Refrigerant control device			LEV						
Diameter of refrigerant pipe	Liquid (R410A)	mm (in.)	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas (R410A)	mm (in.)	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare
Field drain pipe size		mm (in.)	O.D. ø32 (1-1/4) (VP-25)						

Notes:

*1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
*2 Nominal heating conditions
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)
*3 Nominal conditions *1 and *2 are subject to JIS B8615-1.
*4 Due to continuing improvement, above specification may be subject to change without notice.

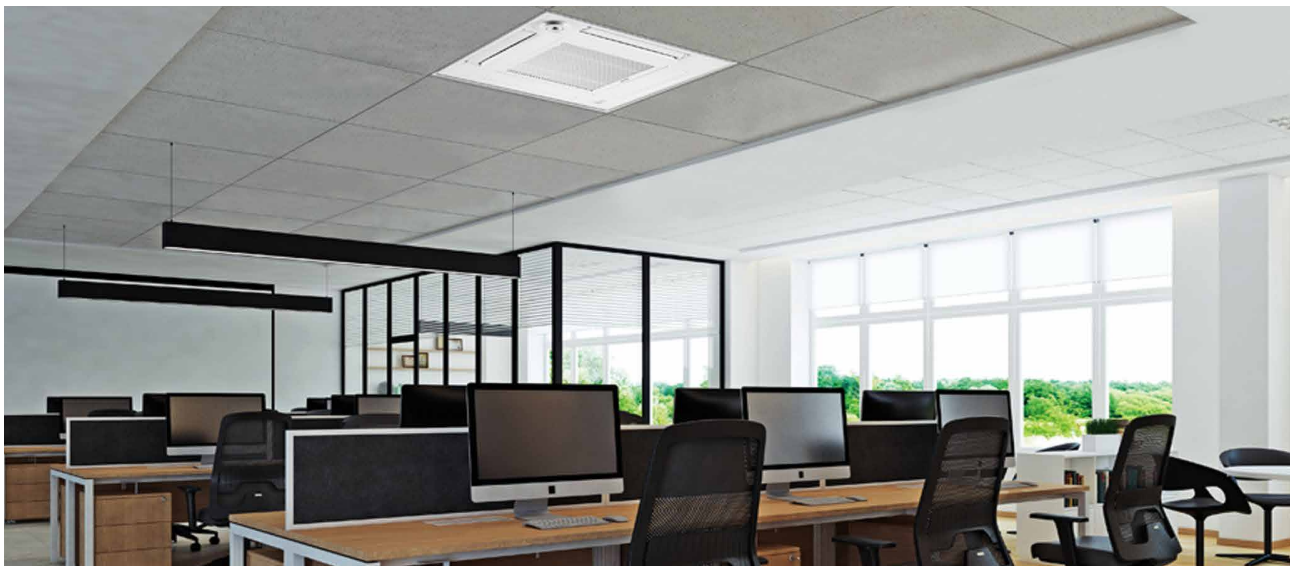
Optional parts

• For PLFY-P VEM-E/A

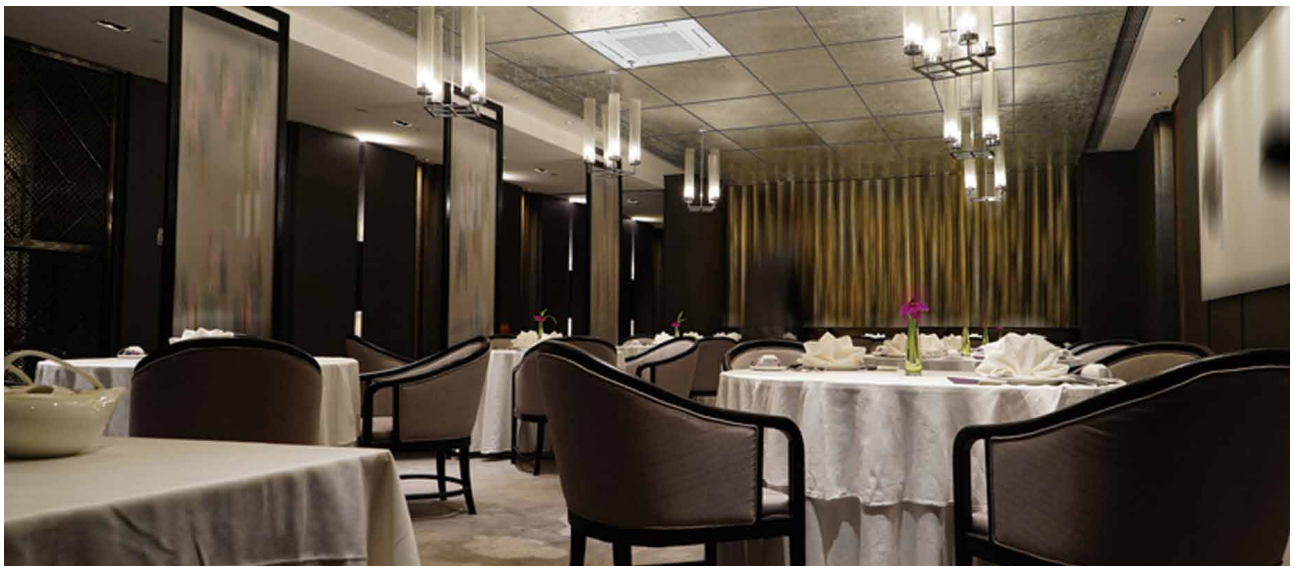
Description	Model	Applicable capacity
Air outlet shutter plate	PAC-SJ37SP-E	P20, P25, P32, P40, P50, P63, P80, P100, P125
Multi-function casement	PAC-SJ41TM-E	P20, P25, P32, P40, P50, P63, P80, P100, P125
High efficiency filter element	PAC-SH59KF-E	P20, P25, P32, P40, P50, P63, P80, P100, P125
Space panel	PAC-SJ65AS-E	P20, P25, P32, P40, P50, P63, P80, P100, P125
Duct flange for fresh air intake	PAC-SH65OF-E	P20, P25, P32, P40, P50, P63, P80, P100, P125

Panel & Corner panel

		With signal Receiver	With 3D i-see Sensor	With New Wireless Remote Controller	With Auto Elevation
Panel	PLP-6EA				
	PLP-6EAL	●			
	PLP-6EAE		●		
	PLP-6EALE	●	●		
	PLP-6EAJ	●			●
	PLP-6EAJE	●	●		●
	PLP-6EALM	●		●	
	PLP-6EALME	●	●	●	
Corner panel	PAR-SE9FA-E	●			
	PAC-SE1ME-E		●		



Ceiling Cassette Type
4-Way Airflow Type – Compact



Ceiling cassette type

4-way airflow type

PLFY-P VFM-E1

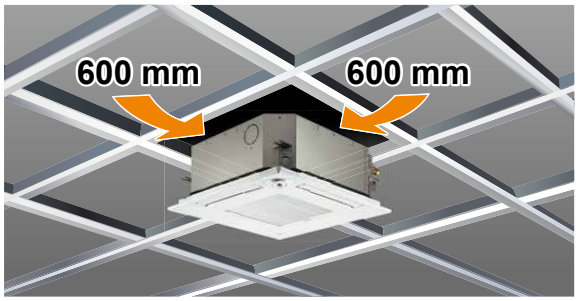
• Technologies and functions P.167

i-see Sensor (Optional) · AUTO · Fan speed · Vane · SWING · Dry · Dual · Auto restoration · Drain Lift Up · Filter sign

The compact size offers a perfect fit to grid system ceilings (600 mm × 600 mm) and provides 4-way airflows despite its size.

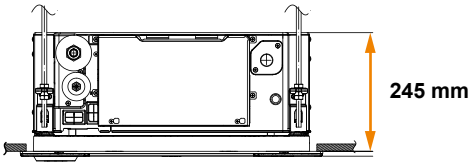
Beautiful square design

The square design matches 2 × 2 (600 mm × 600 mm) ceiling construction specifications.
As such it can be seamlessly integrated to match the design of direct line lighting systems to creating a streamlined look and feel.



Above-ceiling height of 245 mm

The above-ceiling height of 245 mm is top class in the industry* and fits into narrow ceiling spaces.



* As of Aug 2015, among compact 4-way cassettes for system ceilings. (In-company survey)

Compact & light-weight design

The panel weighs 3 kg, and the main unit weighs 14 kg (P15, P20 and P25 models) or 15 kg (P32, P40 and P50 models). These weights are 5 kg lighter than the PLFY-VEM-E model, allowing easy suspension.

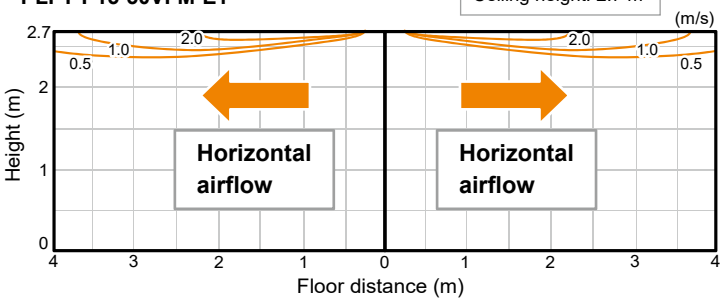
Horizontal airflow

Supply air is horizontally fed into the room to reduce the cold draft feeling. This airflow is ideal for offices and restaurants.

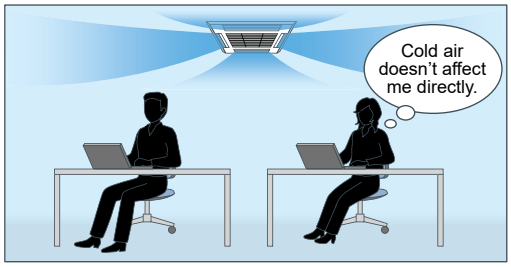
• Airflow distribution

PLFY-P15-50VFM-E1

<Cooling mode>
Horizontal
Ceiling height: 2.7 m



• Horizontal airflow



Ceiling cassette type

4-way airflow type PLFY-P VFM-E1

			PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Power source			1-phase 220-240V 50Hz / 220V 60Hz					
Cooling capacity *1		kW	1.7	2.2	2.8	3.6	4.5	5.6
*1		BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity *1		kW	1.9	2.5	3.2	4.0	5.0	6.3
*1		BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating	kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling	A	0.19	0.21	0.22	0.23	0.28	0.40
	Heating	A	0.14	0.16	0.17	0.18	0.23	0.35
External finish	Unit		Galvanized steel sheet					
(Munsell No.)	Panel		MUNSELL (1.0Y 9.2/0.2)					
Dimension	Unit	mm(in.)	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)					
H x W x D	Panel	mm(in.)	10 x 625 x 625 (3/8 x 24-5/8 x 24-5/8)					
Net weight	Unit	kg(lbs.)	14 (31)			15 (33)		
	Panel	kg(lbs.)	3 (7)					
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity		Turbo fan x 1					
	Airflow rate (Lo-Mid-Hi)	m^3/min	6.5-7.5-8.0	6.5-7.5-8.5	6.5-8.0-9.0	7.0-8.0-9.5	7.5-9.0-11.0	9.0-11.0-13.0
		L/s	108-125-133	108-125-142	108-133-150	117-133-158	125-150-183	150-183-217
		cfm	230-265-282	230-265-300	230-282-318	247-282-335	265-318-388	318-388-459
	External static press.	Pa	0					
Motor	Type		DC motor					
	Output	kW	0.05					
Air filter			PP Honeycomb fabric (long life type)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4) (PVC pipe VP-25 connectable)					
Sound pressure level *2 (Lo-Mid-Hi)		dB<A>	26-28-30	26-29-31	26-30-33	26-30-34	28-33-39	33-39-43

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 It is measured in anechoic room at power source 230V.

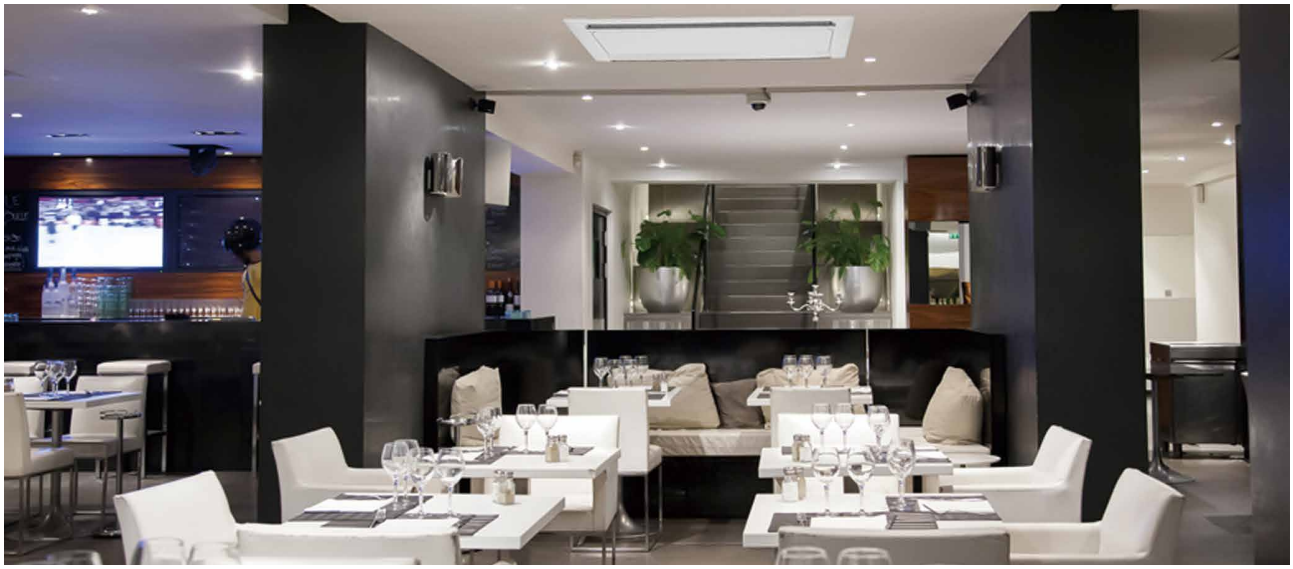
Optional parts

Description	Model	Applicable models
i-see Sensor corner panel	PAC-SF1ME-E	P15, P20, P25, P32, P40, P50
Wireless signal receiver	PAR-SF9FA-E	P15, P20, P25, P32, P40, P50

Panel & Corner panel

		With signal Receiver	With 3D i-see Sensor	With New Wireless Remote Controller
Panel	SLP-2FA			
	SLP-2FAL	●		
	SLP-2FAE		●	
	SLP-2FALE	●	●	
	SLP-2FALM	●		●
	SLP-2FALME	●	●	●
Corner panel	PAR-SF9FA-E	●		
	PAC-SF1ME-E		●	

Ceiling Cassette Type
2-Way Airflow Type



Ceiling cassette type

2-way airflow type

PLFY-P VLMD-E

• Technologies and functions P.167

Fan speed | Vane | SWING | Dry | Dual | Auto restoration | Drain Lift Up | Filter sign

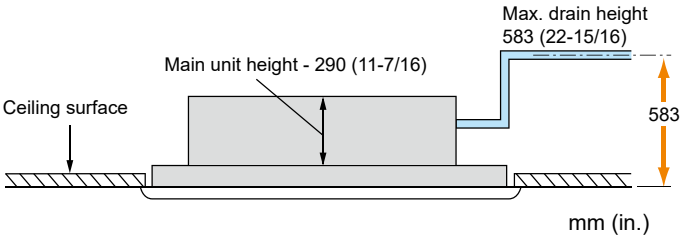
Slim body (depth 634 mm) for up to P100. Recommended for corridors or long and narrow rooms.

Simple panel design

The unobtrusive slim-line profile of the cassette is designed to work in harmony with ceilings and light fittings especially in narrow long areas.

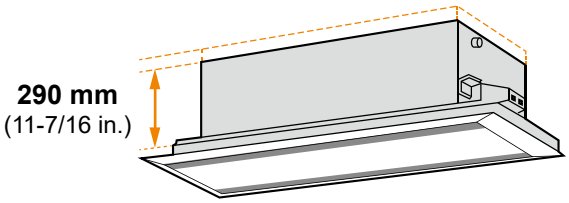
Drain pump as a standard feature

The drain can be positioned anywhere up to 583 mm (22-15/16 in.) from the ceiling surface, providing greater flexibility with long cross-piping and allowing more versatility with piping layouts.



Slim body - only 290 mm (11-7/16 in.) height

The slimline body is highly suited for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The height of the main unit is only 290 mm (11-7/16 in.).



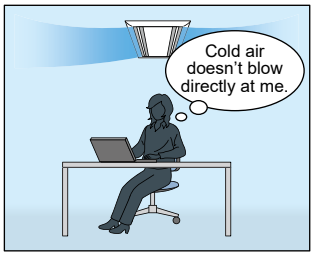
Vane control

Vane angle can be selected from 7 types, including "Horizontal fix" and "Swing," to set the air blow according to preference.

*Airflow direction cannot be changed individually.

Swing

Horizontal airflow



Ceiling cassette type

2-way airflow type PLFY-P VLMD-E

				PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power		Cooling	kW	0.072 / 0.075	0.072 / 0.075	0.072 / 0.075	0.081 / 0.085
consumption		Heating	kW	0.065 / 0.069	0.065 / 0.069	0.065 / 0.069	0.074 / 0.079
Current		Cooling	A	0.36 / 0.37	0.36 / 0.37	0.36 / 0.37	0.40 / 0.42
		Heating	A	0.30 / 0.32	0.30 / 0.32	0.30 / 0.32	0.34 / 0.37
External finish		Unit		Galvanized steel plate			
(Munsell No.)		Panel		Pure white (6.4Y 8.9/0.4)			
Dimension		Unit	mm(in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)			
H x W x D		Panel	mm(in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)			
Net weight		Unit	kg(lbs.)	23 (51)		24 (53)	
		Panel	kg(lbs.)	6.5 (15)			
Heat exchanger				Cross fin			
FAN	Type x Quantity			Turbo fan x 1			
	Airflow rate	*2	m^3/min	6.5-8.0-9.5			7.0-8.5-10.5
	(Lo-Mid-Hi)		L/s	108-133-158			117-142-175
			cfm	230-283-335			247-300-371
	External static press.		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.015 (at 240V)			
Air filter				PP honeycomb fabric (long life type)			
Refrigerant		Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
pipe diameter		Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)			
Sound pressure level		220V,240V	dB<A>	27-30-33			29-33-36
(Lo-Mid-Hi)	*2 *3	230V	dB<A>	28-31-34			30-34-37

				PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E	PLFY-P125VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz				
Cooling capacity		*1	kW	5.6	7.1	9.0	11.2	14.0
		*1	BTU/h	19,100	24,200	30,700	38,200	47,800
Heating capacity		*1	kW	6.3	8.0	10.0	12.5	16.0
		*1	BTU/h	21,500	27,300	34,100	42,700	54,600
Power		Cooling	kW	0.082 / 0.086	0.101 / 0.105	0.147 / 0.156	0.157 / 0.186	0.28 / 0.28
consumption		Heating	kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180	0.27 / 0.27
Current		Cooling	A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88	1.35 / 1.35
		Heating	A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83	1.33 / 1.33
External finish		Unit		Galvanized steel plate				
(Munsell No.)		Panel		Pure white (6.4Y 8.9/0.4)				
Dimension		Unit	mm(in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)		290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)		290 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)
H x W x D		Panel	mm(in.)	20 x 1250 x 710 (13/16 x 49-1/4 x 28)		20 x 1750 x 710 (13/16 x 68-15/16 x 28)		20 x 2010 x 710 (13/16 x 79-3/16 x 28)
Net weight		Unit	kg(lbs.)	27 (60)	28 (62)	44 (98)	47 (104)	56 (124)
		Panel	kg(lbs.)	7.5 (17)		12.5 (28)		13.0 (29)
Heat exchanger				Cross fin				
FAN	Type x Quantity			Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4
	Airflow rate	*2	m^3/min	9.0-11.0-12.5	11.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
	(P50~P100:Lo-Mid-Hi)		L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
	(P125:Lo-Mid2-Mid1-Hi)		cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static press.		Pa	0				
Motor	Type			1-phase induction motor				
	Output		kW	0.020 (at 240V)		0.020 x 2 (at 240V)	0.030 x 2 (at 240V)	0.078 x 2 (at 240V)
Air filter				PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)
Refrigerant		Gas(Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)			
pipe diameter		Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)			
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)				
Sound pressure level		220V,240V	dB<A>	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46 (Lo-Mid2-Mid1-Hi)
(Lo-Mid-Hi)	*2 *3	230V	dB<A>	32-35-38	33-38-40	34-37-40	37-41-43	

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).
*3 It is measured in anechoic room.

Panel

Description	Model	Applicable capacity
Decoration panel	CMP-40VLW-C	P20, P25, P32, P40
	CMP-63VLW-C	P50, P63
	CMP-100VLW-C	P80, P100
	CMP-125VLW-C	P125
OA duct flange	PAC-KH11OF	P20, P25, P32, P40, P50, P63, P80, P100

Ceiling Cassette Type
1-Way Airflow Type

Ceiling cassette type

1-way airflow type

PMFY-P VBM-E

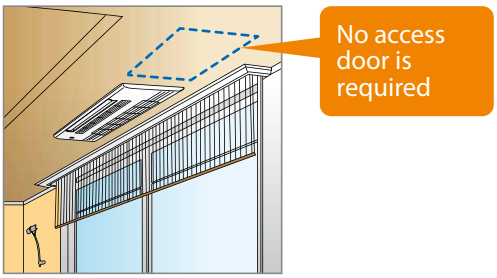
• Technologies and functions P.167

Fan speed | Vane | SWING | Dry | Dual | Auto restoration | Drain Lift Up | Filter sign

Recommended for installation at the edges of a room. A lightweight body ensures excellent workability.

Ceiling mounted installation

Installing a 1-way airflow type unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the center of the room and fixtures such as book shelves are mounted on wall surfaces.

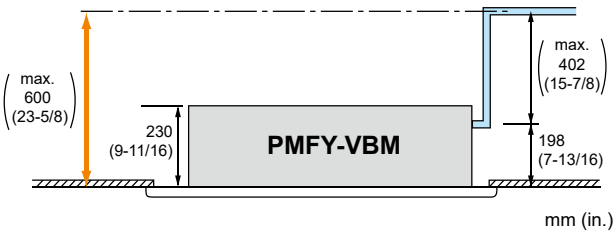


Compact size for smooth installation and maintenance

The body size of the unit has been standardized for all models at 812 mm for easy installation. Body weight is only 14 kg for the main unit and 3 kg for the panel, making this unit one of the lightest in the industry.

Drain pump

The drain can be positioned anywhere up to 600 mm (23-5/8 in.) from the ceiling surface.



Ceiling cassette type

1-way airflow type PMFY-P VBM-E

			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5
	*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1	kW	2.5	3.2	4.0	5.0
	*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.042	0.044		0.054
	Heating	kW	0.042	0.044		0.054
Current	Cooling	A	0.20	0.21		0.26
	Heating	A	0.20	0.21		0.26
External finish (Munsell No.)			White (0.98Y 8.99/0.63)			
Dimension H x W x D	Unit	mm(in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
	Panel	mm(in.)	30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit	kg(lbs.)	14 (31)			
	Panel	kg(lbs.)	3 (7)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
FAN	Type		Line flow fan x 1			
	Airflow rate *2 (Lo-Mid2-Mid1-Hi)	m^3/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3		7.7-8.7-9.7-10.7
		L/s	108-120-133-145	122-133-143-155		128-145-162-178
		cfm	230-254-283-307	258-283-304-328		272-307-343-378
	External static press.	Pa	0			
Motor	Type		1-phase induction motor			
	Output	kW	0.028			
Air filter			PP Honeycomb fabric			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB<A>	27-30-33-35	32-34-36-37		33-35-37-39

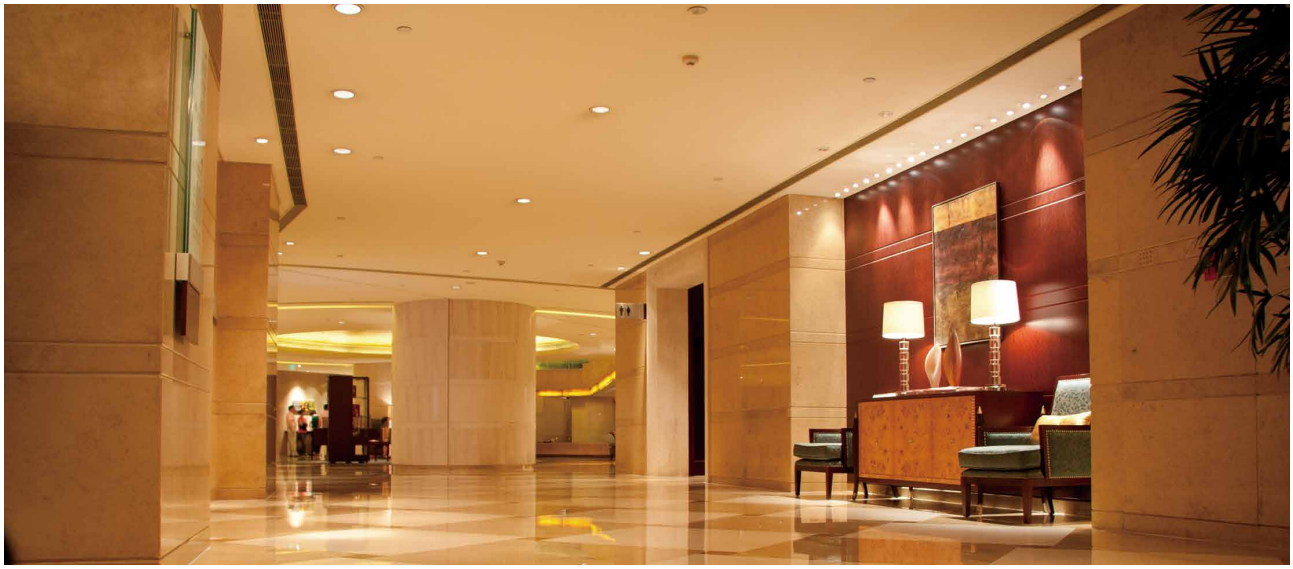
Notes:

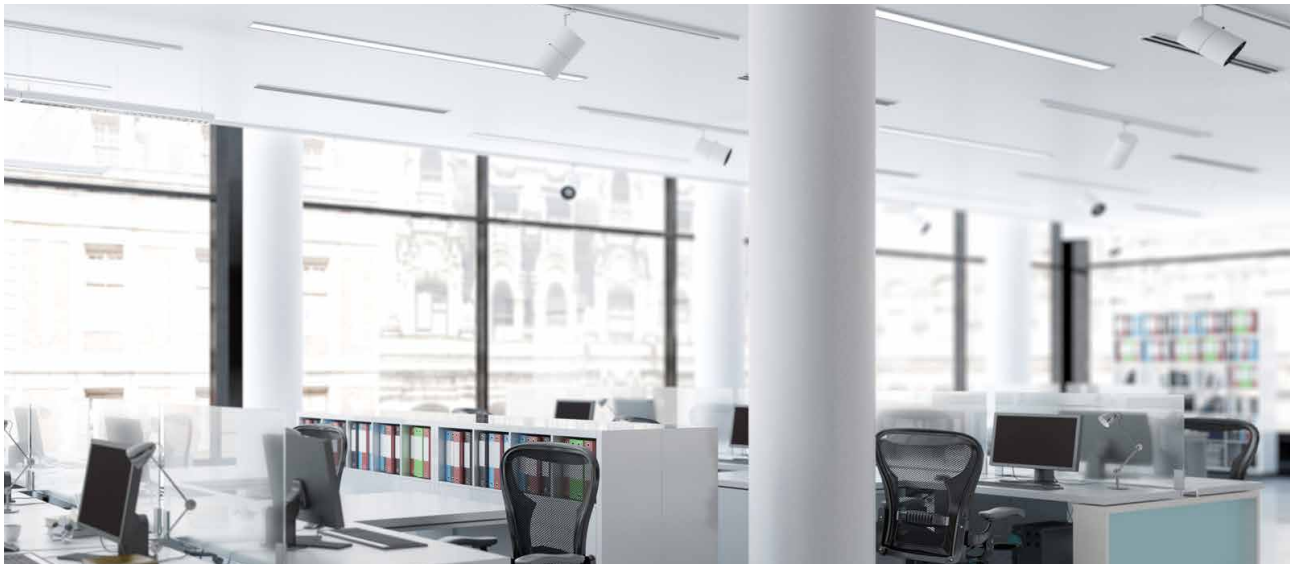
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).
*3 It is measured in anechoic room.

Panel

Description	Model	Applicable capacity
Decoration panel	PMP-40BMW	P20, P25, P32, P40

Ceiling Concealed Type





Low noise type

PEFY-P VMR-E-L/R P.130

- Realizes low noise operation. Most suitable for places such as hotels where low noise operation is required.
- The position of the inlet can be selected to be at the bottom or rear.
- The location of the piping connection can be selected according to the layout of a room.

Static pressure 5 Pa	**Low noise**	**Rear inlet Bottom inlet**
Piping connection Right/Left	**Air flow rate 3 levels**	

Compact depth type

PEFY-P VMX(L)-E(1) P.132

- Measures only 450 mm* in depth and 200 mm in height. Installable in a limited space such as in a room with a clipped ceiling. *Duct flange and filter are excluded.
- Three return air intake positions (side, bottom, side bottom) to choose from to suit the installation conditions.

Static pressure Maximum 45 Pa *Maximum pressure differs depending on model.	**3 inlet type**
Depth: 450 mm* Height: 200 mm *Duct flange and filter are excluded.	**Air flow rate 3 levels**
Drain pump (standard)* Maximum lifting height 700 mm *For PEFY-P VMX-E(1)	

Low static pressure type

PEFY-P VMS1(L)-E P.134

- Thin design with a body height of 200 mm (all HP models) enables installation in a ceiling with small cavity space.
- Realizes low noise operation.
- Demonstrates a maximum external static pressure of 50 Pa despite its compact design.
- The drain pump can be installed or not.

Static pressure Maximum 50 Pa	**Low noise**	**Height 200 mm**
Drain pump (standard) Maximum lifting height 550 mm *For PEFY-P VMS1-E		**Air flow rate 3 levels**

Medium static pressure type

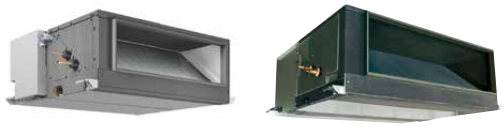
PEFY-P VMA(L)-E P.136

- Thin design with a body height of 250 mm (all HP models) enables installation in a ceiling with small cavity space.
- The position of the inlet can be selected to be at the bottom or rear.
- Demonstrates a maximum external static pressure of 150 Pa despite of its compact design.
- The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.

Static pressure Maximum 150 Pa *Maximum pressure differs depending on model.	**Height 250 mm**	**Rear inlet Bottom inlet**
Drain pump (standard) Maximum lifting height 700 mm *For PEFY-P VMA-E		**Air flow rate 3 levels**

High static pressure type

PEFY-P VMHS-E P.139



- Maximum external static pressure of 250 Pa* allows for more flexibility in duct design.
  *P200, P250VMHS-E models
- Compatible with drain pumps (option) 550 mm−700 mm

Static pressure Maximum 250 Pa *Maximum pressure differs depending on model.	
Drain pump (option) Maximum lifting height 700 mm	**Air flow rate 3 levels**

Fresh air intake type

PEFY-P VMHS-E-F
PEFY-P VMH-E-F P.143

- Outlet air temperature can be controlled. (VMHS-E-F model only)
- Fresh air intake type indoor unit
- Maximum external static pressure of 250 Pa* allows for more flexibility in duct design.
  *VMHS-E-F model

Static pressure Maximum 250 Pa *Maximum pressure differs depending on model.	**Fresh air intake type**
Drain pump (option) Maximum lifting height 700 mm *For PEFY-P VMHS-E-F	**Air flow rate 3 levels** *For PEFY-P VMHS-E-F

Ceiling concealed type
Low noise type

PEFY-P VMR-E-L/R

• Technologies and functions P.167

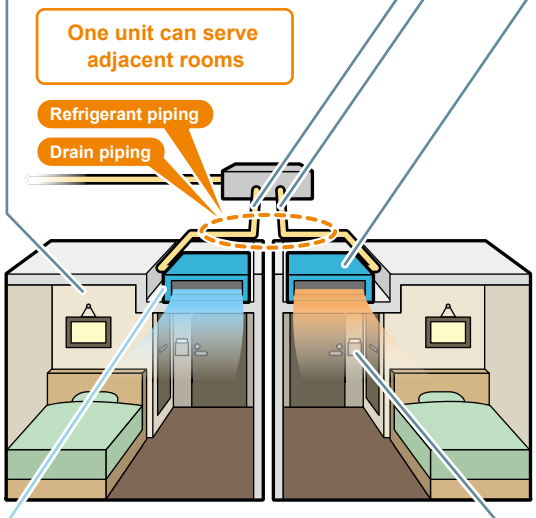
*This image shows the -L type. On the -R type, the control box comes to the right side when looked at from the front.

Realizes low noise operation as well as reduced construction work and maintenance, to create a comfortable room environment. Most suitable for installation in places such as hotels.

Low noise operation for a quiet indoor environment

Low noise design: Minimum of 20 dB when airflow rate is low and maximum of 35 dB when airflow rate is high.

*Noise values measured on a rear-inlet model in an anechoic room. (The noise value is higher when the bottom inlet is used.)



Fan structure allowing easy maintenance

As the fan case does not use screws, it can be easily removed, allowing easy maintenance. Moreover, the air filter can be pulled out from two directions, from the side or rear of the main unit.

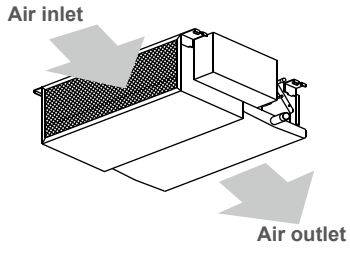
Flexible application in symmetrically arranged rooms

Models are available with the refrigerant/drain piping and control box on either the right or left side, to flexibly fit rooms that are symmetrically arranged next to each other, as is frequently seen in hotels.

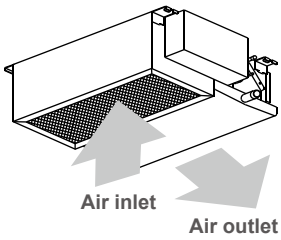
Easy change of air inlet direction

The air inlet can be selected to be at the rear or bottom in accordance with the layout of a room.

• Rear inlet



• Bottom inlet



By exchanging the closing board and air filter, the position of the inlet can be changed. (At factory shipment: Rear inlet)

*Units with a bottom inlet make more noise than those with a rear inlet. The rear inlet is recommended for rooms that need to be quiet, such as bedrooms.

Interlocking using a card key

The air conditioner can be switched ON/OFF by inserting or removing a card key to prevent forgetting to turn off the air conditioner and save wasteful operation. (Optional accessory is needed.)

Ceiling concealed type
Low noise type PEFY-P VMR-E-L/R

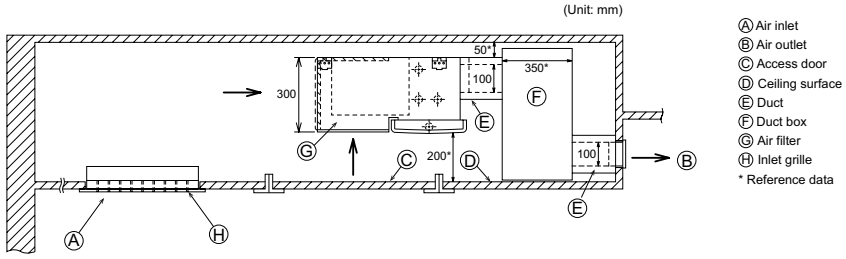
				PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L
Power source				1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity		*1	kW	2.2	2.8	3.6
		*1	BTU/h	7,500	9,600	12,300
Heating capacity		*1	kW	2.5	3.2	4.0
		*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling		kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating		kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling		A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating		A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish				Galvanized		
Dimension H x W x D	Rear inlet		mm(in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet		mm(in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight			kg(lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
FAN	Type x Quantity			Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.8-5.8-7.9		4.8-5.8-9.3
			L/s	80-97-132		80-97-155
			cfm	170-205-279		170-205-328
	External static pressure	*2	Pa	5		
Motor	Type			1-phase induction motor		
	Output		kW	0.018		0.023
Air filter				PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas		mm(in.)	ø12.7 (ø1/2) Brazed		
	Liquid		mm(in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter			mm(in.)	O.D. 26 (1)		
Sound pressure level (Lo-Mid-Hi)	220V		dB<A>	20-25-30		20-25-33
	230V			21-26-32		21-26-35
*3	240V			22-27-30		22-27-33

				PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R
Power source				1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity		*1	kW	2.2	2.8	3.6
		*1	BTU/h	7,500	9,600	12,300
Heating capacity		*1	kW	2.5	3.2	4.0
		*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling		kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating		kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling		A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating		A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish				Galvanized		
Dimension H x W x D	Rear inlet		mm(in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet		mm(in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight			kg(lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
FAN	Type x Quantity			Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.8-5.8-7.9		4.8-5.8-9.3
			L/s	80-97-132		80-97-155
			cfm	170-205-279		170-205-328
	External static pressure	*2	Pa	5		
Motor	Type			1-phase induction motor		
	Output		kW	0.018		0.023
Air filter				PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas		mm(in.)	ø12.7 (ø1/2) Brazed		
	Liquid		mm(in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter			mm(in.)	O.D. 26(1)		
Sound pressure level (Lo-Mid-Hi)	220V		dB<A>	20-25-30		20-25-33
	230V			21-26-32		21-26-35
*3	240V			22-27-30		22-27-33

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C (81°F) DB/19°C (66°F) WB, Outdoor 35°C (95°F) DB
Heating : Indoor 20°C (68°F) DB, Outdoor 7°C (45°F) DB/6°C (43°F) WB
*2 The external static pressure is set to 5Pa (at 220V, 230V, 240V).
*3 Measured in anechoic room. Sound pressure levels of the unit with a rear air inlet. (Sound pressure levels are higher than the unit with a bottom air inlet.)
• If quietness is required, installation of an L-shaped duct is recommended. Please refer to the installation pattern below for the duct system design.

(Unit: mm)



Ⓐ Air inlet
Ⓑ Air outlet
Ⓒ Access door
Ⓓ Ceiling surface
Ⓔ Duct
Ⓕ Duct box
Ⓖ Air filter
Ⓗ Inlet grille
* Reference data

Ceiling concealed type
Compact depth type

PEFY-P VMX(L)-E(1)

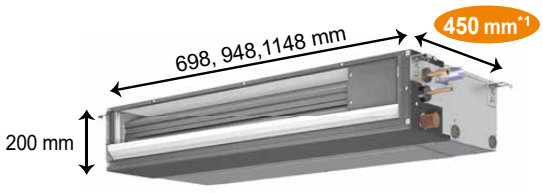
• Technologies and functions P.167

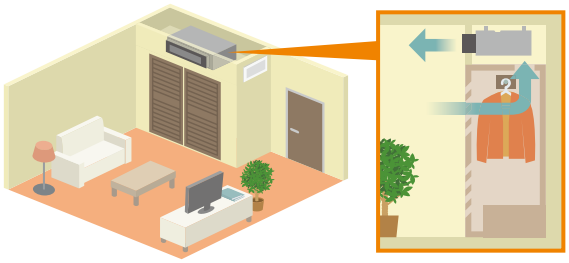
VMX

Compact depth design and three air inlet positions offer flexible installation.
The line-up consists of up to P63 with the same depth.

Compact design

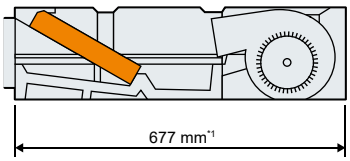
The thin body allows installation in tight spaces such as above a closet.



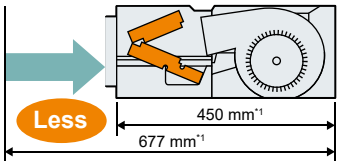


PEFY-P VMX(L)-E(1)		P15	P20	P25	P32	P40	P50	P63
Height	mm	200						
Width	mm	698					948	1148
Depth	mm	450*1						

Standard Depth Model (VMS1)



Compact Depth Model (VMX)



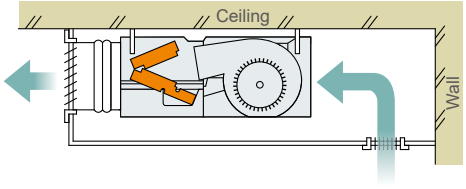
All models measure 450 mm*1 in depth and 200 mm in height.
The V-shaped design of the heat exchanger reduced the depth by approx. 33%.
The line-up is available from P15 to P63.

*1. Duct flange and filter are excluded.

Three air inlet positions to choose from, allowing for optimum return air vent position

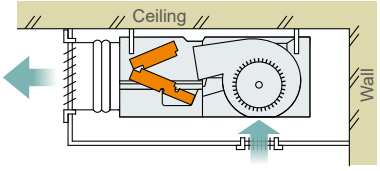
Rear Inlet

Low sound pressure level, suitable for installation where quietness is required.



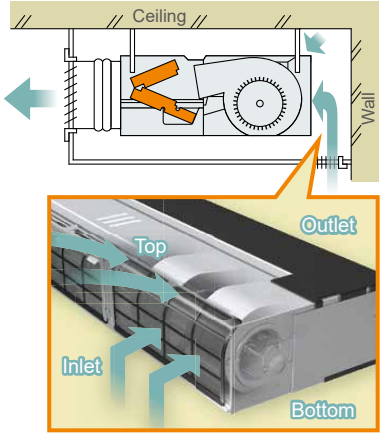
Bottom Inlet

Requires less rear clearance space, allowing for installation in a tight space



Top & Rear Inlet

Requires the same amount of installation space as the bottom-inlet models, but quieter



For VMX, Mitsubishi Electric has developed a unique technique of simultaneous return air intake from the top and rear side of an indoor unit.
Filter and switches are accessible from the bottom for easy maintenance and setting change.
Changes in filter structure and inlet shape on the top and rear inlet model reduced the minimum clearance requirement to 50 mm, enabling the installation of the indoor unit in a narrow space.

*Provide a service access space and an inspection window. Refer to the installation manual for details.
*It is recommended to choose rear inlet for rooms requiring quietness. Please refer to the DATABOOK for details on the noise level.

Changeable static pressure

The unit is made suitable for a variety of applications with static pressure settings of 4, 15, 35, 45 Pa (P50, P63)/4, 15, 35 Pa (P15, P20, P25, P32, P40).

Ceiling concealed type

Compact depth type PEFY-P VMX(L)-E(1)

			PEFY-P15VMX-E (1)	PEFY-P20VMX-E (1)	PEFY-P25VMX-E (1)	PEFY-P32VMX-E (1)	PEFY-P40VMX-E (1)	PEFY-P50VMX-E (1)	PEFY-P63VMX-E (1)
Power source			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz
Cooling capacity *1		kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
(Nominal) *1		BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
*2	Power input	kW	0.057	0.057	0.073	0.079	0.124	0.140	0.139
*2	Current input	A	0.62	0.62	0.73	0.90	1.41	1.51	1.62
Heating capacity *3		kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
(Nominal) *3		BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
*2	Power input	kW	0.038	0.038	0.054	0.060	0.105	0.121	0.120
*2	Current input	A	0.42	0.42	0.53	0.70	1.21	1.31	1.42
External finish			Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized
External dimension		mm	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 948 x 481 (450*5)	200 x 1,148 x 481 (450*5)
H x W x D		in.	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 37-3/8 x 18-15/16 (17-3/4*5)	7-7/8 x 45-1/4 x 18-15/16 (17-3/4*5)
Net weight		kg (lbs)	17 (38)	17 (38)	17 (38)	18 (40)	18 (40)	22 (49)	25 (56)
Heat exchanger			Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4
*4	External static press.	Pa	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35> - <45>	<4> - 15 - <35> - <45>
		mmH_2O	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6> - <4.6>	<0.4> - 1.5 - <3.6> - <4.6>
	Motor Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output	kW	0.096	0.096	0.096	0.096	0.096	0.096	0.096
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid-High)						
		m^3/min	5.0 - 6.0 - 7.0	5.0 - 6.5 - 7.5	5.5 - 7.0 - 9.0	5.5 - 7.5 - 9.0	7.0 - 10.0 - 12.5	8.5 - 14.0 - 17.0	11.0 - 15.0 - 19.5
		L/s	83 - 100 - 117	83 - 108 - 125	92 - 117 - 150	92 - 125 - 150	117 - 167 - 208	142 - 233 - 283	183 - 250 - 325
		cfm	177 - 212 - 247	177 - 230 - 265	194 - 247 - 318	194 - 265 - 318	247 - 353 - 441	300 - 494 - 600	388 - 530 - 689
Sound pressure level (measured in anechoic room)			(Low-Mid-High)						
(rear inlet) *2		dB <A>	26-27-30	26-28-32	28-30-34	28-31-36	31-38-42	30-37-42	30-34-37
(bottom inlet) *2			32-37-42	32-37-42	34-39-46	38-42-47	42-51-56	38-49-56	40-46-53
Air filter			PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Refrigerant piping	Liquid	mm (in.)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)
diameter	Gas	mm (in.)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	15.88 (5/8)
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

			PEFY-P15VMXL-E (1)	PEFY-P20VMXL-E (1)	PEFY-P25VMXL-E (1)	PEFY-P32VMXL-E (1)	PEFY-P40VMXL-E (1)	PEFY-P50VMXL-E (1)	PEFY-P63VMXL-E (1)
Power source			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz
Cooling capacity *1		kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
(Nominal) *1		BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
*2	Power input	kW	0.038	0.038	0.054	0.060	0.105	0.121	0.120
*2	Current input	A	0.42	0.42	0.53	0.70	1.21	1.31	1.42
Heating capacity *3		kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
(Nominal) *3		BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
*2	Power input	kW	0.038	0.038	0.054	0.060	0.105	0.121	0.120
*2	Current input	A	0.42	0.42	0.53	0.70	1.21	1.31	1.42
External finish			Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized
External dimension		mm	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 698 x 481 (450*5)	200 x 948 x 481 (450*5)	200 x 1,148 x 481 (450*5)
H x W x D		in.	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 27-1/2 x 18-15/16 (17-3/4*5)	7-7/8 x 37-3/8 x 18-15/16 (17-3/4*5)	7-7/8 x 45-1/4 x 18-15/16 (17-3/4*5)
Net weight		kg (lbs)	16 (36)	16 (36)	16 (36)	17 (38)	17 (38)	21 (47)	24 (53)
Heat exchanger			Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4
*4	External static press.	Pa	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35>	<4> - 15 - <35> - <45>	<4> - 15 - <35> - <45>
		mmH_2O	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6>	<0.4> - 1.5 - <3.6> - <4.6>	<0.4> - 1.5 - <3.6> - <4.6>
	Motor Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output	kW	0.096	0.096	0.096	0.096	0.096	0.096	0.096
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid-High)						
		m^3/min	5.0 - 6.0 - 7.0	5.0 - 6.5 - 7.5	5.5 - 7.0 - 9.0	5.5 - 7.5 - 9.0	7.0 - 10.0 - 12.5	8.5 - 14.0 - 17.0	11.0 - 15.0 - 19.5
		L/s	83 - 100 - 117	83 - 108 - 125	92 - 117 - 150	92 - 125 - 150	117 - 167 - 208	142 - 233 - 283	183 - 250 - 325
		cfm	177 - 212 - 247	177 - 230 - 265	194 - 247 - 318	194 - 265 - 318	247 - 353 - 441	300 - 494 - 600	388 - 530 - 689
Sound pressure level (measured in anechoic room)			(Low-Mid-High)						
(rear inlet) *2		dB <A>	26-27-30	26-28-32	28-30-34	28-31-36	31-38-42	30-37-42	30-34-37
(bottom inlet) *2			32-37-42	32-37-42	34-39-46	38-42-47	42-51-56	38-49-56	40-46-53
Air filter			PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Refrigerant piping	Liquid	mm (in.)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)
diameter	Gas	mm (in.)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	15.88 (5/8)
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2 The values are measured at the factory setting of external static pressure.
*3 Nominal heating conditions
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*4 The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*5 Duct flange and filter are excluded.
*PEFY-P15, 20, 25, 32, 40, 50, 63VMX(L)-E(1) cannot be connected to PUMY-P112, 125, 140VKM5/YKM4.
*PEFY-P50, 63VMX(L)-E(1) cannot be connected to PUMY-SP80, 112, 125, 140VKMD/YKMD-A.

*Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Ceiling concealed type

Low static pressure type

PEFY-P VMS1(L)-E

• Technologies and functions P.167

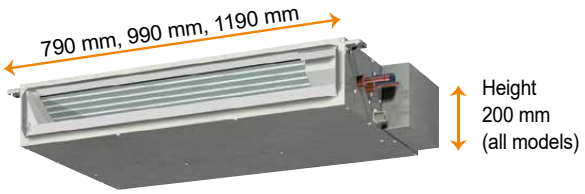
AUTO | Fan speed | Dry | Dual | ESP | Auto restoration | VMS1 Drain Lift Up | VMS1L Drain Lift Up (Optional) | Filter sign

*This image shows the VMS1 type
(equipped with a drain pump as a standard feature).

A thin body 200 mm in height and a maximum external static pressure rating of 50 Pa provides significant flexibility of design and allows installation in narrow ceiling spaces. The lineup consists of models up to P63 with the same height.

Compact design with a height of no more than 200 mm (all models) and widths of 790 mm (P15-P32).

The thin body with a height of no more than 200 mm (all models) allows installation in a ceiling with small cavity space.



PEFY-P VMS1(L)-E		P15	P20	P25	P32	P40	P50	P63
Height	mm	200						
Width	mm	790				990		1190

Low noise design

Owing to a centrifugal fan and coil, low noise operation is realized. It is best suited to places where quietness is required.

- Sound pressure level (standard static pressure) at 15 Pa

dB(A)

Sound pressure level	Capacity		P15	P20	P25	P32	P40	P50	P63
	Fan Speed	High	28	29	30	32	33	35	36
		Mid	24	25	26	27	30	32	33
		Low	22	23	24	24	28	30	30

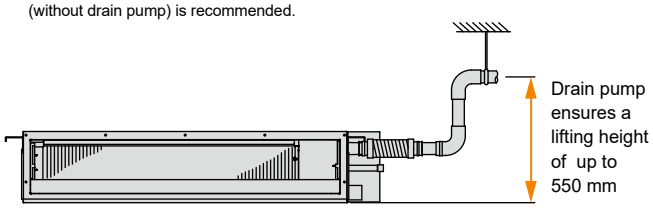
Demonstrates a maximum external static pressure of 50 Pa despite its compact design

External static pressure can be selected from 5, 15, 35 and 50 Pa (set to 15 Pa at the time of factory shipment).

Optional drain pump

For PEFY-P VMS1, the drain pump is equipped as a standard feature and eliminates the need for a drain trap. It has a maximum lifting height of 550 mm.
For PEFY-P VMS1L-E, the drain pump is sold separately.

*For places where low noise operation is especially required (i.e., hotels), VMS1L (without drain pump) is recommended.



Ceiling concealed type

Low static pressure type PEFY-P VMS1(L)-E

				PEFY-P15VMS1(L)-E	PEFY-P20VMS1(L)-E	PEFY-P25VMS1(L)-E	PEFY-P32VMS1(L)-E	PEFY-P40VMS1(L)-E	PEFY-P50VMS1(L)-E	PEFY-P63VMS1(L)-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz						
Cooling capacity	*1		kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	*1		BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1		kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	*1		BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	*3	Cooling	kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
		Heating	kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	*3	Cooling	A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
		Heating	A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish				Galvanized						
Dimension			mm	200 x 790 x 700				200 x 990 x 700		200 x 1,190 x 700
H x W x D			in.	7-7/8 x 31-1/8 x 27-9/16				7-7/8 x 39 x 27-9/16		7-7/8 x 46-7/8 x 27-9/16
Net weight	*3		kg(lbs.)	19(42) [18(40)]			20(45) [19(42)]	24(53) [23(51)]		28(62) [27(60)]
Heat exchanger				Cross fin (Aluminium fin and copper tube)						
FAN	Type x Quantity			Sirocco fan x 2				Sirocco fan x 3		Sirocco fan x 4
	Airflow rate (Lo-Mid-Hi)		m^3/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
			L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
			cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static press.		Pa	5-15-35-50						
Motor	Type			DC motor						
	Output		kW	0.096						
Air filter				PP Honeycomb fabric (washable)						
Refrigerant pipe diameter		Gas	mm(in.)	ø12.7 (ø1/2) Brazed						ø15.88 (ø5/8) Brazed
		Liquid	mm(in.)	ø6.35 (ø1/4) Brazed						ø9.52 (ø3/8) Brazed
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (mesured in anechoic room)			dB<A>	22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°CD.B./19°CW.B. (81°FD.B. / 66°FW.B.) Outdoor : 35°CD.B. (95°FD.B.)
Heating : Indoor : 20°CD.B. (68°FD.B.) Outdoor : 7°CD.B. / 6°CW.B. (45°FD.B. / 43°FW.B.)
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)
*2 The external static pressure is set to 15 Pa at factory shipment.
*3 [ ] is in case of PEFY-P15-63VMS1L-E

Optional parts

Description	Model	Applicable capacity
Drain pump	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63 *For PEFY-VMS1L only
Control box replace kit	PAC-KE70HS-E	P15, 20, 25, 32, 40, 50, 63

Ceiling concealed type
Medium static pressure type

PEFY-P VMA(L)-E

• Technologies and functions P.167

AUTO | Fan speed | Dry | Dual | ESP | Auto restoration | VMA Drain Lift Up | Filter sign

*This image shows the VMA type
(equipped with a drain pump as a standard feature).

A wide range of external static pressure and the slim 250mm-height body provide design flexibility for narrow ceiling spaces. The lineup consists of up to P140 with the same height.

Compact design with a height of no more than 250 mm (all models)

Thin body design with a height of no more than 250 mm (all models) enables the installation in a ceiling with small cavity.

Demonstrates a maximum external static pressure of 150 Pa despite its compact design

Five-stage external static pressure settings provide flexibility for duct extension, branching, and air outlet configuration and are adjustable to meet different application conditions.
Settings range to a maximum of 150 Pa.

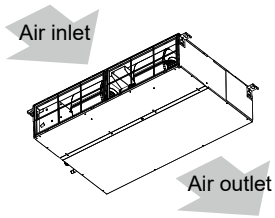
• External static pressure setting

Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-P VMA(L)-E	35/50/70/100/150 Pa										

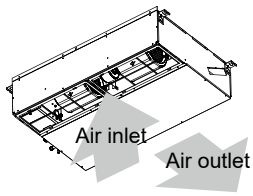
Air inlet direction can be easily changed

By simply switching the closing board and air filter, the inlet layout can be changed from the rear inlet to the bottom inlet. (At factory shipment: Rear inlet)

• Rear inlet



• Bottom inlet



* Units with a bottom inlet make more noise than those with a rear inlet.
The rear inlet is recommended for rooms that need to be quiet, such as bedrooms.

Analogue input

Multi-stage airflow control is possible by connecting a third-party Damper System Controller to the analogue input.

Optional drain pump

The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.

Built-in drain pump
PEFY-P VMA-E

No drain pump
PEFY-P VMAL-E
*Units with an "L" at the end of the model name are not equipped with a drain pump.

Ceiling concealed type

Medium static pressure type PEFY-P VMA(L)-E

			PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E	PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz				
Cooling capacity *1		kW	2.2	2.8	3.6	4.5	5.6
(Nominal) *1		BTU/h	7,500	9,600	12,300	15,400	19,100
Heating capacity *2		kW	2.5	3.2	4.0	5.0	6.3
(Nominal) *2		BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling *3	kW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]	0.09 [0.07]	0.11 [0.09]
	Heating *3	kW	0.04	0.04	0.05	0.07	0.09
Current	Cooling *3	A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]	0.64 [0.53]	0.74 [0.63]
	Heating *3	A	0.42	0.42	0.44	0.53	0.63
External finish			Galvanized steel plate				
Dimension H x W x D		mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732
		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8
Net weight		kg(lbs)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]	26 (58) [25 (56)]	26 (58) [25 (56)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 1				
	Air flow rate (Low-Mid-High)	m^3/min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0
		L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283
		cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600
	External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
Motor	Type		DC motor				
	Output	kW	0.085	0.085	0.085	0.085	0.085
Air filter			PP honeycomb fabric.				
Refrigerant piping diameter	Liquid	mm(in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed
	Gas	mm(in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)	O.D.32(1-1/4)	O.D.32(1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level			(Low-Mid-High)				
(measured in anechoic room) *3 *5		dB<A>	26-28-29	26-28-29	28-30-34	28-30-34	28-32-35
*3 *6		dB<A>	23-25-26	23-25-26	23-26-29	23-27-30	25-29-32

			PEFY-P63VMA(L)-E	PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E	PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz					
Cooling capacity *1		kW	7.1	8.0	9.0	11.2	14.0	16.0
(Nominal) *1		BTU/h	24,200	27,300	30,700	38,200	47,800	54,600
Heating capacity *2		kW	8.0	9.0	10.0	12.5	16.0	18.0
(Nominal) *2		BTU/h	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption	Cooling *3	kW	0.12 [0.10]	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]	0.34 [0.32]	0.36 [0.34]
	Heating *3	kW	0.10	0.12	0.12	0.22	0.32	0.34
Current	Cooling *3	A	1.01 [0.90]	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]	2.05 [1.94]	2.21 [2.10]
	Heating *3	A	0.90	1.04	1.04	1.36	1.94	2.10
External finish			Galvanized steel plate					
Dimension H x W x D		mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
		in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight		kg(lbs)	32 (71) [31(69)]	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]	42 (93) [41 (91)]	46 (102) [45 (100)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 2					
	Air flow rate (Low-Mid-High)	m^3/min	13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	28.0 - 34.0 - 40.0	29.5 - 35.5 - 42.0
		L/s	225 - 267 - 317	242 - 300 - 350	242 - 300 - 350	383 - 467 - 550	467 - 567 - 667	492 - 592 - 700
		cfm	477 - 565 - 671	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483
	External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
Motor	Type		DC motor					
	Output	kW	0.121	0.121	0.121	0.244	0.244	0.244
Air filter			PP honeycomb fabric.					
Refrigerant piping diameter	Liquid	mm(in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas	mm(in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level			(Low-Mid-High)					
(measured in anechoic room) *3 *5		dB<A>	29-32-36	30-34-38	30-34-38	32-37-41	35-40-44	36-41-45
*3 *6		dB<A>	25-29-33	26-29-34	26-29-34	28-33-37	32-36-40	33-37-42

Notes:

* [ ] is in case of PEFY-P VMAL-E

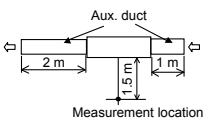
*1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*2 Nominal heating conditions
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

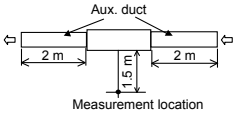
*3 The values are measured at the rated external static pressure.

*4 The rated external static pressure is shown without < >. The factory setting is the rated value.

*5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.



*6 Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.



Optional parts

• For PEFY-P VMA(L)-E

Description	Model	Applicable capacity
		VMA(L)
Filter box	PAC-KE91TB-E	P20, P25, P32
	PAC-KE92TB-E	P40, P50
	PAC-KE93TB-E	P63, P71, P80
	PAC-KE94TB-E	P100, P125
	PAC-KE95TB-E	P140

Ceiling concealed type

High static pressure type

PEFY-P VMHS-E

• Technologies and functions P.167

AUTO · Fan speed · Dry · Dual · ESP · Auto restoration · Drain Lift Up (Optional) · Filter sign

PEFY-P VMHS-E (P40-P140)

PEFY-P VMHS-E (P200/P250)

A wide range of external static pressure options to match virtually any application.

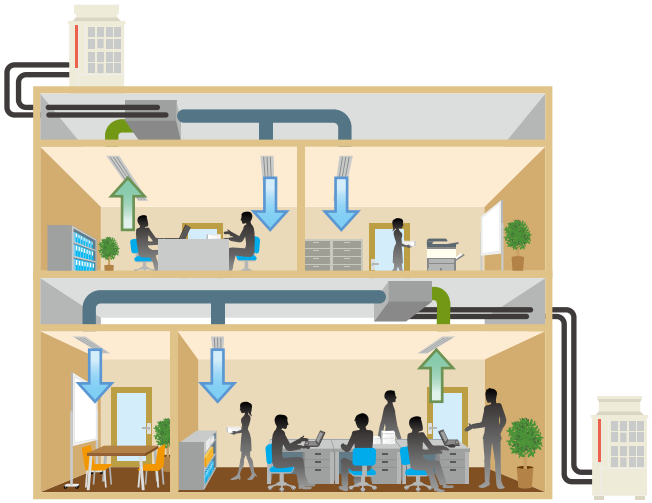
Maximum external static pressure of 250 Pa allows easy duct design

High external static pressure enables longer ducts for more flexibility in design.

PEFY-P VMHS-E	P40	P50	P63	P71	P80	P100	P125	P140
External static pressure (Pa)	50 – <100> – <150> – <200>							

PEFY-P VMHS-E	P200	P250
External static pressure (Pa)	<50> – <100> – 150 – <200> – <250>	

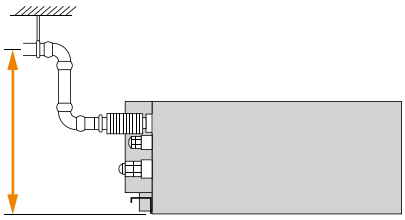
The factory setting of external static pressure is shown without brackets (< >).
Refer to "Fan characteristics curves" according to external static pressure, in the DATA BOOK for the usable range of airflow rate.



Drain pump (option) lifts drain water up to 550 mm−700 mm

*550 mm for P40−P140 VMHS, 700 mm for P200/P250VMHS models.

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm (21-11/16 in.) for P40−P140VMHS models and 700 mm (27-9/16 in.) for P200/P250VMHS models. Allowing more flexibility in piping layout design and reducing horizontal piping requirements.



Drain pump ensures a lifting height of up to 550 mm (P40−P140VMHS models) or 700 mm (P200/P250 VMHS models)

P140 (6 HP) and smaller models with a DC motor

The use of a DC motor

In the past, the only models featuring a DC motor were the P200 (8 HP) and P250 (10 HP). Now, the P140 (6 HP) and smaller models feature a DC motor that consumes less power compared to AC motors. In the P80 models, power consumption is reduced by 59%*.

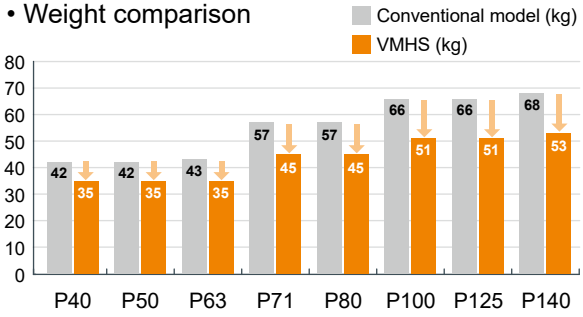
*Comparison made at 50 Hz, 220 V, 100 Pa low fan speed

	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
PEFY-P VMH(S)	AC motor								DC motor	
PEFY-P VMHS	DC motor									

Reduced weight

By downsizing the motor, the unit weight has been reduced, offering easier installation.

• Weight comparison



Drain pumps (sold separately) with a DC motor are now also available.

The use of a high-efficiency DC motor for the drain pump motor in the latest models reduces power consumption by 90%, in comparison to conventional models. The pump head height of 550 mm provides for greater piping design flexibility.

Four levels of external static pressure settings

While the conventional models only had three levels of external static pressure, the latest models offer four levels of external static pressure. The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

			P40	P50	P63	P71	P80	P100	P125	P140
PEFY-P VMH	External static pressure (Pa)	220 V	<50>-100-<200>							
		230, 240 V	<100>-150-<200>							
PEFY-P VMHS		220-240 V	50-<100>-<150>-<200>							

Four levels of external pressure settings

The factory setting of external static pressure is shown without brackets (< >).
Refer to "Fan characteristics curves" according to the external static pressure, in the DATA BOOK for the usable range of airflow rate.

Three fan speeds (Low/Mid/High) to choose from

The conventional models had two levels of fan speed, but the latest models offer three levels (Low/Mid/High). Combined with a wider selection of external static pressure levels, the latest models offer optimal operation settings to suit the air-conditioning load of the installation space.

Ceiling concealed type

High static pressure type PEFY-P VMHS-E

			PEFY-P40VMHS-E	PEFY-P50VMHS-E	PEFY-P63VMHS-E	PEFY-P71VMHS-E	PEFY-P80VMHS-E
Power source			1-phase 220-230-240 V 50/60 Hz				
Cooling capacity *1		kW	4.5	5.6	7.1	8.0	9.0
(Nominal) *1		BTU/h	15,400	19,100	24,200	27,300	30,700
*2	Power input	kW	0.055	0.055	0.090	0.075	0.090
*2	Current input (220-230-240 V)	A	0.41 - 0.39 - 0.38	0.41 - 0.39 - 0.38	0.64 - 0.62 - 0.59	0.54 - 0.52 - 0.50	0.63 - 0.61 - 0.58
Heating capacity *3		kW	5.0	6.3	8.0	9.0	10.0
(Nominal) *3		BTU/h	17,100	21,500	27,300	30,700	34,100
*2	Power input	kW	0.055	0.055	0.090	0.075	0.090
*2	Current input (220-230-240 V)	A	0.41 - 0.39 - 0.38	0.41 - 0.39 - 0.38	0.64 - 0.62 - 0.59	0.54 - 0.52 - 0.50	0.63 - 0.61 - 0.58
External finish			Galvanized steel plate				
External dimension H x W x D		mm	380 x 745 x 900	380 x 745 x 900	380 x 745 x 900	380 x 1,030 x 900	380 x 1,030 x 900
		in.	15 x 29-3/8 x 35-7/16	15 x 29-3/8 x 35-7/16	15 x 29-3/8 x 35-7/16	15 x 40-9/16 x 35-7/16	15 x 40-9/16 x 35-7/16
Net weight		kg (lbs)	35 (78)	35 (78)	35 (78)	45 (100)	45 (100)
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2
*4	External static press.	Pa	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>
		mmH_2O	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>
	Motor Type		DC motor				
	Motor output	kW	0.121	0.121	0.121	0.244	0.244
	Driving mechanism		Direct-driven by motor				
	Airflow rate (Lo-Mid-Hi)	m^3/min	10.0 - 12.0 - 14.0	10.0 - 12.0 - 14.0	13.5 - 16.0 - 19.0	15.5 - 18.0 - 22.0	18.0 - 21.5 - 25.0
		L/s	167 - 200 - 233	167 - 200 - 233	225 - 267 - 317	258 - 300 - 367	300 - 358 - 417
		cfm	353 - 424 - 494	353 - 424 - 494	477 - 565 - 671	547 - 636 - 777	636 - 759 - 883
Sound pressure level (measured			(Low-Mid-High)				
in anechoic room) *2		dB <A>	20-23-27	20-23-27	24-27-32	24-26-30	25-27-30
Air filter			Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.				
Refrigerant piping diameter	Liquid	mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27˚CD.B./19˚CW.B. (81˚FD.B./66˚FW.B.), Outdoor: 35˚CD.B. (95˚FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*2 The values are measured at the factory setting of external static pressure.

*3 Nominal heating conditions
Indoor: 20˚CD.B. (68˚FD.B.), Outdoor: 7˚CD.B./6˚CW.B. (45˚FD.B./43˚FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*4 The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

Ceiling concealed type

High static pressure type PEFY-P VMHS-E

			PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E	PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power source			1-phase 220-230-240 V 50/60 Hz			1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz	
Cooling capacity *1		kW	11.2	14.0	16.0	22.4	28.0
(Nominal) *1		BTU/h	38,200	47,800	54,600	76,400	95,500
*2	Power input	kW	0.160	0.160	0.190	0.63	0.82
*2	Current input (220-230-240 V)	A	1.05 - 1.01 - 0.96	1.05 - 1.01 - 0.96	1.24 - 1.19 - 1.14	3.47 - 3.32 - 3.18	4.72 - 4.43 - 4.14
Heating capacity *3		kW	12.5	16.0	18.0	25.0	31.5
(Nominal) *3		BTU/h	42,700	54,600	61,400	85,300	107,500
*2	Power input	kW	0.160	0.160	0.190	0.63	0.82
*2	Current input (220-230-240 V)	A	1.05 - 1.01 - 0.96	1.05 - 1.01 - 0.96	1.24 - 1.19 - 1.14	3.47 - 3.32 - 3.18	4.72 - 4.43 - 4.14
External finish			Galvanized steel plate				
External dimension H x W x D		mm	380 x 1,195 x 900	380 x 1,195 x 900	380 x 1,195 x 900	470 x 1,250 x 1,120	470 x 1,250 x 1,120
		in.	15 x 47-1/16 x 35-7/16	15 x 47-1/16 x 35-7/16	15 x 47-1/16 x 35-7/16	18-9/16 x 49-1/4 x 44-1/8	18-9/16 x 49-1/4 x 44-1/8
Net weight		kg (lbs)	51 (113)	51 (113)	53 (117)	97 (214)	100 (221)
Heat exchanger			Cross fin (Aluminum fin and copper tube)			Cross fin (Aluminum plate fin and copper tube)	
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
*4	External static press.	Pa	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	<50> - <100> - 150 - <200> - <250>	<50> - <100> - 150 - <200> - <250>
		mmH_2O	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>	5.1 - <10.2> - <15.3> - <20.4>	<5.1> - <10.2> - 15.3 - <20.4> - <25.5>	<5.1> - <10.2> - 15.3 - <20.4> - <25.5>
	Motor Type		DC motor				
	Motor output	kW	0.375	0.375	0.375	0.870	0.870
	Driving mechanism		Direct-driven by motor			Inverter-control	
	Airflow rate (Lo-Mid-Hi)	m^3/min	26.5 - 32.0 - 38.0	26.5 - 32.0 - 38.0	28.0 - 34.0 - 40.0	50.0 - 61.0 - 72.0	58.0 - 71.0 - 84.0
		L/s	442 - 533 - 633	442 - 533 - 633	467 - 567 - 667	833 - 1,017 - 1,200	967 - 1,183 - 1,400
		cfm	936 - 1,130 - 1,342	936 - 1,130 - 1,342	989 - 1,201 - 1,412	1,766 - 2,154 - 2,542	2,048 - 2,507 - 2,966
Sound pressure level (measured			(Low-Mid-High)				
in anechoic room) *2		dB <A>	27-31-34	27-31-34	27-32-36	36-39-43	39-42-46
Air filter			Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.				
Refrigerant piping diameter	Liquid	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	22.22 (7/8) Brazed
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27˚CD.B./19˚CW.B. (81˚FD.B./66˚FW.B.), Outdoor: 35˚CD.B. (95˚FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*2 The values are measured at the factory setting of external static pressure.

*3 Nominal heating conditions
Indoor: 20˚CD.B. (68˚FD.B.), Outdoor: 7˚CD.B./6˚CW.B. (45˚FD.B./43˚FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

*4 The factory setting of external static pressure is shown without < >. Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

Optional parts

Description	Model	Applicable capacity VMHS-E	Remarks
Drain pump	PAC-KE05DM-F	P200, P250	
	PAC-DRP10DP-E2	P40-P140	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P200, P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Required when long life filter is used
	PAC-KE99TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	

Ceiling concealed type
Fresh air intake type

PEFY-P VMHS-E-F
PEFY-P VMH-E-F

• Technologies and functions P.167

Fan speed | ESP | Auto restoration | Drain Lift Up (Optional) | Filter sign


PEFY-P125VMHS-E-F


PEFY-P200, 250VMHS-E-F


PEFY-P80, 140VMH-E-F

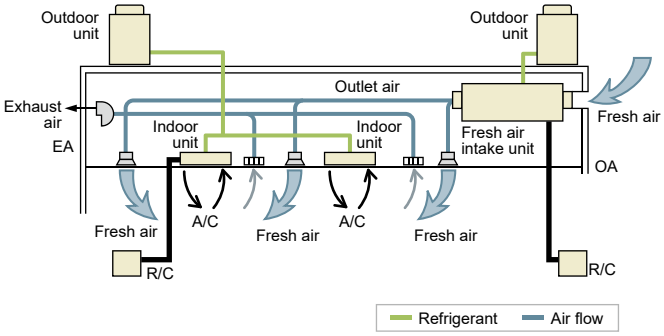

PEFY-P200, 250VMH-E-F

Air conditioner with fresh air intake structure enables intake of outside air. Pre-treating the intake air contributes to ensure optimized room comfort.

Enables intake of outside air

Fresh air can be taken in. This fresh air intake feature is available for each air-conditioning zone.

*Fresh air intake type indoor units are designed to supply pretreated outside air to the room. It is not for controlling internal thermal load.



Flexible settings

• External static pressure

Selectable external static pressure expands design possibilities.

PEFY-P VMHS-E-F	P125	P200	P250
External static pressure (Pa)	<100>-<150>-200-<250>		

PEFY-P VMH-E-F		P80	P140	P200	P250
External static pressure (Pa)	208 V	<35> -85- <170>	<35> -85- <170>	<140> -200	<110> -190
	220 V	<40> -115- <190>	<50> -115- <190>	<150> -210	<120> -200
	230 V	<50> -130- <210>	<60> -130- <220>	<160> -220	<130> -210
	240 V	<80> -170- <220>	<100> -170- <240>	–	–

The factory setting of external static pressure is shown without brackets (< >). Refer to "Fan characteristics curves", according to the external static pressure, in the DATA BOOK for the usable range of the air flow rate.

• Airflow mode/rate

(For PEFY-P VMHS-E-F models only)

Two types of airflow modes are available, each of which has three airflow rates to choose from.

Mode	Normal airflow rate	High airflow rate
Airflow rate	Low-Medium-High	Low-Medium-High

*Airflow rates are accessible from the remote controller.

Outlet air temperature control

(for PEFY-P VMHS-E-F models only)

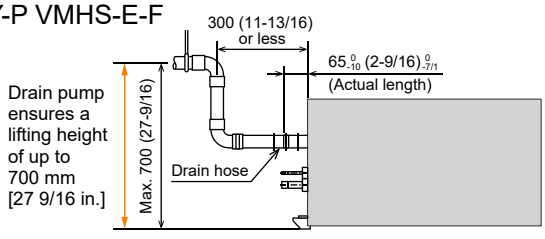
Pre-treating the intake air before it is supplied to the room contributes to the stability of room temperature, ensuring optimized room comfort.

*Outlet air temperature may fluctuate depending on the outside air temperature and the operating status of the indoor and outdoor units.

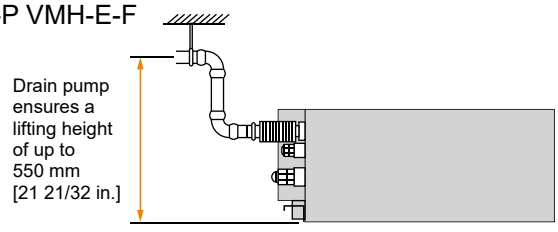
Drain pump (option)

The introduction of an upper drain pump allows the drain connection to be raised, allowing more freedom in piping layout design and reducing horizontal piping requirements.

• PEFY-P VMHS-E-F



• PEFY-P VMH-E-F



Ceiling concealed type
Fresh air intake type PEFY-P VMHS-E-F

			PEFY-P125VMHS-E-F		PEFY-P200VMHS-E-F		PEFY-P250VMHS-E-F *6	
Power source			1-phase 220-230-240 V 50/60 Hz		1-phase 220-230-240 V 50/60 Hz		1-phase 220-230-240 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	14.0		22.4		28.0	
	*1	BTU/h	47,800		76,400		95,500	
*2	Power input	kW	0.220		0.260		0.350	
*2	Current input (220 V)	A	1.43		1.66		2.16	
Temp. range of cooling			17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.		17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.		17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.	
Heating capacity (Nominal)	*3	kW	8.9		13.9		17.4	
	*3	BTU/h	30,400		47,400		59,400	
*2	Power input	kW	0.230		0.270		0.360	
*2	Current input (220 V)	A	1.52		1.85		2.38	
Temp. range of heating			-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.		-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.		-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.	
External finish			Galvanized		Galvanized		Galvanized	
External dimension HxWxD		mm	380 x 1,195 x 900		470 x 1,250 x 1,120		470 x 1,250 x 1,120	
		in.	15 x 47-1/16 x 35-7/16		18-9/16 x 49-1/4 x 44-1/8		18-9/16 x 49-1/4 x 44-1/8	
Net weight		kg (lbs)	49 (109)		78 (172)		81 (179)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2		Sirocco fan x 2	
*4, 5	External static press.	Pa	<100> - <150> - 200 - <250>		<100> - <150> - 200 - <250>		<100> - <150> - 200 - <250>	
		mmH_2O	<10.2> - <15.3> - 20.4 - <25.5>		<10.2> - <15.3> - 20.4 - <25.5>		<10.2> - <15.3> - 20.4 - <25.5>	
	Motor Type		DC motor		DC motor		DC motor	
	Motor output	kW	0.244		0.375		0.375	
	Driving mechanism		Direct-driven by motor		Direct-driven by motor		Direct-driven by motor	
*4, 5	Air flow rate (Low-Mid-High)		Normal-airflow rate mode	<High-airflow rate mode>	Normal-airflow rate mode	<High-airflow rate mode>	Normal-airflow rate mode	<High-airflow rate mode>
		m^3/min	14.0 - 15.5 - 18.0	15.5 - 18.0 - 20.0	22.5 - 25.0 - 28.0	25.0 - 28.0 - 32.0	28.0 - 31.0 - 35.0	31.0 - 35.0 - 40.0
		L/s	233 - 258 - 300	258 - 300 - 333	375 - 417 - 467	417 - 467 - 533	467 - 517 - 583	517 - 583 - 667
		cfm	494 - 547 - 636	547 - 636 - 706	794 - 883 - 989	883 - 989 - 1,130	989 - 1,095 - 1,236	1,095 - 1,236 - 1,412
Sound pressure level (measured in anechoic room) (Low-Mid-High)	*2	dB <A>	Normal-airflow rate mode: 34-37-41	<High-airflow rate mode>: 36-40-42	Normal-airflow rate mode: 35-38-41	<High-airflow rate mode>: 36-39-42	Normal-airflow rate mode: 38-40-44	<High-airflow rate mode>: 38-41-45
Air filter			Option: Synthetic fiber unwoven cloth filter (long life filter).		Option: Synthetic fiber unwoven cloth filter (long life filter).		Option: Synthetic fiber unwoven cloth filter (long life filter).	
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed	
	Gas (R410A)	mm (in.)	15.88 (5/8) Brazed		19.05 (3/4) Brazed		22.22 (7/8) Brazed	
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)		O.D.32 (1-1/4)		O.D.32 (1-1/4)	
Optional parts	Drain pump kit		PAC-DRP10DP-E2		PAC-KE06DM-F		PAC-KE06DM-F	
	Long life filter		PAC-KE89LAF		PAC-KE85LAF		PAC-KE85LAF	
	Filter box		PAC-KE140TB-F		PAC-KE250TB-F		PAC-KE250TB-F	

Notes:

*1 Cooling capacity indicates the maximum value at operation under the following condition. Cooling: Indoor 33°CDB/28°CWB, Outdoor 33°CDB. The set temperature of the remote controller is 18°C.
*2 The value are measured at the factory setting of airflow mode and external static pressure.
*3 Heating capacity indicates the maximum value at operation under the following condition. Heating: Indoor 0°CDB/-2.9°CWB, Outdoor 0°CDB/-2.9°CWB. The set temperature of the remote controller is 25°C.
*4 The factory setting of airflow mode and external static pressure mode is shown without < >. Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*5 If the airflow rate is over the usable range, dew drop can be caused from the air outlet and the air flow rate is changed automatically because of the output down by the fan motor control. If the air flow rate is less than the usable range, condensation from the unit surface can be caused.
*6 Regarding P250VMHS-E-F, the middle notch air flow rate is different from the spec value when the external static pressure setting is set to 100Pa. See "Fan characterics curves" in DATA BOOK for the details.
• The combination of fresh air intake type indoor units with other types of indoor units to handle internal thermal load which may cause the conflict of operation mode. It is not recommended when fresh air intake type indoor unit is connected to the Y or WY series.
• Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the desired preset temperature may not always be achieved and the outlet air temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
• Fresh air intake type indoor units cannot be connected to an outdoor unit together with PWFY series.
• The maximum connectable indoor units to 1 outdoor unit are 110% (100% in case of heating below -5°C).
• When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity.
• The AUTO mode on the local remote controller is available only when fresh air intake type indoor unit is connected to the R2 or WR2 series of outdoor unit.
• The system changeover function is available only when all the connected indoor units are fresh air intake type indoor units.
• The fan temporary stops during defrost.
• The cooling and heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5 m and a level difference of 0 m.
• The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information in DATA BOOK for the details.
• Thermo off (Fan) operation automatically starts either when temperature is lower than 17°CDB in cooling mode or when the temperature exceeds 20°CDB in heating mode.
• Dry mode is not available.
• When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
• Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation, which may occur dew condensation on the grills and ducts. Please insulate the grills, ducts, and rooms to prevent dew condensation properly.
• Air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible in case of usage of field supply filters.

Ceiling concealed type
Fresh air intake type PEFY-P VMH-E-F

				PEFY-P80VMH-E-F	PEFY-P140VMH-E-F	PEFY-P200VMH-E-F	PEFY-P250VMH-E-F
Power source				1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz		3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz	
Cooling capacity	*1		kW	9.0	16.0	22.4	28.0
	*1		BTU/h	30,700	54,600	76,400	95,500
Temp. range of cooling				21°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 21°CD.B.			
Heating capacity	*1		kW	8.5	15.1	21.2	26.5
	*1		BTU/h	29,000	51,500	72,300	90,400
Temp. range of heating				-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.			
Power consumption	*2	Cooling	kW	0.16 / 0.21	0.29 / 0.33	0.34 / 0.42	0.39 / 0.50
	*2	Heating	kW	0.16 / 0.21	0.29 / 0.33	0.34 / 0.42	0.39 / 0.50
Current	*2	Cooling	A	0.67 / 0.91	1.24 / 1.48	0.58 / 0.74	0.68 / 0.86
	*2	Heating	A	0.67 / 0.91	1.24 / 1.48	0.58 / 0.74	0.68 / 0.86
External finish				Galvanized			
Dimension H x W x D			mm (in.)	380 x 1,000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1,200 x 900 (15 x 47-1/4 x 35-7/16)	470 x 1,250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)	
Net weight			kg (lbs)	50 (111)	67 (148)	100 (221)	
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 1	Sirocco fan x 2		
	Airflow rate		m^3/min	9.0	18.0	28	35
			L/s	150	300	467	583
			cfm	318	636	989	1,236
	External static pressure	208V	Pa	<35> - 85 - <170>	<35> - 85 - <170>	-	-
	*3	220V	Pa	<40> - 115 - <190>	<50> - 115 - <190>	-	-
		230V	Pa	<50> - 130 - <210>	<60> - 130 - <220>	-	-
		240V	Pa	<80> - 170 - <220>	<100> - 170 - <240>	-	-
		380V	Pa	-	-	<140> / 200	<110> / 190
		400V	Pa	-	-	<150> / 210	<120> / 200
		415V	Pa	-	-	<160> / 220	<130> / 210
Motor	Type			1-phase induction motor		3-phase induction motor	
	Output		kW	0.09 (220V, 115Pa)	0.14 (220V, 115Pa)	0.20 (415V, 220Pa)	0.23 (415V, 210Pa)
Air filter (option)				Synthetic fiber unwoven cloth filter (long life)		Synthetic fiber unwoven cloth filter (long life type)	
Refrigerant pipe diameter		Liquid	mm (in.)	ø9.52 (ø3/8) Flare		ø9.52 (ø3/8) Brazed	
		Gas	mm (in.)	ø15.88 (ø5/8) Flare		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)		O.D.32 (1-1/4)	
Sound pressure level		208, 220V	dB<A>	38	38	-	-
(measured in anechoic room)	*2 *4	230, 240V	dB<A>	43	43	-	-
		380V	dB<A>	-	-	42	44
		400V	dB<A>	-	-	43	45
		415V	dB<A>	-	-	44	46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 33°CDB/28°CWB (91°FDB/82°FWB) Outdoor : 33°CDB (91°FDB)
Heating : Indoor : 0°CDB/-2.9°CWB (32°FDB/27°FWB) Outdoor : 0°CDB/-2.9°CWB (32°FDB/27°FWB)
Pipe length : 7.5 m (24-9/16 ft) Level difference : 0 m (0 ft)

*2 The values are measured at the factory setting of external static pressure.
The figure of Electrical characteristic indicates at 240V 50Hz/230V 60Hz (PEFY-P80, 140VMH-E-F type), at 50Hz/60Hz (PEFY-P200, 250VMH-E-F type).

*3 The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

*4 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

- Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the outlet air temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- The maximum connectable indoor units to 1 outdoor unit are 110% (100% in case of heating below -5°C).
- When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity.
- Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.
- The AUTO mode on the local remote controller is available only when fresh air intake type indoor unit is connected to the R2 or WR2 series of outdoor unit.
- The system changeover function is available only when all the connected indoor units are fresh air intake type indoor units.
- The fan temporary stops during defrost.
- Dry mode is not available.
- In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan characteristics curves" in DATA BOOK for the details.
- When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
- Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation, which may occur dew condensation on the grills and ducts. Please insulate the grills, ducts, and rooms to prevent dew condensation properly.
- Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of field supply filters.

Optional parts

• For PEFY-P VMHS-E-F

Description	Model	Applicable capacity	
		VMHS-E-F	VMH-E-F
Long life filter	PAC-KE88LAF	-	P80
	PAC-KE89LAF	P125	P140
	PAC-KE85LAF	P200, P250	P200, P250
Filter box	PAC-KE80TB-F	-	P80
	PAC-KE140TB-F	P125	P140
	PAC-KE250TB-F	P200, P250	P200, P250
Drain pump	PAC-KE04DM-F	-	P80, P140, P200, P250
	PAC-DRP10DP-E2	P125	-
	PAC-KE06DM-F	P200, P250	-

Ceiling Suspended Type

Ceiling suspended type

PCFY-P VKM-E

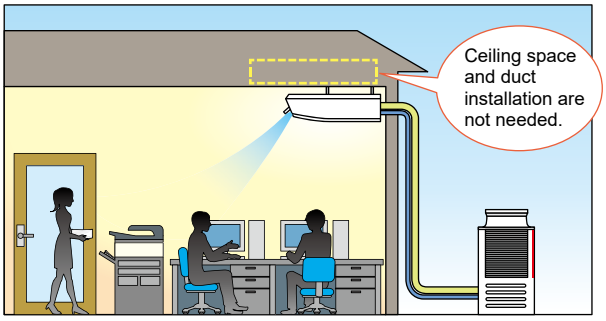
• Technologies and functions P.167

AUTO · Fan speed · Vane · SWING · Dry · Dual · Auto restoration · High efficiency (Optional) · Drain Lift Up (Optional) · Filter sign

A stylish indoor unit design and optional drain pump expand installation possibilities.

Easy installation

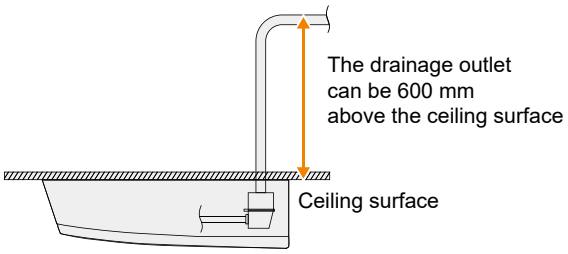
The ceiling suspended cassette can easily be installed without requiring ductwork, even if the ceiling does not have sufficient space.



Drain pumps can be supported throughout the horsepower range. (Optional)

The optional drain pump allows the drain connection to be raised as high as 600 mm, expanding flexibility in choosing an installation location.

• Drain pump installation



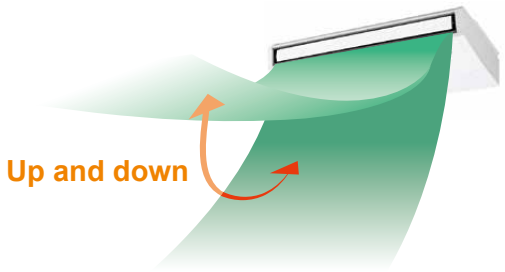
A height of 230 mm for harmony with the interior design

Sleek and slim with stylishly curved lines, the PCFY-Series blends right into any interior.

*This image shows PCFY-P40VKM-E

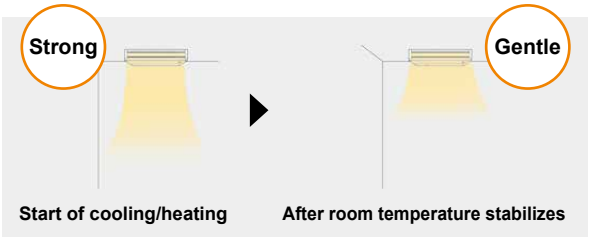
Auto vane control

Outlet vanes can be moved up and down using the remote controller. This improved airflow control feature helps eliminate the cold draft feeling.



Automatic air-speed adjustment

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.



Ceiling suspended type PCFY-P VKM-E

			PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity *1		kW	4.5	7.1	11.2	14.0
		BTU/h	15,400	24,200	38,200	47,800
Heating capacity *1		kW	5.0	8.0	12.5	16.0
		BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling	kW	0.04	0.05	0.09	0.11
	Heating	kW	0.04	0.05	0.09	0.11
Current	Cooling	A	0.28	0.33	0.65	0.76
	Heating	A	0.28	0.33	0.65	0.76
External finish(Munsell No.)			6.4Y 8.9/0.4			
Dimension H x W x D		mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680	
		in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4	
Net weight		kg(lbs.)	24(53)	32 (71)	36 (79)	38 (84)
Heat exchanger			Cross fin (Aluminum fin and copper tube)			
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4	
	Airflow rate *2	m^3/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
	(Lo-Mid2-Mid1-Hi)	L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
		cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
	External static pressure	Pa	0			
Motor	Type		DC motor			
	Output	kW	0.090	0.095	0.160	
Air filter			PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB<A>	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB,Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
*2 Airflow rate/Sound pressure level are shown in (low-middle 2-middle 1-high).
*3 It is measured in anechoic room.

Optional parts

Description	Model	Applicable capacity
Drain pump kit	PAC-SH83DM-E	P40
	PAC-SH84DM-E	P63, 100, 125
High efficiency filter	PAC-SH88KF-E	P40
	PAC-SH89KF-E	P63
	PAC-SH90KF-E	P100, 125
Wireless remote controller kit	PAR-SL94B-E	P40, 63, 100, 125

Wall-Mounted Type

Wall-mounted type

PKFY-P VLM-E
PKFY-P VKM-E

• Technologies and functions P.167

VLM AUTO, Fan speed, Vane, SWING, Dry, Dual, Auto restoration, Drain Lift Up, Filter sign (Optional)


PKFY-P10–32VLM


PKFY-P40–50VLM


PKFY-P VKM

Sophisticated design matches any interior.

A design that matches any room interior (VLM model)

A sharp and simple form combines beauty and function. The simple square design harmonizes beautifully with the straight lines of the walls, floor and ceiling. The white body color has been adopted to enhance the beauty and comfort of a room without disturbing its atmosphere.

Previous models


PKFY-P VBM <P15–P25>

PKFY-P VHM <P32–P50>

Latest model


PKFY-P VLM <P10–P32>


PKFY-P VLM <P40–P50>

New lineup

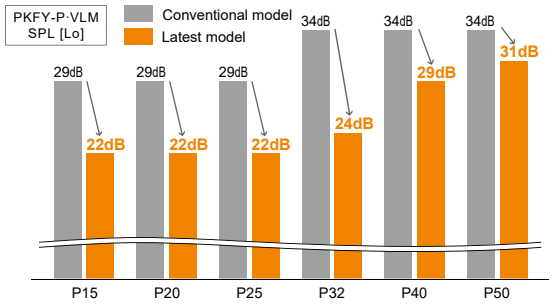
The broad lineup from P10 to P50 offers flexible proposals tailored to diverse customer needs and applications.

		P10	P15	P20	P25	P32	P40	P50
Conventional	VBM		●	●	●			
Conventional	VHM					●	●	●
Latest	VLM	●	●	●	●	●	●	●

*For details on connectability with the P10 model, refer to the specifications of the outdoor units.

Reduced noise level

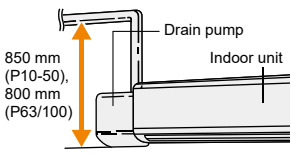
The noise level has been reduced compared to the previous model (PKFY-P VBM/VHM) by improving the unit structure, including the line flow fan.



*Measurement condition (Fan speed: Low)
*Measured in an anechoic room

Optional drain pump

The optional drain pump allows the drain connection to be raised as high as 850 mm (P10-50) or 800 mm (P63/100), allowing more flexibility in piping layout design.



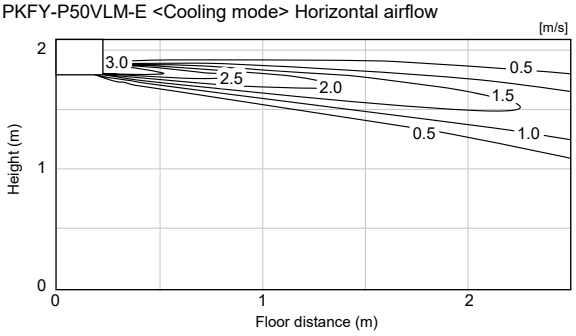
Improved airflow control

Horizontal airflow

Airflow control has been improved to achieve horizontal airflow. This reduces the cold draft feeling even with a wall mounted model, while ensuring optimal air conditioning.

• Airflow distribution

PKFY-P50VLM-E <Cooling mode> Horizontal airflow



Fan speed & vane control

The VLM model provides 4 fan speeds and an auto mode. Additionally, the vane angle can be set to five steps. This enables air conditioning as desired.

		Fan Speed	Vane Control	
			Vane Angle	Swing mode
Conventional	PKFY-P** VBM	4 speeds	4 steps	----
	PKFY-P** VHM	3 speeds + AUTO	5 steps	✓
Latest	PKFY-P** VLM-E	4 speeds + AUTO	5 steps	✓

Wall-mounted type PKFY-P VLM-E

			PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz						
Cooling capacity *1		kW	1.2	1.7	2.2	2.8	3.6	4.5	5.6
*1		BTU/h	4,100	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity *1		kW	1.4	1.9	2.5	3.2	4.0	5.0	6.3
*1		BTU/h	4,800	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.02			0.03	0.04		0.05
	Heating	kW	0.01			0.02	0.03		0.04
Current	Cooling	A	0.20			0.25	0.35		0.45
	Heating	A	0.15			0.20	0.30		0.40
External finish(Munsell No.)			Plastic, MUNSELL (0.7PB 9.2/0.4)						
Dimension H x W x D		mm(in.)	299 x 773 x 237 (11-25/32 x 30-7/16 x 9-11/32)					299 x 898 x 237 (11-25/32 x 35-3/8 x 9-11/32)	
Net weight		kg(lbs.)	11 (25)					13 (29)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity		Line flow fan x 1						
	Airflow rate *2	m^3/min	3.3-3.5-3.8-4.2	4.0-4.2-4.4-4.7	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4
	(Lo-Mid2-Mid1-Hi)	L/s	55-58-63-70	67-70-73-78	67-73-82-90	67-77-90-112	72-90-115-140	105-123-143-167	113-138-170-207
		cfm	117-124-134-148	141-148-155-166	141-155-173-191	141-162-191-237	152-191-244-297	222-261-304-353	240-293-360-438
	External static pressure	Pa	0						
Motor	Type		DC motor						
	Output	kW	0.030						
Air filter			PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2) Flare						
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4) Flare						
Field drain pipe diameter		mm(in.)	I.D.16 (5/8)						
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB<A>	22-24-26-28		22-26-29-31	22-27-31-35	24-31-37-41	29-34-37-40	31-36-41-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB,Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).
*3 It is measured in anechoic room.

Wall-mounted type PKFY-P VKM-E

			PKFY-P63VKM-E	PKFY-P100VKM-E
Power source			1-phase 220-230-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity *1		kW	7.1	11.2
		BTU/h	24,200	38,200
Heating capacity *1		kW	8.0	12.5
		BTU/h	27,300	42,600
Power consumption	Cooling*4	kW	0.05	0.08
	Heating	kW	0.04	0.07
Current	Cooling*4	A	0.37	0.58
	Heating	A	0.30	0.51
External finish(Munsell No.)			Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D		mm(in.)	365 x 1,170 x 295 (14-3/8 x 46-1/16 x 11-5/8)	
Net weight		kg(lbs.)	21 (46)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		Line flow fan x 1	
	Airflow rate *2 (Lo-Hi)	m^3/min	16-20	20-26
		L/s	267-333	333-433
		cfm	565-706	706-918
	External static pressure	Pa	0	
Motor	Type		DC motor	
	Output	kW	0.056	
Air filter			PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter		mm(in.)	I.D. 16(5/8)	
Sound pressure level (Lo-Hi) *2 *3		dB<A>	39-45	41-49

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-high).
*3 It is measured in anechoic room.
*4 Electrical characteristic of cooling are included optional drain-pump.

Optional parts

Description	Model	Applicable capacity
External LEV Box	PAC-SK17LE-E	P10
	PAC-SG95LE-E	P15, 20, 25, 32, 40, 50, 63
Drain pump kit	PAC-SK01DM-E	P10, 15, 20, 25, 32, 40, 50
	PAC-SH94DM-E	P63, 100

Floor Standing Type

Floor standing type
Exposed type

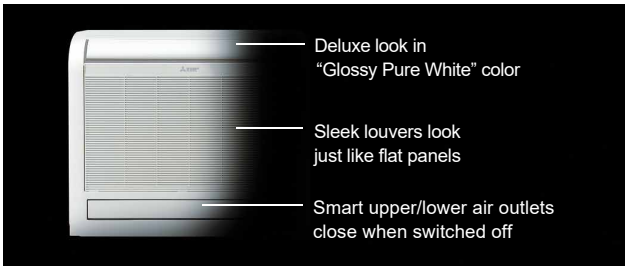
PFFY-P VKM-E2

• Technologies and functions P.167

For living rooms, bed rooms, or offices where a sophisticated design is required.
The latest Mitsubishi innovation is a floor-standing air-conditioner that is elegant in design and rich in function.

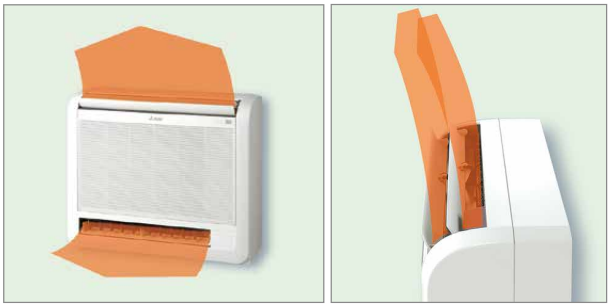
Sophisticated design

This innovative, new floor standing air-conditioner exhibits a pleasing mix of streamlined form and diverse functions. It is engineered to keep room walls empty, and to provide comfortable cooling in the summer and toasty heating in the winter.
The “Glossy Pure White” color ensures a high-end look, a perfect match for any room. Both upper and lower air outlets remain closed when switched off, showing off a smart and striking image.
It is sure to provide a handsome fit to distinctive room interiors.

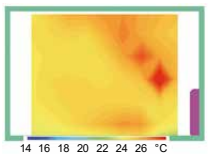


Optimum air distribution

Comfortable room temperatures are accomplished through optimum, powerful, and efficient air distribution through upper and lower air outlets.
The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode).
By setting the vane angle almost vertical, bothersome direct wind can be avoided for increased comfort.

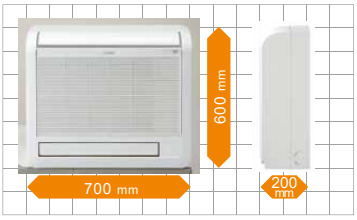


The air from both the upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Say goodbye to chilly feet!



Slim, yet mighty

The unit's body is slim and trim, highlighting its compact essence. It is an ideal size for living rooms, bedrooms, and more.
The removable and washable front panel makes for easy cleaning.
Easy, regular cleaning helps to maintain energy-efficient operation.



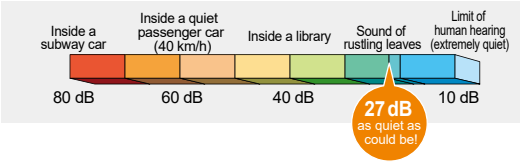
Quiet operation (lowest noise level among most floor standing types)

Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. The new floor standing models are no exception. They create a quiet and comfortable space with virtually no conspicuous noise.

*PFFY-P20VKM-E2
at low fan speed

• Noise level

*2.5kw class



Floor standing type

Exposed type PFFY-P VKM-E2

				PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source				1-phase 220-240V 50Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.025	0.025	0.025	0.028
	Heating		kW	0.025	0.025	0.025	0.028
Current	Cooling		A	0.20	0.20	0.20	0.24
	Heating		A	0.20	0.20	0.20	0.24
External finish				Plastic (Pure white)			
Dimension			mm	600 x 700 x 200			
H x W x D			in.	23-5/8 x 27-9/16 x 7-7/8			
Net weight			kg(lbs.)	15 (34)			
Heat exchanger				Cross fin (Alminium plate fin and copper tube)			
FAN	Type x Quantity			Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi)		m^3/min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.03 x 2			
Air filter				PP honeycomb fabric (Catechin Filter)			
Refrigerant pipe diameter	Gas(Flare)		mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare)		mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter				I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi)		*2	dB<A>	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle-high-shigh).
*3 It is measured in anechoic room.

Floor standing type
Exposed type

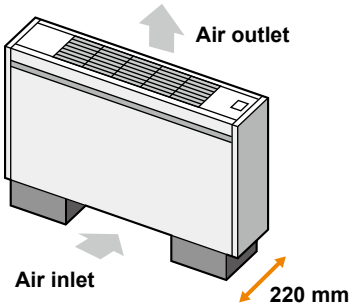
PFFY-P VLEM-E

• Technologies and functions P.167

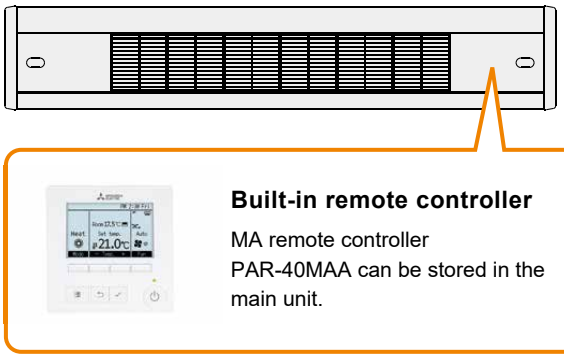
This floor standing type allows efficient air conditioning around the perimeter of a room. It adopts a low-height design that does not block the daylight from the windows.

Compact unit for perimeter air conditioning

The compact body is only 220 mm (8-11/16 in.) deep for easy installation and effective air conditioning around the perimeter of a room.



Remote controller storage in the main unit



Built-in remote controller

MA remote controller
PAR-40MAA can be stored in the main unit.

Dehumidifying Mode to manage moisture build-up

Rooms are kept optimally dehumidified according to the indoor temperature to prevent over-cooling.

Floor standing type

Exposed type PFFY-P VLEM-E

			PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power source			1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity *1		kW	2.2	2.8	3.6	4.5	5.6	7.1
*1		BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity *1		kW	2.5	3.2	4.0	5.0	6.3	8.0
*1		BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)			Acrylic paint (5Y 8/1)					
Dimension H x W x D		mm	630 x 1,050 x 220		630 x 1,170 x 220		630 x 1,410 x 220	
		in.	24-13/16 x 41-3/8 x 8-11/16		24-13/16 x 46-1/8 x 8-11/16		24-13/16 x 55-9/16 x 8-11/16	
Net weight		kg(lbs.)	28 (62)		30 (67)	32 (71)	36 (80)	37 (82)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate *2 (Lo-Hi)	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108		117-150	150-183	200-233	200-258
		cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure	Pa	0					
Motor	Type		1-phase induction motor					
	Output	kW	0.015		0.018	0.030	0.035	0.050
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi) *2 *3 *4		dB<A>	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Air flow rate/Sound pressure level are in (Low-High)

*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB<A> lower at AC230V/50Hz
· 2dB<A> lower at AC220V/50Hz
· 3dB<A> lower at 1.5m x 1.5m point

*4 It is measured in anechoic room.

Floor standing type
Concealed type

PFFY-P VLRM-E
PFFY-P VLRMM-E

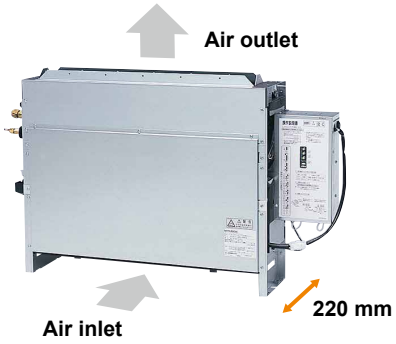
• Technologies and functions P.167

VLRMM: AUTO, Fan speed, Dry
Dual
VLRMM: ESP
Auto restoration
Filter sign

Fits neatly and easily installed in perimeter zone.

Compact unit for easy perimeter air conditioning

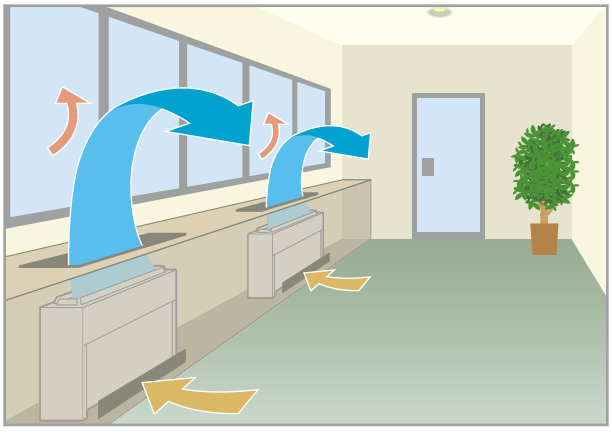
The compact body is only 220 mm (8-11/16 in.) in depth, so it can be easily installed and concealed in a perimeter counter.



Concealed design ensures harmony with any interior

The embedded type design makes it possible to install the unit while keeping its beautiful appearance and architectural design.

• Installation image



Maximum external static pressure of 60 Pa (for VLRMM models)

An additional external static pressure capacity provides flexibility for duct extension, branching, and air outlet configuration.

Electronic dry function dehumidify refreshingly

Rooms are kept optimally dehumidified according to the indoor temperature to prevent over-cooling.

Floor standing type

Concealed type PFFY-P VLRM-E

			PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-E
Power source			1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating	kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating	A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)			Galvanized steel plate					
Dimension H x W x D		mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
		in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.)	22 (49)		24 (53)	25 (56)	29 (64)	30 (67)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate *2 (Lo-Hi)	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108		117-150	150-183	200-233	200-258
		cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure	Pa	0					
Motor	Type		1-phase induction motor					
	Output	kW	0.015		0.018	0.030	0.035	0.050
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi) *2 *3 *4		dB<A>	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 Air flow rate/Sound pressure level are in (Low-High)

*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB<A> lower at AC230V/50Hz
· 2dB<A> lower at AC220V/50Hz
· 3dB<A> lower at 1.5m x 1.5m point

*4 It is measured in anechoic room.

Floor standing type

Concealed type PFFY-P VLRMM-E

			PFFY-P20VLRMM-E	PFFY-P25VLRMM-E	PFFY-P32VLRMM-E	PFFY-P40VLRMM-E	PFFY-P50VLRMM-E	PFFY-P63VLRMM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz					
Cooling capacity	*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling	kW	0.04		0.04	0.05	0.05	0.07
	Heating	kW	0.04		0.04	0.05	0.05	0.07
Current	Cooling	A	0.34		0.38	0.43	0.48	0.59
	Heating	A	0.34		0.38	0.43	0.48	0.59
External finish(Munsell No.)			Galvanized steel plate					
Dimension H x W x D		mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
		in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.)	21 (47)		24 (53)	25 (56)	29 (64)	29 (64)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Mid-Hi)	m^3/min	4.5-5.5-6.5		6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
		L/s	75-92-108		108-125-150	133-158-183	167-200-233	183-217-258
		cfm	159-194-230		230-265-318	282-335-388	353-424-494	388-459-547
	External static pressure *2	Pa	20/40/60					
Motor	Type		DC motor					
	Output	kW	0.096					
Air filter			PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas	mm(in.)	ø12.7 (ø1/2) Brazed					ø15.88 (ø5/8) Brazed
	Liquid	mm(in.)	ø6.35 (ø1/4) Brazed					ø9.52 (ø3/8) Brazed
Field drain pipe diameter		mm(in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Mid-Hi) *3	20Pa	dB<A>	31-36-40		27-32-37	30-36-40	32-37-41	35-40-44
	40Pa	dB<A>	34-39-42		30-35-41	32-38-42	35-40-44	36-42-47
	60Pa	dB<A>	35-40-43		32-37-42	35-39-44	36-41-45	38-43-48

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)
*2 The external static pressure is set to 20Pa at factory shipment.
*3 The sound pressure level in operation is measured at 1m apart from the front side and the bottom side of the unit in anechoic room.
(Noise meter A-scale value) Connect the duct of 1m in length to the air outlet.

Inverter-driven compressor technology

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series


Compressor

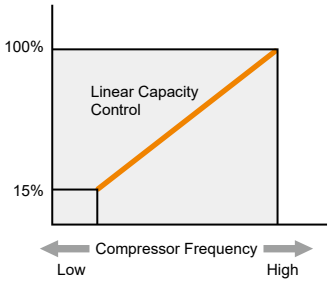
All CITY MULTI compressors are inverter-driven to precisely match the cooling and heating demands of each building.

The compressor varies its speed to match the indoor cooling or heating demand and therefore consumes only the energy that is required.

When an inverter-driven system operates at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non-inverter system.
The fixed speed system can only operate at 100%, but partial load conditions prevail for the majority of the time. Therefore, it cannot match the annual efficiency of an inverter-driven system.

With its proven single inverter-driven compressor technology, the CITY MULTI series is favored by the industry for its low starting currents (a mere 8 amps for a 20HP outdoor unit) and smooth transition across the range of compressor frequencies.

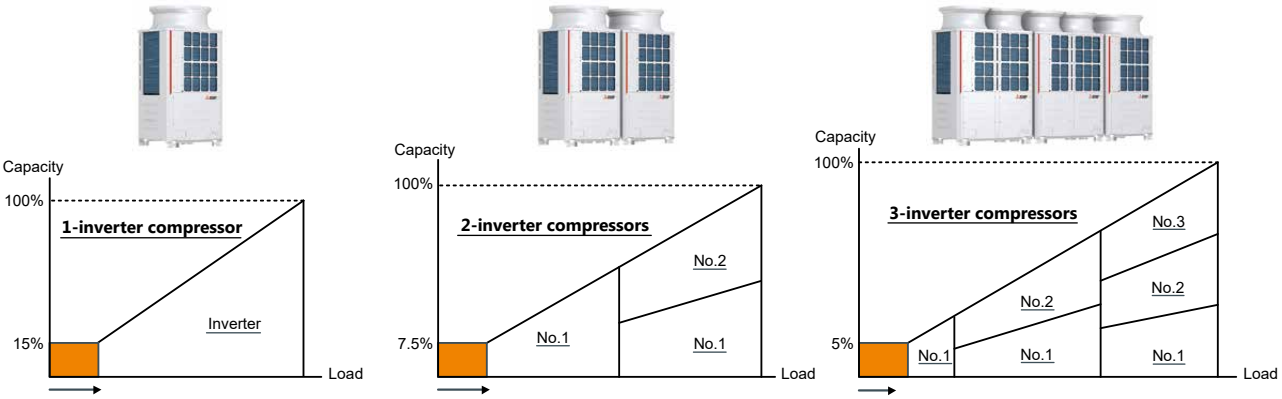
• Heating/Cooling Capacity



* Image

*Values vary depending on actual conditions, such as ambient temperature.

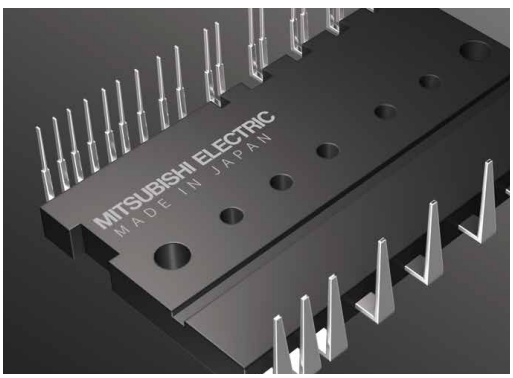
• Stable and Smooth Operation



Intelligent Power Module (IPM) manufactured by Mitsubishi Electric

Y-Series EP *1 | R2-Series EP *2 | WY-Series *3
Y-Series P *1 | R2-Series P *2 | WR2-Series *3

Power modules manufactured by Mitsubishi Electric are installed in the compressor, which is the core component, as well as in the inverter circuit board that drives the fan. SiC (silicon carbide) is used in the power module that is equipped with a voltage-boosting circuit to raise the output voltage of the inverter and expand the operating range. This greatly reduces the power loss of the voltage boosting circuit and helps improve the energy efficiency of the unit (EER and SEER improvement).



* The 20 horsepower YNW is equipped with a voltage boosting circuit that uses SiC.

*1. IPM (compressor) is installed in the 14HP to 20HP (P350 to P500) single modules and the 26HP to 54HP (P650 to P1350) combination modules. SiC elements are used in the 20HP (P500) single module IPM.

*2. IPM (compressor) is installed in the 14HP to 22HP (P350 to P550) single modules and the 26HP to 44HP (P650 to P1100) combination modules. SiC elements are used in the 20HP and 22HP (P500 and P550) single module IPM.

*3. IPM (compressor) is installed in the 14HP to 36HP (P350 to P900) modules (excluding the 16HP to 20HP (P400 to P500) combination models).

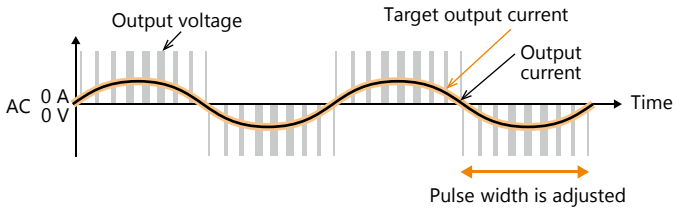
PWM control

Y-Series EP R2-Series EP WY-Series
Y-Series P R2-Series P WR2-Series

PWM control is used to control the number of motor revolutions according to operational load. It varies the inverter pulse width (electric signal wave occurring over a short period) to control the output.
Optimal control of electrical current is required according to operation.

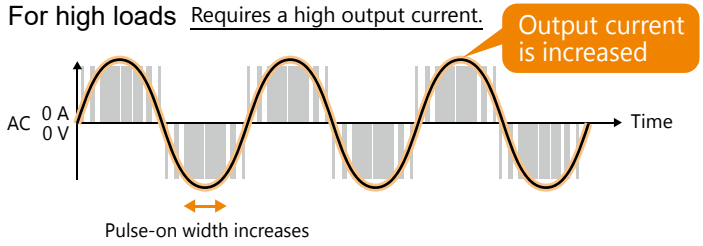
*Hybrid Integrated Circuit

• For low loads Does not require a high target output current.



To achieve the target output current, the intervals at which the "pulse" signal is turned on are controlled to adjust the output current.
At low load time, the pulse-on width is minimized to save energy.

• For high loads Requires a high output current.



The increased pulse-on width increases both the duration that the voltage is applied and the amount of electrical current compared to the low load time, and accelerates the rotation speed of the compressor from 60 rps to 140 rps.*

*The number of compressor rotations differs depending on the usage condition.

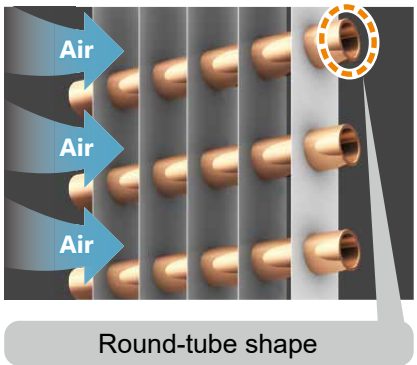
The ability to adjust the pulse range and output current to suit a given load increases the operating range of the unit.

Flat-tube heat exchanger

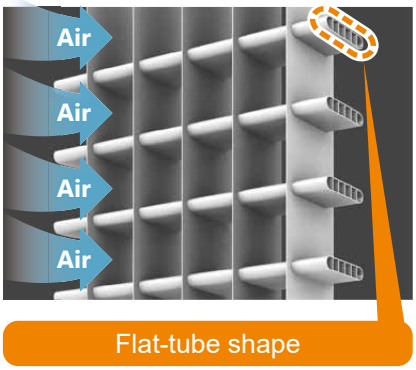
Y-Series EP R2-Series EP

The flat-tube heat exchanger delivers high heat exchange efficiency. The use of flat tubes increases the number of piping stages while maintaining the same size of heat exchanger. The inside of the tube is divided into thin compartments to increase the area of contact between the refrigerant and air, and thereby increase heat exchange effectiveness and significantly improve energy-saving performance. The flat-tube heat exchanger improves heat exchange effectiveness by approximately 30% compared to round-tube heat exchangers.

• Round-tube heat exchanger



• Flat-tube heat exchanger



(Illustration)

Approximately 30% increase in heat-exchange efficiency (compared to the round-tube)

220% increase in surface area (compared to the round-tube)

Heat Inter-Changer (HIC) circuit

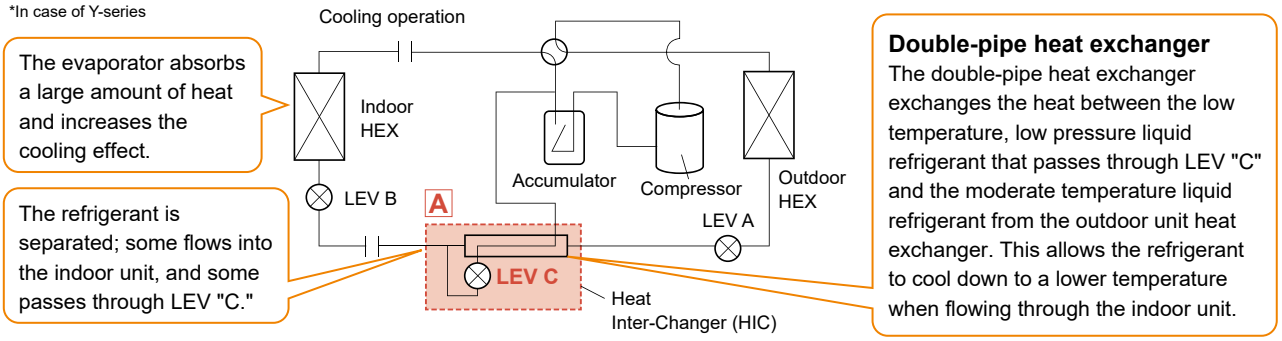
Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

The HIC circuit increases cooling efficiency. This technology raises the degree of supercooling, increasing both cooling capacity and cooling efficiency.
The HIC circuit is installed before the point at which the high pressure liquid refrigerant, which passes through the heat exchanger of the outdoor/heat source unit, flows into the indoor unit. The temperature of the liquid refrigerant, to which heat is discharged from the outdoor/heat source unit heat exchanger, is further lowered before the refrigerant enters the expansion valve, to allow the evaporator to absorb a large amount of heat and increase cooling efficiency.

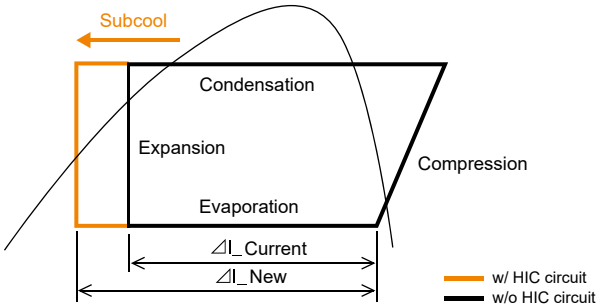
HIC mechanism

Some of the high pressure liquid refrigerant that passes through the outdoor/heat source unit heat exchanger flows directly into the indoor unit, and the rest passes through linear expansion valve (LEV) "C" to lower both the temperature and pressure. The heat is exchanged between the low temperature, low pressure liquid refrigerant that passes through LEV "C" and the moderate temperature liquid refrigerant from the outdoor/heat source unit heat exchanger. This further lowers the temperature of the liquid refrigerant before it enters LEV "B." This heat exchange system uses a "double-pipe" heat exchanger.

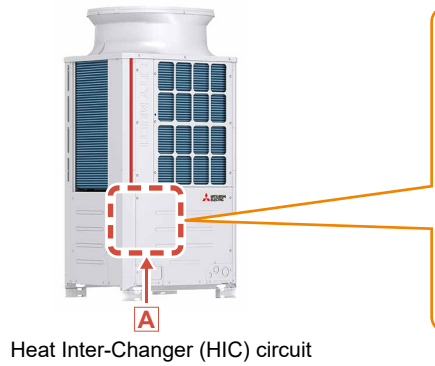
• HIC circuit diagram
*In case of Y-series



• HIC circuit effect: (Image using a Mollier diagram)

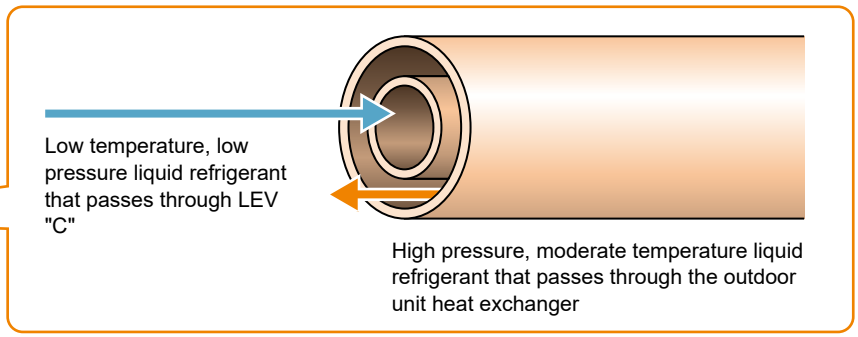


• HIC circuit
(Double-pipe heat exchanger)



Heat Inter-Changer (HIC) circuit
*In case of Y-series

• Double-pipe heat exchanger cross section
(High-performance grooved pipe)



IH warmer

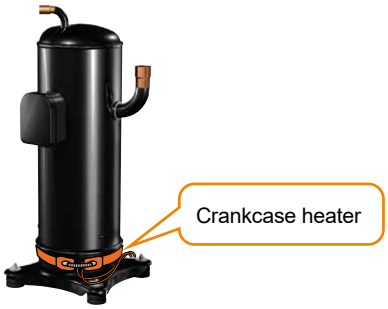
Y-Series EP | R2-Series EP | WY-Series *1
Y-Series P | R2-Series P | WR2-Series *1

Induction heating (IH) is used to heat the refrigerant that flows back into the compressor*. This method differs from the conventional crankcase heater method (in which a belt heater is wrapped around the outside of the compressor) in that heat is not applied from the outside; the refrigerant is heated from the inside, thus eliminating wasted heat.

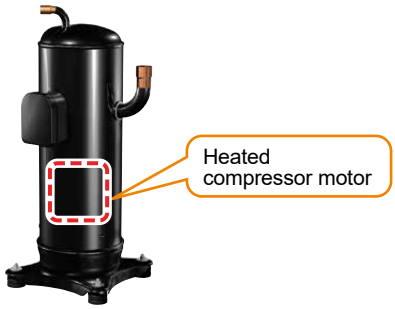
* Normally, the compressor is heated while the outdoor unit is stopped to prevent liquid refrigerant from remaining in the compressor and to evaporate the liquid refrigerant in the compressor.

*1. Power is supplied to the heater only with the 22HP and 24HP (P550 and P600) single modules

• Crankcase heater power supply method



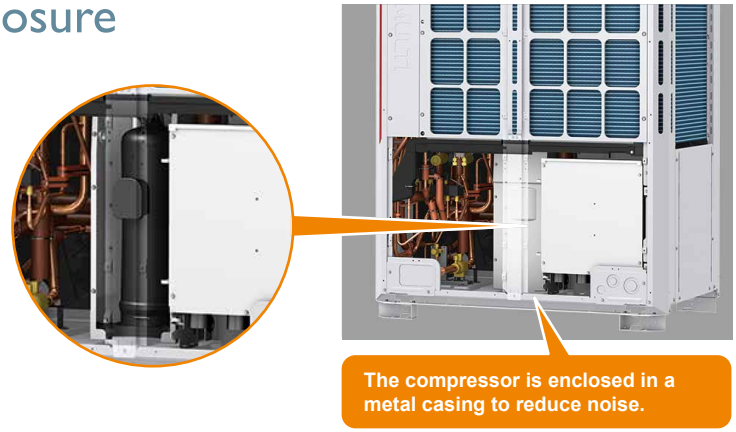
• IH power supply method (without crankcase heater)



Metal compressor enclosure

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

The compressor is enclosed in a metal casing to reduce noise.
In some models, a sound absorbing material is applied to the metal casing to further reduce noise.

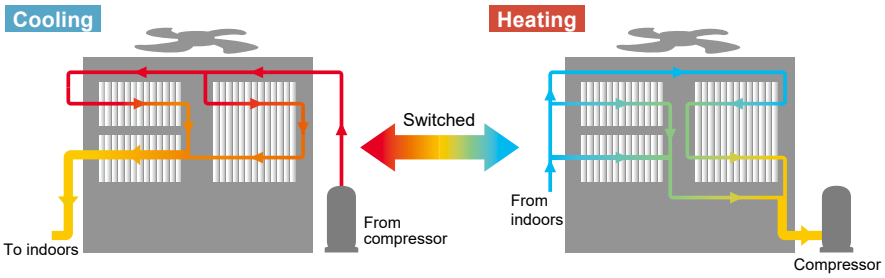


Adaptive flow control

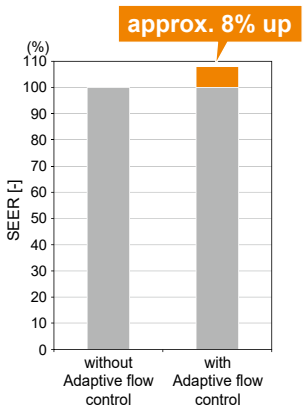
Y-Series EP (–18HP)

The refrigerant circuit flow adapts for both heating and cooling.

Adaptive flow control



Comparison of EP300 (Y-Series) SEER (cooling) with and without variable path



- During cooling, a serial flow path (flow through two of the heat exchangers split into three, and then through the last heat exchanger) is used. With fewer paths, the refrigerant flow rate is increased and the heat conductivity performance is improved. In addition, the drop in heat exchanger capacity for per path prevents the refrigerant stagnation and improves the condensing performance of the heat exchanger during cooling.
- During heating, a parallel flow path (flow refrigerant simultaneously through all heat exchangers split into three) is used. By flowing the refrigerant to all paths at the heat exchanger inlets (by increasing the number of paths compared to cooling), pressure loss in the heat exchanger is reduced, and the evaporator performance is improved.

* Increase in evaporator performance is compared to using the original number of cooling paths.

Mitsubishi Electric's outdoor units and heat source units utilize the latest technology and offer a wide variety of functions. See the preceding pages for details of each technology and function.

●: Available −: Not available

System	Air cooled				Water cooled	
Type	Heat pump		Heat recovery		Heat pump	Heat recovery
Series	Y-Series		R2-Series		WY-Series	WR2-Series
	Standard (Y-Series P)	High efficiency (Y-Series EP)	Standard (R2-Series P)	High efficiency (R2-Series EP)	WY-Series	WR2-Series
Model	PUHY-P Y(S)NW-A1	PUHY-EP Y(S)NW-A1	PURY-P Y(S)NW-A1	PURY-EP Y(S)NW-A1	PQHY-P Y(S)LM-A1	PQRY-P Y(S)LM-A1
						

► Operation mode

COP priority mode	●	●	●	●	−	−
Low noise mode	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 100%	50, 100%
System changeover (for heat pump)	●	●	−	−	●	−
Auto mode	−	−	●	●	−	●
Dual set point*1	●	●	●	●	●	●

► Energy efficiency control

Evaporating temperature control (Fixed temperature control)	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C	+6°C, +9°C, +14°C	+4°C, +9°C, +14°C	+6°C, +9°C, +14°C
Evaporating temperature control (Automatic control shifting)	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns
High sensible heat operation (during cooling)	●	●	●	●	●	●
Demand control*2	12 steps	12 steps	8 steps	8 steps	8 steps	8 steps
Continuous heating operation during defrost	●	●	●	●	−	−
Selectable external static pressure of outdoor unit	0,30,60,80 Pa	0,30,60,80 Pa	0,30,60,80 Pa	0,30,60,80 Pa	−	−
Operation at high outside temperatures	52°C	52°C	52°C	52°C	−	−

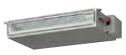
► Maintenance functions

Rotation control	●	●	●	●	●	●
Emergency operation mode	●	●	●	●	●	●
Pump down function	●	●	●	●	●	●
Individual LEV control	●	●	●	●	●	●
Snow sensor setting	●	●	●	●	−	−

*1 Should be supported by indoor unit and remote controller.
*2 Maximum number of steps. Available steps depends on the outdoor unit combination.

VRF INDOOR UNIT FUNCTION TABLE

●: Standard ▲: Optional –: Not available

Type	Ceiling cassette type				Ceiling concealed type			
	4-way airflow type		2-way airflow type	1-way airflow type	Low noise type	Compact depth type	Low static pressure type	Medium static pressure type
Model	PLFY-P VEM-E/A (PLFY EM)	PLFY-P VFM-E1 (PLFY FM)	PLFY-P VLMD-E (PLFY LMD)	PMFY-P VBM-E (PMFY BM)	PEFY-P VMR-E-L/R (PEFY MR)	PEFY-P VMX(L)-E(1) (PEFY MX)	PEFY-P VMS1(L)-E (PEFY MS)	PEFY-P VMA(L) (PEFY MA)
								

▶ i-see Sensor

3D i-see Sensor	▲*1	▲*1	–	–	–	–	–	–

▶ Air distribution

Automatic air-speed adjustment *2	●	●	–	–	–	●	●	●
Fan speed setting	4 levels	3 levels	P20–P100: 3 levels P125: 4 levels	4 levels	3 levels	3 levels	3 levels	3 levels
Vane setting *4	5 levels +Auto	5 levels +Auto	4 levels (Auto: N/A)	4 levels +Auto	–	–	–	–
Swing	●	●	●	●	–	–	–	–

▶ Convenience

Dry operation	●	●	●	●	●	●	●	●
Dual set point *5	●	●	●	●	●	●	●	●
External static pressure setting	–	–	–	–	1 level	P15–P40: 3 levels P50, P63: 4 levels	4 levels	5 levels
Automatic restoration after power failure	●	●	●	●	●	●	●	●
High efficiency filter	▲	–	–	–	–	–	–	–

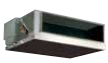
▶ Installability and serviceability

Drain pump	●	●	●	●	–	VMX: ● VMXL: –	VMS1: ● VMS1L: ▲	VMA: ● VMAL: –
Pump head (mm) *6	850	850	P20–P100: 583 P125: 600	600	–	350	550	700
Filter cleaning sign *8	●	●	●	●	●	●	●	●

*1 Requires a panel with the 3D i-see Sensor (sold separately). An MA remote controller (PAR-40MAA) is required to set the 3D i-see Sensor. Some settings can be made using the PAR-SL100A-E.
*2 To set the fan speed to Auto using the wireless remote controller, certain controller settings need to be made beforehand. Refer to the installation manual of the wireless remote controller for details on how to make the settings.
*3 The airflow rate mode can be set to either Normal or High. Three fan speeds are available in each mode. Select the mode with the DipSW on the indoor unit. Contact your local distributor for details.
*4 The available vane angle positions will depend on the remote controller to be used. Refer to the instruction manual of the relevant remote controller for details.
*5 Should be supported by indoor unit and remote controller.
*6 Pump head from the bottom of the unit
*7 Pump head from the top of the unit
*8 Factory setting: OFF

VRF INDOOR UNIT FUNCTION TABLE

●: Standard ▲: Optional –: Not available

	Ceiling concealed type			Ceiling suspended type	Wall mounted type		Floor standing type		
	High static pressure type	Fresh air intake type					Exposed type		Concealed type
	PEFY-P VMHS-E PEFY MHS	PEFY-P VMHS-E-F PEFY MHS-F	PEFY-P VMH-E-F PEFY MH-F	PCFY-P VKM-E PCFY KM	PKFY-P VLM-E PKFY LM	PKFY-P VKM-E PKFY KM	PFFY-P VKM-E2 PFFY KM	PFFY-P VLEM-E PFFY LEM	PFFY-P VLRM(M)-E PFFY LRM
									
i-see Sensor	–	–	–	–	–	–	–	–	–
Auto	●	–	–	●	●	–	–	–	VLRM: – VLRMM: ●
Fan speed	3 levels	3 levels *3	1 level	4 levels	4 levels	2 levels	4 levels	2 levels	VLRM: 2 levels VLRMM: 3 levels
Vane	–	–	–	5 levels +Auto	5 levels +Auto	4 levels +Auto	4 levels +Auto	–	–
Swing	–	–	–	●	●	●	●	–	–
Dry	●	–	–	●	●	●	●	●	●
Dual	●	–	–	●	●	●	●	●	●
ESP	P20–P140: 4 levels P200, P250: 5 levels	4 levels	P80, P140: 3 levels P200, P250: 2 levels	–	–	–	–	–	VLRM: – VLRMM: 3 levels
Auto restoration	●	●	●	●	●	●	●	●	●
High efficiency	–	–	–	▲	–	–	–	–	–
Drain Lift Up	▲	▲	▲	▲	▲	▲	–	–	–
	P40–P140: 550 P200, P250: 700	P125: 550 P200, P250: 700	550	600 *7	850	800	–	–	–
Filter sign	●	●	●	●	●	●	●	●	●

Operation mode

COP priority mode

Y-Series EP | R2-Series EP
Y-Series P | R2-Series P

The operation pattern under low ambient temperature conditions can be selected and the priority mode setting ("Capacity priority mode" and "COP priority mode") can be switched with the function settings.
Each mode is activated when the ambient temperature is below the specified temperature. For factory settings, refer to the Data Book.

Low noise mode

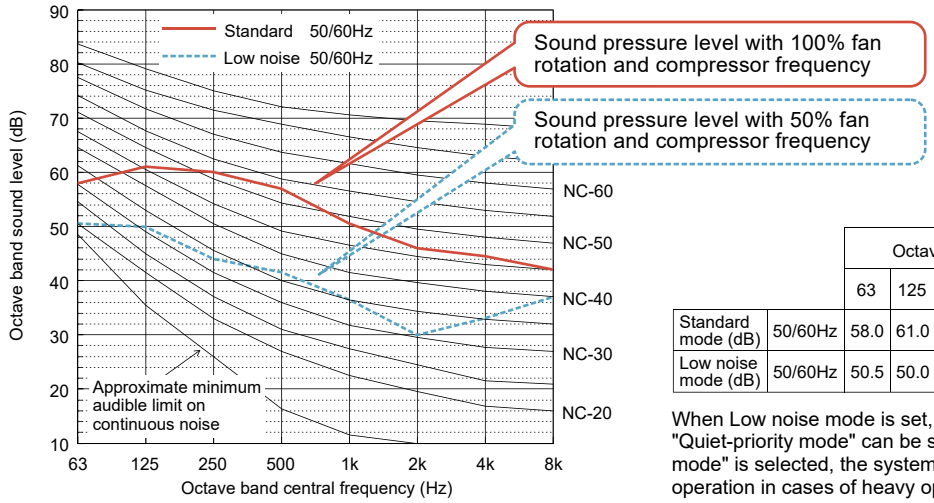
Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

This mode reduces noise by limiting the compressor frequency and the number of rotations of the outdoor fan (for the air-cooled outdoor unit).
The user can select a preferred level.

*Cooling/heating capacity drops during low-noise mode operation.

• Examples of sound pressure level in low noise mode (PUHY-P200YNW-A1 <cooling>)

Sound level of PUHY-P200YNW-A1(-BS)



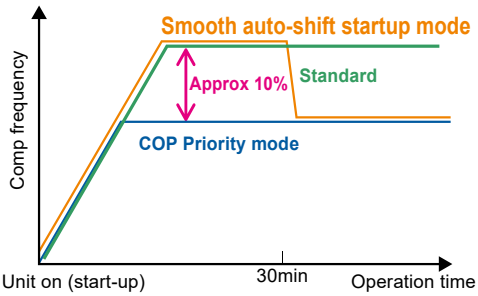
		Octave band central frequency (Hz)								dB(A)
		63	125	250	500	1k	2k	4k	8k	
Standard mode (dB)	50/60Hz	58.0	61.0	60.0	57.0	50.5	46.0	44.5	42.0	58.0
Low noise mode (dB)	50/60Hz	50.5	50.0	44.0	41.5	36.5	30.0	33.0	37.0	44.0

When Low noise mode is set, "Performance-priority mode" and "Quiet-priority mode" can be selected. When "Performance-priority mode" is selected, the system automatically returns to normal operation in cases of heavy operating conditions.

Smooth auto-shift startup mode

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

Smooth auto-shift startup mode, an operation mode on the outdoor unit, can now be selected in addition to the conventional COP Priority and Capacity Priority modes. In order to heat the room faster, Capacity Priority mode runs for 30 minutes when heating operation starts. The unit then switches to COP Priority mode to increase energy-saving efficiency. This enables both improved comfort and energy savings.



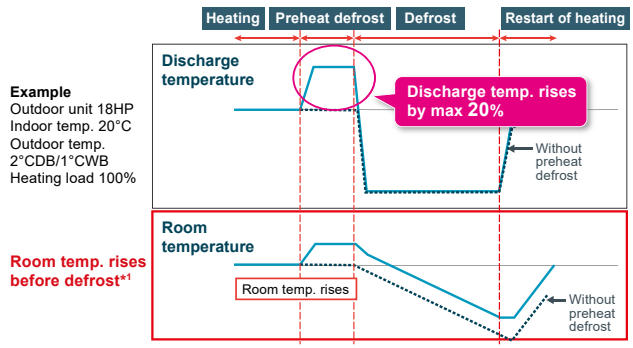
* Time for preparation for heating is required.
* Each mode is activated when the ambient temperature is below the specified temperature. For details on the settings, refer to the Data Book.

Preheat defrost operation

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

The outdoor unit is equipped with a preheat defrost operation that raises the discharge temperature of the air before beginning defrost operation. This contributes to raising the room temperature before the start of defrost operation and prevents room occupants experiencing a chilling sensation.

Preheat defrost ON/OFF



*1 depending on heating load

System changeover (for heat pumps)

Y-Series EP | Y-Series P | WY-Series

Normal switching between cooling and heating

With CITY MULTI's switchable cooling/heating models, in order to switch from cooling to heating, the operation mode of all indoor units performing cooling operation needs to be switched manually.

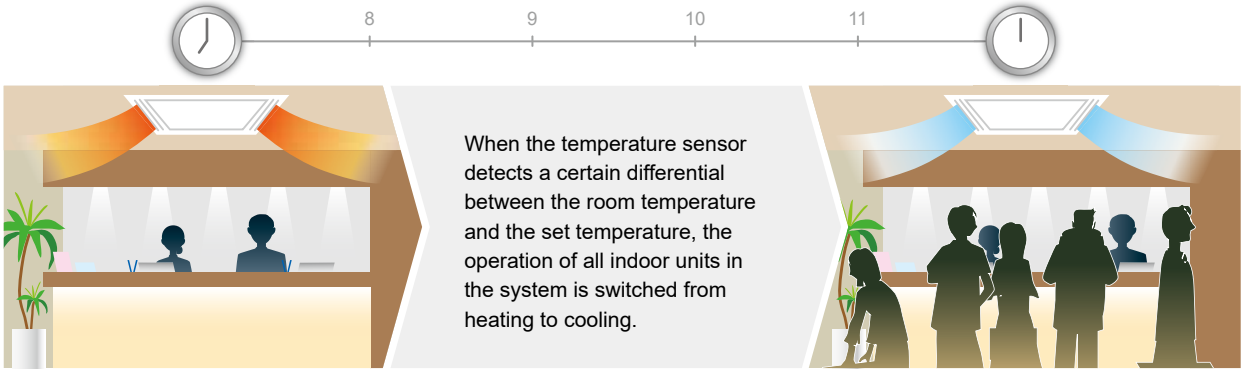
Using system changeover to switch between cooling and heating

Depending on the dip switch settings, the operation mode of all indoor units can be automatically switched according to the operation mode of a specific indoor unit (the unit with the smallest M-NET address). Operation can be automatically switched between cooling and heating according to the temperature difference between the preset temperature on the specific indoor unit and the room temperature.

*Please avoid grouping the indoor unit with the smallest number address with other indoor units.

• Suitable situations

When both cooling and heating operations are required in a single day due to a large difference between the hottest and coldest times of the day.



When using the AE-200E/AE-50E

It is possible to automatically switch between cooling and heating without setting the dip switches on outdoor units. Users can select from the two types of switching patterns shown below.

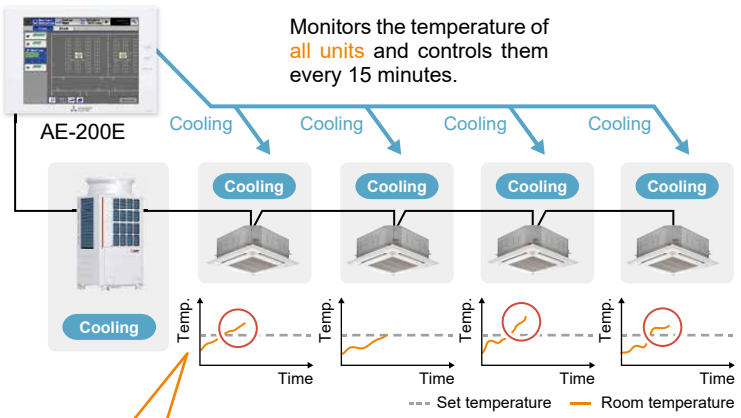
(1) Averaging

Operation mode (cooling or heating) is determined and switched every 15 minutes based on the demands of the majority of all groups connected to the outdoor unit, taking into consideration the capacity of each indoor unit and the temperature differences between the set temperatures and room temperatures.

(2) Representative Group

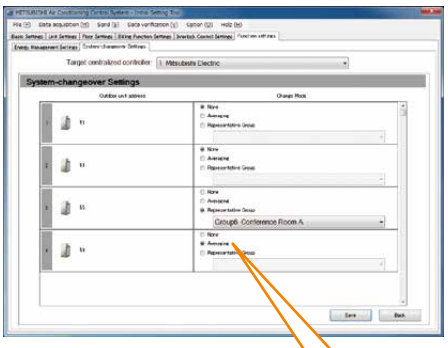
Operation mode (cooling or heating) is switched based on the temperature difference between the set temperature and the room temperature of the representative group.

• Image of the averaging method



If the room temperature is higher on average than the set temperature, AE-200E changes the system mode to cooling.
Cooling mode or heating mode is decided by the average weighted return air temperature, the set temperature and capacity.

• Settings for the AE-200E



Select from "None," "Averaging," and "Representative Group."

*To use system changeover, the Web Browser for Initial Settings is required.

Dual set point

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

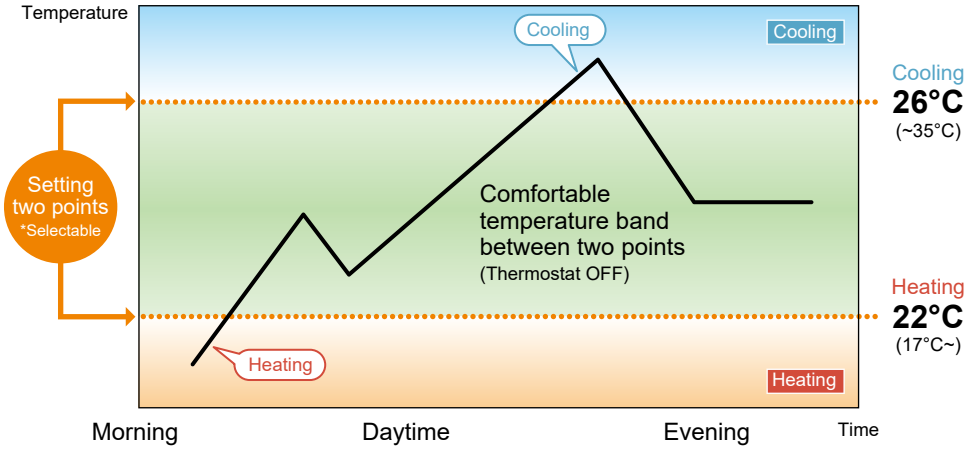
Normally, the desired room temperature is set to the same value for cooling and heating. However, the dual set point function allows different temperatures to be set for cooling and heating. When operation switches from cooling to heating or vice versa, the preset temperature changes accordingly.

Setting dual set points in Auto mode on R2 and WR2 models improves energy efficiency, compared to setting a single set point.

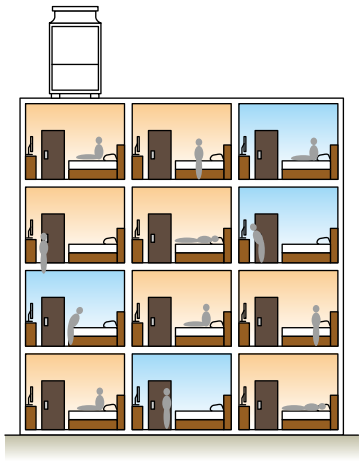
When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the cooling or heating mode and keep the room temperature within the preset range.
The outdoor unit does not operate in the comfortable temperature band defined by two temperature points where the thermostat is off. This cuts down on unnecessary operation of the air conditioning system.

*This function is supported only when all the indoor units, remote controllers, and system controllers that are connected to a given group are compatible with the function.

• Operation pattern in Auto (dual set point) mode

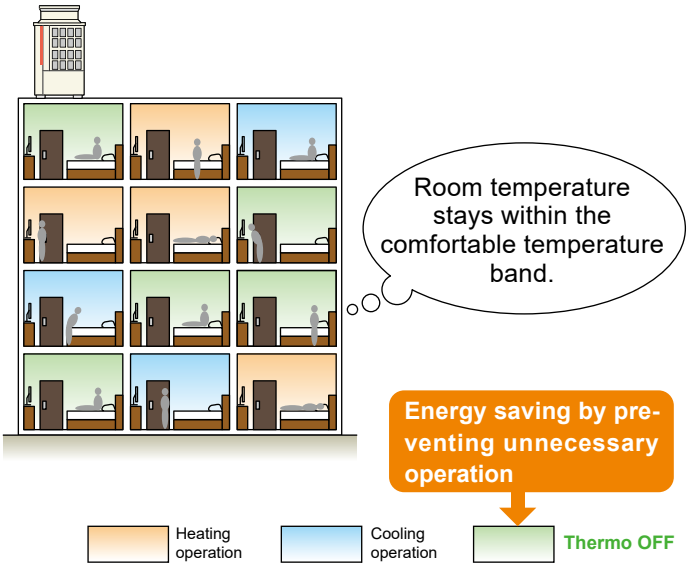


Auto mode with single set point



Auto mode with dual set point

Thermo OFF status is energy saving as the refrigerant stops circulating.



*For details of the installation restrictions, refer to the DATABOOK.

Energy efficiency control

ET control Evaporating temperature control (during cooling)

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

During cooling, the temperature of the refrigerant is controlled according to the air conditioning load. This helps to ensure energy-efficient operation.

Normal mode

The evaporating temperature is kept constant regardless of the load. Even at low loads, the normal evaporating temperature does not change, and energy loss is generated during partial load operation.

Smart evaporating temperature control mode

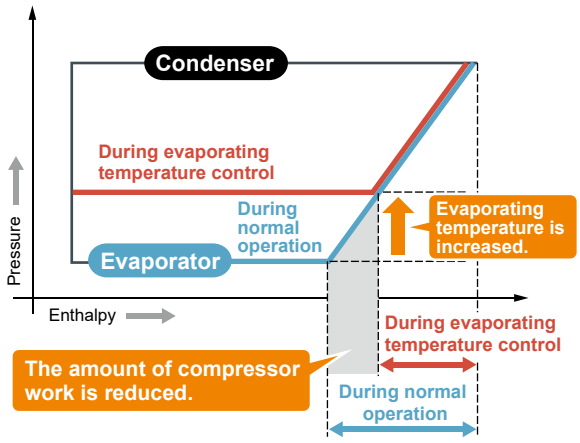
The evaporating temperature is increased and the compressor input is decreased according to the load, resulting in increased operating efficiency.
There are two patterns for controlling the evaporating temperature, as follows.

1 The evaporating temperature is controlled to be constant regardless of the ΔT. It is set to a value that is higher than the normal evaporating temperature.

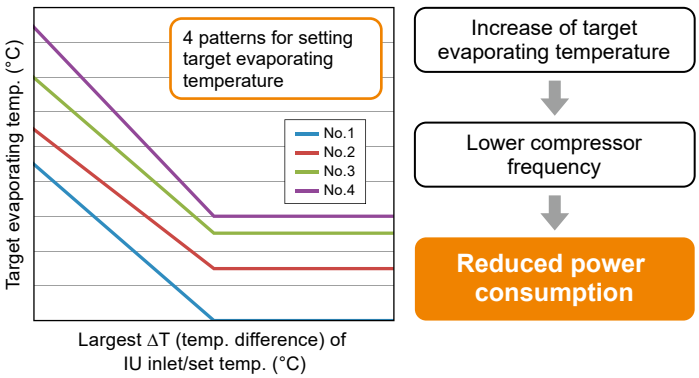
2 The evaporating temperature is controlled in accordance with the ΔT. It can be selected from 4 control patterns.

* The availability of 1 and 2 varies depending on the model. Refer to the function table.
* Changing the evaporating temperature reduces latent heat capacity. Select an appropriate pattern according to the installation conditions.
* The fixed temperature control function and the automatic control shifting function cannot be used simultaneously.

1 Image of evaporating temperature control (Fixed temperature control)



2 Image of evaporating temperature control (Automatic control in 4 patterns)



*1 To change the evaporating temperature setting, the setting of the dip switch on the outdoor/heat source unit needs to be changed.

*2 When the difference between the indoor unit air-intake temperature and the actual temperature exceeds 1°C, the evaporating temperature based on this difference is constant.

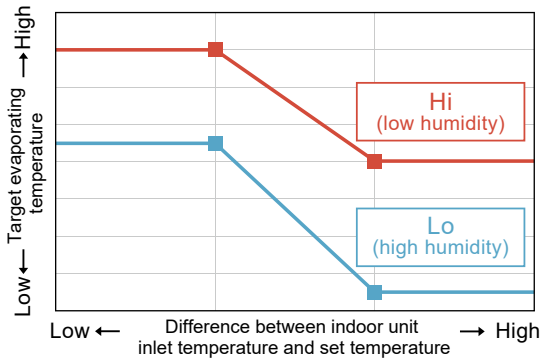
• Suitable situations
- Spaces with constant high temperatures from heat sources such as OA equipment
- During low load times when air conditioners are used for cooling (such as during the morning)

High sensible heat operation (during cooling)

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

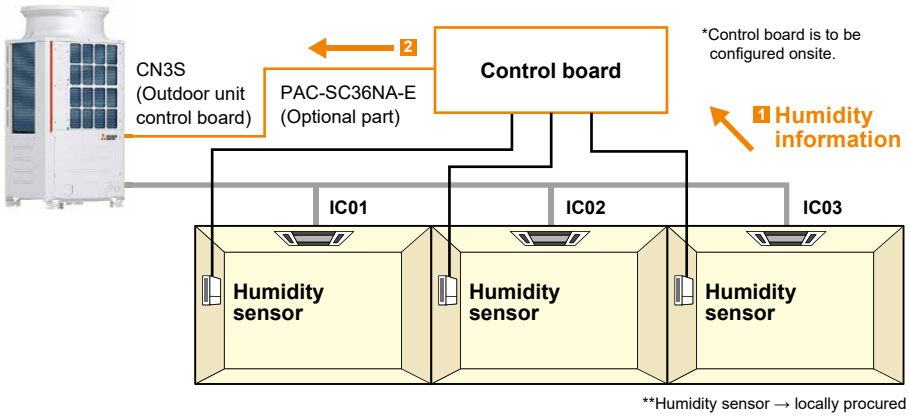
Evaporating temperature is controlled according to room temperature and humidity.

• Image of evaporating temperature control during high sensible heat operation in full cooling mode



In high sensible heat operation mode, air conditioners consume less energy, thereby realizing cost savings.
With the installation of a locally-procured humidity sensor, the evaporating temperature of the outdoor/heat source unit can be controlled optimally as shown below according to the difference between the indoor unit inlet temperature and set temperature.
A wide range of temperature settings is available, from a low evaporating temperature close to normal operation temperature to a high evaporating temperature to realize energy savings.

• Image of installation of locally-procured humidity sensors



1 Humidity information is sent to the control board.

2 The control board judges the humidity information and sends a HIGH/LOW signal to the outdoor unit through CN3S. The outdoor unit shifts the evaporating temperature depending on the information from the control board.

• Temperature and humidity conditions

	Comfort level in room	Zone	Status of outdoor unit	Evaporating temperature control
Comfortable temperature and humidity High sensible heat operation	Comfortable	Humidity / Comfortable zone / Temperature	Comfortable and energy-saving operation even at low compressor rotating speed	Temperature of indoor unit refrigerant is kept high Hi Lo Low ← Target evaporating temperature → High Low ← Difference between indoor unit inlet temperature and set temperature → High
High humidity	A little humid	Humidity / Comfortable zone / Temperature	Compressor rotates at medium speed to reduce humidity	Temperature of indoor unit refrigerant is slightly reduced. Hi Lo Low ← Target evaporating temperature → High Low ← Difference between indoor unit inlet temperature and set temperature → High
High temperature and humidity	Uncomfortable	Humidity / Comfortable zone / Temperature	Compressor rotates at high speed to reduce temperature and humidity	Temperature of indoor unit refrigerant is greatly reduced. Hi Lo Low ← Target evaporating temperature → High Low ← Difference between indoor unit inlet temperature and set temperature → High

Demand control

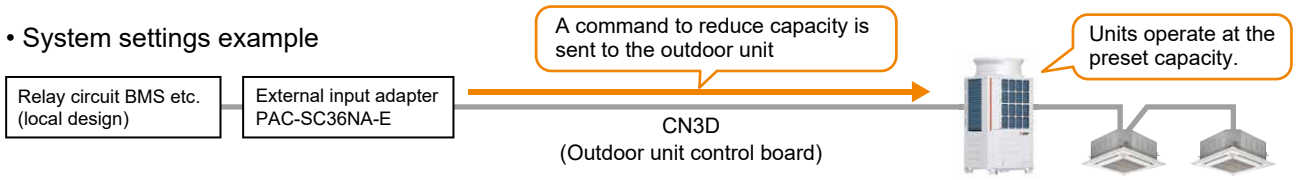
Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

This function reduces the capacity of the outdoor/heat source unit by way of the external input to the outdoor unit.
The capacity of the outdoor unit can be reduced in steps, with patterns ranging from 2 to 12 control steps depending on the system. The number of steps that can be set and the corresponding capacity are shown below.
• 2 steps (0-100%) • 4 steps (0-50-75-100%) • 8 steps (0-25-38-50-63-75-88-100%)
• 12 steps (0-17-25-34-42-50-59-67-75-84-92-100%)

Possible usage

When power consumption is centrally-controlled within a building, the system can be forced to operate in the capacity-save mode by receiving external signals.

• System settings example



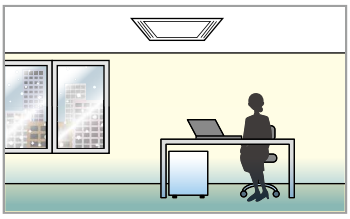
Continuous heating operation

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting without stopping the heating operation.
Reducing the stoppage time of the heating operation suppresses any drop in room temperature.
Use the dip switch on the outdoor unit to switch between the continuous heating operation method and conventional defrosting method.

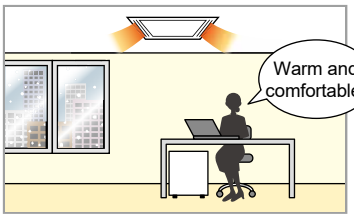
* Heating capacity drops during continuous heating operation.

Conventional defrosting operation



Heating is stopped during the defrosting operation, so room temperature drops.

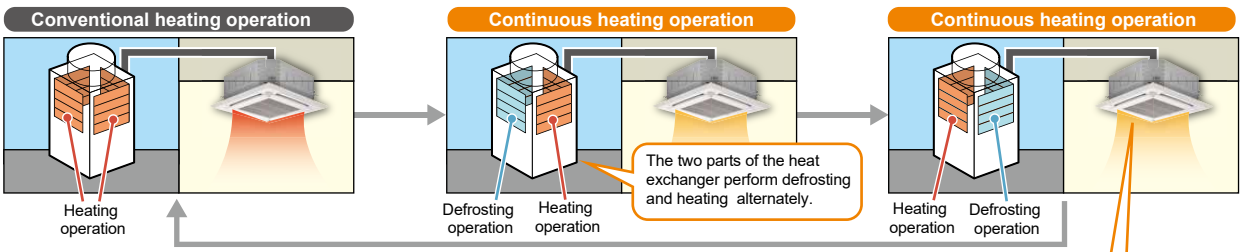
Continuous heating operation



You can enjoy a comfortable environment that is continuously heated.

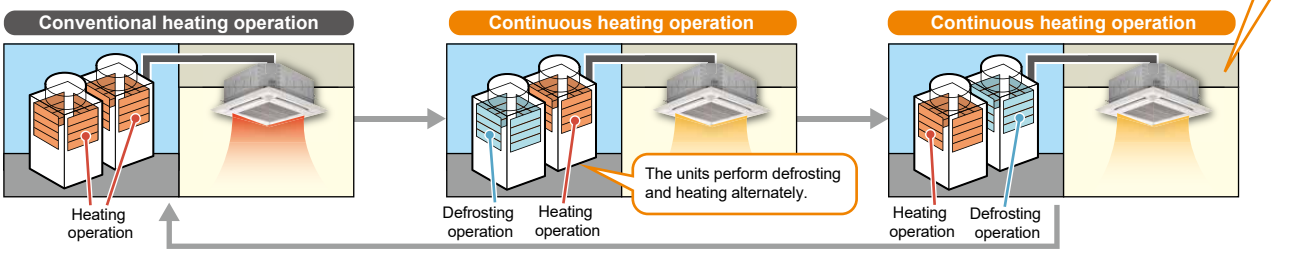
• Image of continuous heating operation (single unit)

The heat exchanger of the outdoor unit is divided into two parts. Even when defrosting is necessary, one part of the heat exchanger continues the heating operation.



• Image of continuous heating operation (combination)

With the combination model, units perform defrosting and heating alternately. While one unit is performing defrosting, the other continues heating.

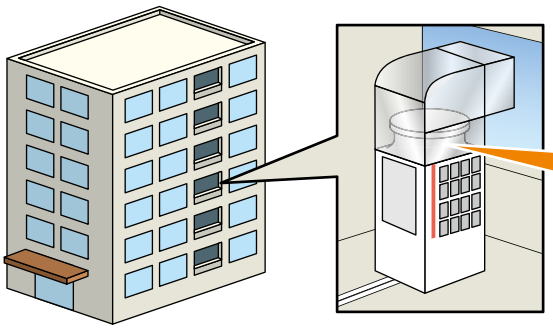


Selectable external static pressure of the outdoor unit

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

The static pressure specification for the outdoor unit can be selected (0, 30, 60, or 80 Pa).
This facilitates installation of the unit on each floor of a high-rise building or on balconies.

* The static pressure that can be set varies depending on the model.
* Noise level and power consumption vary depending on the static pressure setting.
* For details of the installation restrictions, refer to the DATABOOK.



Long exhaust hoods can be connected.
This facilitates installation of the unit on each floor of a high-rise building or on balconies.

Maximum external static pressure 80 Pa (local setting)

* PUHY-(E)P-Y(S)NW-A, PURY-(E)P-Y(S)NW-A

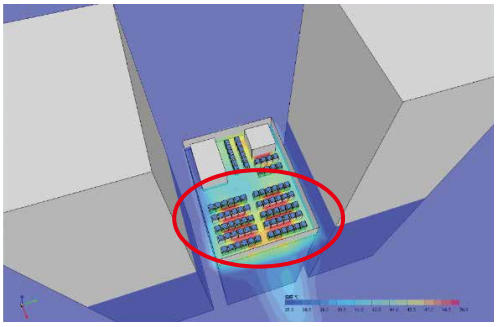
Operation at high outside temperatures

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

In built-up areas where the passage of air is blocked, the warm air that is discharged from the outdoor units may cause high temperatures around the units. YNW has an expanded guaranteed operation range of up to 52°C [125°F], so it can be used reliably even if the outdoor air temperature rises abnormally during the hot summer daytime.

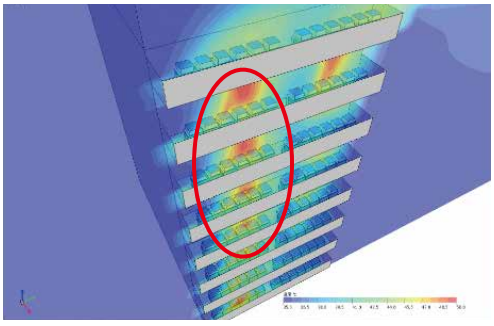
Example of flow analysis Conditions: Outdoor air temperature = 35°C (DB), Room temperature = 27°C (DB)

Built-up area with buildings and outdoor units



If the passage of air is blocked in a built-up area, the high temperature air discharged from the outdoor units may linger around the units.

Installation on each floor of a high-rise building



When the outdoor units are installed on the balconies, the high temperature air discharged from the units may be trapped in the balcony.

• Models for use in outside temperatures of up to 52°C

PUHY-(E)P-Y(S)NW-A1
PURY-(E)P-Y(S)NW-A1

* These images show the High efficiency R2 type.

Maintenance functions

Rotation control

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

With the combination model, the outdoor/heat source units operate alternately. This reduces operating load and leads to a longer service life.

Emergency operation mode

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

With combination model, if one outdoor/heat source unit is experiencing a problem, the other outdoor/heat source units temporary perform emergency operation. This mode can be easily set via remote controller.

Rest assured in case of unit failure

Emergency operation can be performed easily with a local remote controller.

Pump down function

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

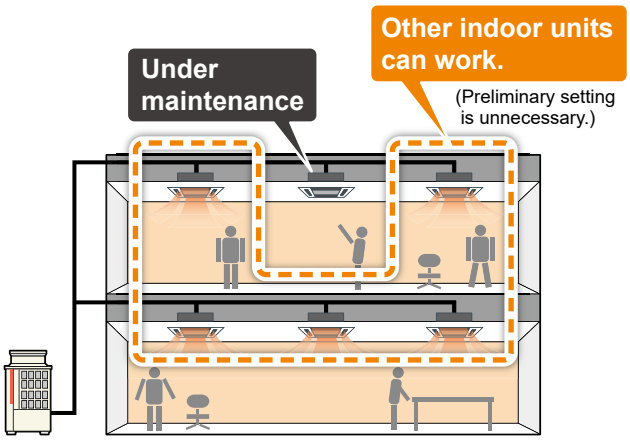
This function collects the refrigerant that remains in the indoor unit/BC controller (for VRF system), or the HBC controller (for HVRF system) and the outdoor/heat source unit piping when the refrigerant piping needs to be removed, such as when the air conditioner is relocated.
This function can also be used to stop the operation of the indoor unit and return the refrigerant to the outdoor/heat source unit in the event that a refrigerant leak is detected.

* To detect a refrigerant leak, a circuit that includes a refrigerant leak detection sensor must be designed and prepared on site.

Individual LEV control

Y-Series EP | R2-Series EP | WY-Series
Y-Series P | R2-Series P | WR2-Series

Even if one of the indoor units stops for repair, the LEV of the indoor unit can be closed so that the other indoor units can continue to operate. (No preliminary setting is necessary.)



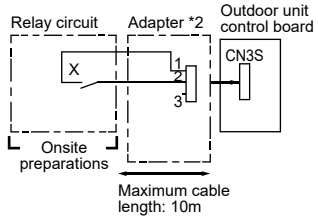
Snow sensor setting

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

When a snow buildup signal is received from the snow sensor (procured locally), or when ambient temperature drops below 5ºC (detected with TH7), the outdoor unit is automatically switched to ventilation operation. This activates the outdoor unit fan to prevent snow from building up on the unit.

• Snow sensor setting example

Snow sensor (CN3S)



X: Relay — Contact rating voltage >= 15VDC
Contact rating current >= 0.1A
Minimum applicable load =< 1mA at DC

*2. Optional part: PAC-SC36NA-E or locally procured product
Snow sensor: The outdoor fan runs when X is closed in stop mode.

Maintenance data retrieval via USB

Y-Series EP | Y-Series P | R2-Series EP | R2-Series P

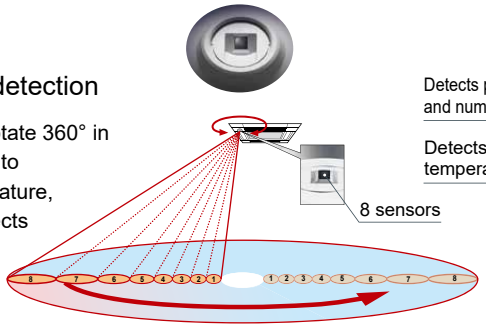
Operation data was retrieved from conventional models using the maintenance tool. On the latest model, the data can be retrieved quickly via USB*1. It is unnecessary to carry the personal computer in which the maintenance tool has been installed, reducing field operation time and improving convenience. Software can be rewritten via USB*2.

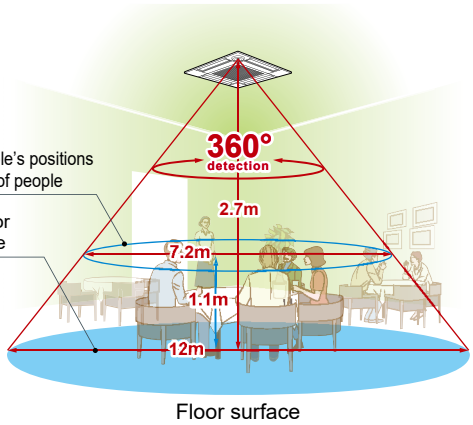
*1 In the case of OC-IC maximum configuration
*2 USB memory devices conforming to USB2.0 can be used.

i-see Sensor

3D i-see Sensor

PLFY EM Optional PLFY FM Optional





*In case of a 2.7m ceiling

• Highly accurate people detection

A total of eight sensors fully rotate 360° in 3-minute intervals. In addition to detecting human body temperature, an original algorithm also detects people's positions and the number of people.

• Detects number of people

Room occupancy energy saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time to save air-conditioning power. Air-conditioning power equivalent to 1°C is saved during both cooling and heating operations at an occupancy rate of approximately 30%. The temperature is controlled according to the number of people.

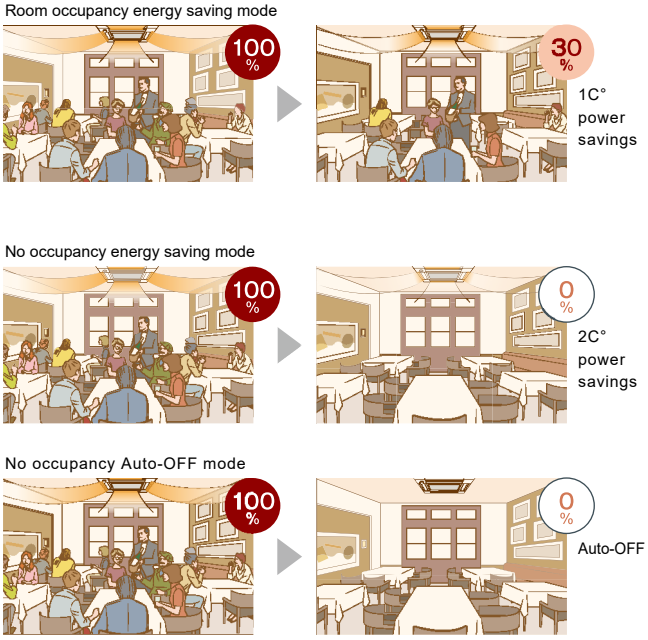
No occupancy energy saving mode

When 3D i-see Sensor detects no one in the room, the system is switched to a preset power-saving mode. If the room remains unoccupied for more than 60 minutes, air-conditioning power equivalent to 2°C is saved during both cooling and heating operations. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

When the room remains unoccupied for a preset length of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10 minutes, from 60 to 180 minutes.

*No occupancy Auto-OFF mode is not available when multiple indoor units are operated by a single MA remote controller.

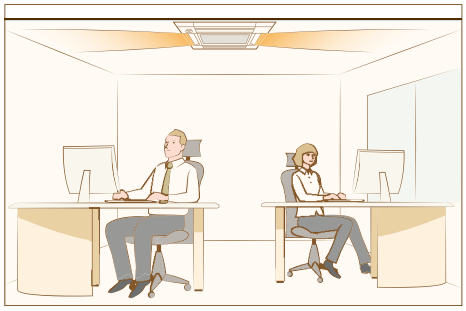


*PAR-40MAA is required for each setting.

• Detects people's positions

Direct/indirect settings*

Some people do not like the feeling of wind, while others want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, each vane can be set to block or not block the wind.

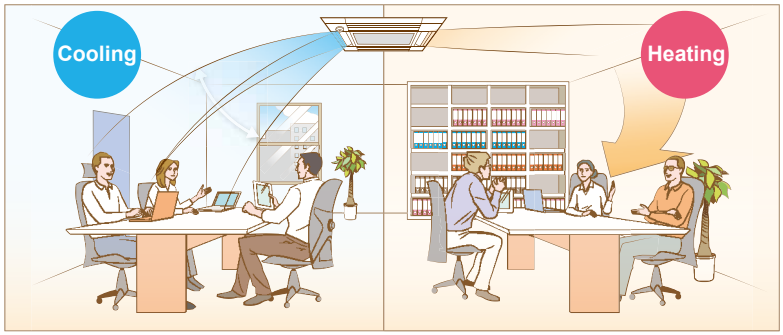


*PAR-40MAA or PAR-SL100A-E is required for each setting.

Seasonal airflow*

<When cooling>
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When the pre-set temperature is reached, the air conditioner switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

<When heating>
The air conditioner automatically switches between circulation and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When the pre-set temperature is reached, the air conditioner switches from heating to circulation and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



*PAR-40MAA is required for each setting.

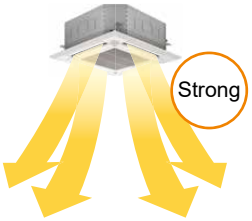
Air distribution

Automatic air-speed adjustment

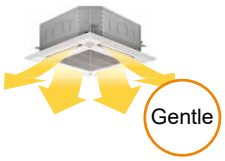
PLFY EM | PLFY FM | PEFY MX | PEFY MS | PEFY MA | PEFY MHS
PCFY KM | PKFY LM | PFFY LRM*1 | PFFY CM

*1. VLRMM only

An automatic Air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment.



At the start of the heating/cooling operation, airflow is set to high speed to quickly heat/cool the room.



When the room temperature reaches the desired setting, the airflow speed is automatically decreased for stable and comfortable heating/cooling operation.

The unit operates at high speed at startup to rapidly heat or cool the space, then automatically slows down once the target temperature has been reached. It is more economical than starting up the unit at low speed and keeping it operating at low speed.

Air speed is automatically reduced when the target temperature has been reached, saving on energy costs. There is no more need to remember to turn down the setting.

Fan speed setting

PLFY EM | PLFY FM | PLFY LMD | PMFY BM | PEFY MR | PEFY MX | PEFY MS | PEFY MA | PEFY MHS
PEFY MHS-F | PEFY MH-F | PCFY KM | PKFY LM | PKFY KM | PFFY KM | PFFY LEM | PFFY LRM | PFFY CM

A maximum of four fan speeds are available (Low-Middle 2-Middle 1-High). In addition to the four fan speeds, the Auto mode is available on some models. Various combinations of fan speed and vane angle setting are available to create the optimum airflow for any given space.

Fan speed	Remote controller display				
	Auto	Low	Middle 2	Middle 1	High
4 levels	Auto / *1				
3 levels	Auto / *1		(Middle)		
2 levels	Auto / *1				

*1 On PAR-FL32MA

*The actual fan speed will differ from the fan speed displayed on the LCD when one of the following conditions is met.

- While “Standby” or “Defrost” is displayed
- When the room temperature is higher than the set temperature during the heating mode
- Immediately after heating operation (during standby for switching the operation mode)
- During the Dry mode

Vane setting

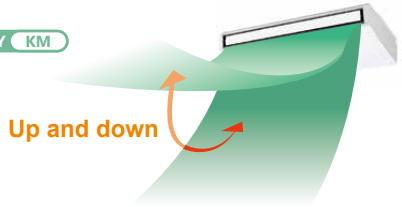
PLFY EM | PLFY FM | PLFY LMD | PMFY BM | PCFY KM | PKFY LM | PKFY KM | PFFY KM

Vertical airflow setting is selectable from a maximum of seven settings (a maximum of five fixed angles, swing, and Auto). Using different combinations of vertical airflow setting and fan speed, airflow direction and distance can be fine-tuned to deliver optimum airflow to all corners of the room.
When set to Auto, the vane is directed horizontally in the Cooling, Dry, and Fan modes, and directed downward in the Heating mode. The available vane angle positions will depend on the remote controller to be used. Refer to the instruction manual of the relevant remote controller for details.

Swing

PLFY EM | PLFY FM | PLFY LMD | PMFY BM | PCFY KM | PKFY LM | PKFY KM | PFFY KM

The air outlet vane swings up and down so that the airflow is spread evenly throughout the room.



*The actual air direction will differ from the air direction displayed on the LCD when one of the following conditions is met.

- While “Standby” or “Defrost” is displayed
- When the room temperature is higher than the set temperature during the heating mode
- Immediately after heating operation (during standby for switching the operation mode)

Convenience

Dry operation

PLFY EM PLFY FM PLFY LMD PMFY BM PEFY MR PEFY MX PEFY MS PEFY MA PEFY MHS
PCFY KM PKFY LM PKFY KM PFFY KM PFFY LEM PFFY LRM PFFY CM

The Dry mode is a dehumidifying mode in which the unit intermittently operates in a mild cooling mode.
During seasons when operating the unit in the Cooling mode tends to overcool the room, such as during the rainy season, the Dry mode helps keep the room at a comfortable temperature by reducing the room temperature by a few degrees centigrade.

*The unit cannot be operated in the Dry mode when the room temperature is below 18°C.
*The fan operates at low speed in the Dry mode. (When the user tries to change the fan speed, the fan speed display on the remote controller will change, but the selection will not actually be reflected.)

Dual set point

PLFY EM PLFY FM PLFY LMD PMFY BM PEFY MR PEFY MX PEFY MS PEFY MA PEFY MHS
PCFY KM PKFY LM PKFY KM PFFY KM PFFY LEM PFFY LRM PFFY CM

Normally, the desired room temperature is set to the same value for cooling and heating. However, the dual set point function allows different temperatures to be set for cooling and heating. When operation switches from cooling to heating or vice versa, the preset temperature changes accordingly.

External static pressure setting

PEFY MR PEFY MX PEFY MS PEFY MA PEFY MHS PEFY MHS-F PEFY MH-F PFFY LRM*1 PFFY CM

*1. VLRMM only

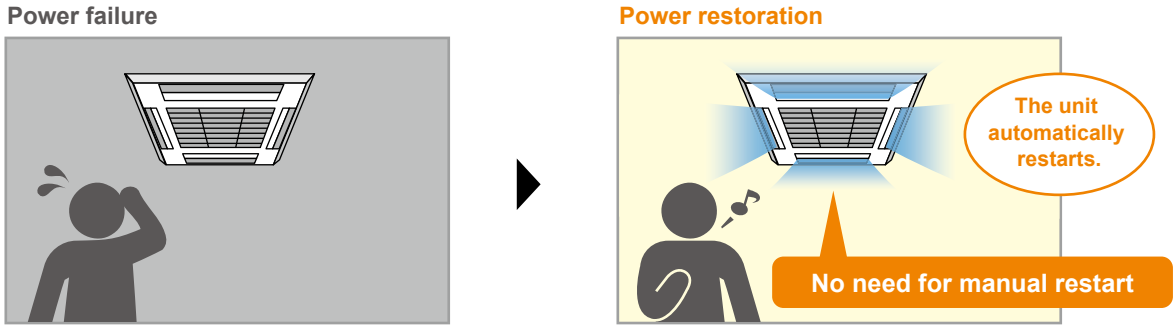
External static pressure settings are selectable in fine steps according to the inlet/outlet directions and duct length.

*External static pressure setting is set with the DipSW on the indoor unit. Contact your local distributor for details.

Automatic restoration after power failure

PLFY EM PLFY FM PLFY LMD PMFY BM PEFY MR PEFY MX PEFY MS PEFY MA PEFY MHS
PEFY MHS-F PEFY MH-F PCFY KM PKFY LM PKFY KM PFFY KM PFFY LEM PFFY LRM PFFY CM

Upon restoration of power, the unit will automatically resume operation in the mode it was in before the power failure (in approximately 5 minutes after restoration of power).



High efficiency filter

PLFY EM (Optional) PCFY KM (Optional)

The high efficiency filter has a much finer mesh compared to standard filters, and is capable of capturing minute particulates floating in the air that were not previously caught.

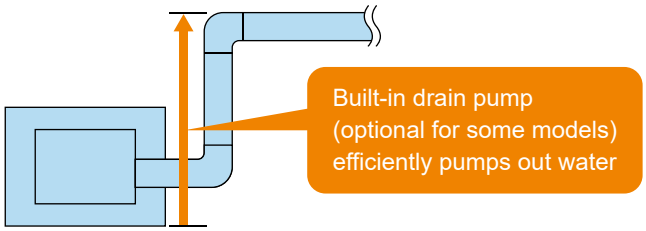
Installability and serviceability

Drain pump

PLFY EM | PLFY FM | PLFY LMD | PMFY BM | PEFY MX *1 | PEFY MS *2 | PEFY MA *3
PEFY MHS (Optional) | PEFY MHS-F (Optional) | PEFY MH-F (Optional) | PCFY KM (Optional) | PKFY LM (Optional) | PKFY KM (Optional)

*1. VMX only
*2. Optional for PEFY-P-VMS1L-E and PEFY-W-VMS-A
*3. VMA only

A built-in drain pump (optional for some models) allows the drain piping to be raised.



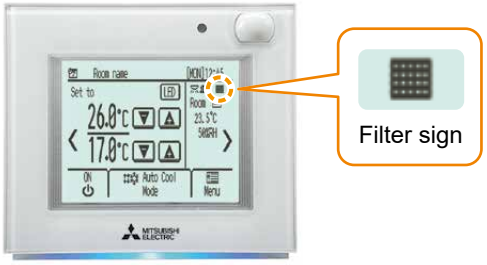
Filter cleaning sign

PLFY EM | PLFY FM | PLFY LMD | PMFY BM | PEFY MR | PEFY MX | PEFY MS | PEFY MA | PEFY MHS
PEFY MHS-F | PEFY MH-F | PCFY KM | PKFY LM | PKFY KM | PFFY KM | PFFY LEM | PFFY LRM | PFFY CM

Air conditioner operating time is monitored, and the user is notified when filter maintenance is necessary. The filter icon is scheduled to appear on the remote controller after a certain number of operation hours.
Factory setting: OFF

*External static pressure setting is set with the DipSW on the indoor unit. Contact your local distributor for details.

• Filter sign on the controller display



Ventilation Systems

• Lossnay lineup

Unit type	Model \ Airflow	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
Lossnay Unit	LGH-RVX Series 	●	●	●	●	●	●	●	●	●	
	LGH-RVXT Series 								●	●	●
	GUF Series 				●			●			

LGH-RVX Series

A commercially oriented system that can be used to deliver high performance and functions virtually anywhere.

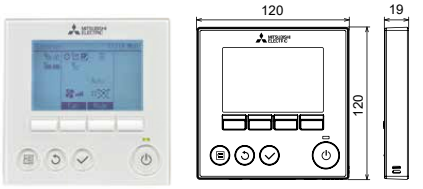
LGH-RVXT Series

Thin, large airflow models of the LGH Series that deliver high performance and functions.

GUF Series

Heat recovery units with a heating and cooling system that uses the CITY MULTI outdoor unit as a heat source.

• Remote controller

Function (Communicating Mode)	PZ-61DR-E LGH-RVX/RVXT
	 Unit (mm)
Fan speed selection	4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto
Night-purge setting (time and fan speed)	Yes
Function setting from RC	Yes
Bypass temp. free setting	Yes
Heater-On temp. free setting	Yes
Fan power change after installation	Yes
ON/OFF timer	Yes
Auto-OFF timer	Yes
Weekly timer	Yes
Operation restrictions (ON/OFF, ventilation mode, fan speed)	Yes
Operation restrictions (fan speed skip setting)	Yes
Screen contrast adjustment	Yes
Language selection	Yes (8 languages) *
Initializing	Yes
Filter cleaning sign	Yes
Lossnay core cleaning sign	Yes
Error indication	Yes
Error history	Yes

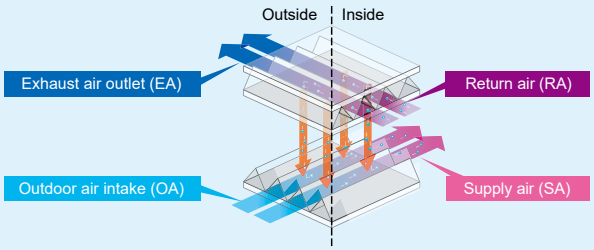
* The 8 languages are English, German, French, Spanish, Italian, Portuguese, Russian and Swedish.

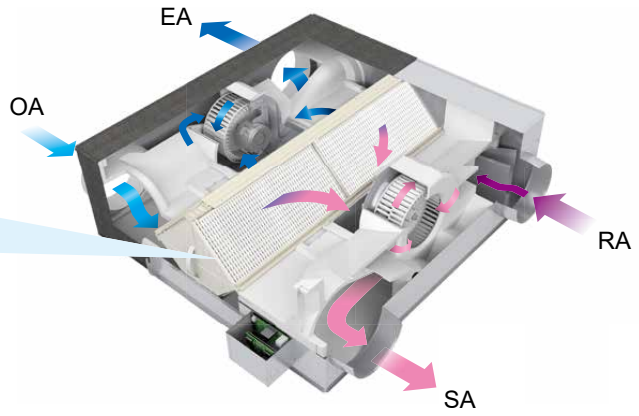
**Lossnay ventilation systems are renowned industry-wide for their efficiency.
They offer environmentally friendly energy recovery and humidity control, and enable air-conditioning systems to simultaneously provide optimum room comfort and energy savings.**

Indoor Air Quality Inside a Building is Optimized Through Temperature and Humidity Exchange by Lossnay

Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

The concept of sensible heat and latent heat exchange using a Lossnay core



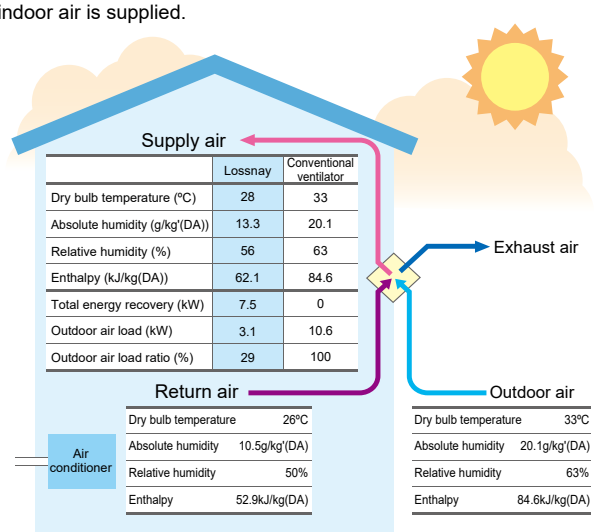


What can be Improved by Introducing Lossnay?

• Ventilation with maximized comfort

In summer

Air similar to the conditions of cooled (dehumidified) indoor air is supplied.



	Lossnay	Conventional ventilator
Dry bulb temperature (ºC)	28	33
Absolute humidity (g/kg'(DA))	13.3	20.1
Relative humidity (%)	56	63
Enthalpy (kJ/kg(DA))	62.1	84.6
Total energy recovery (kW)	7.5	0
Outdoor air load (kW)	3.1	10.6
Outdoor air load ratio (%)	29	100

Return air	
Dry bulb temperature	26ºC
Absolute humidity	10.5g/kg'(DA)
Relative humidity	50%
Enthalpy	52.9kJ/kg(DA)

Outdoor air	
Dry bulb temperature	33ºC
Absolute humidity	20.1g/kg'(DA)
Relative humidity	63%
Enthalpy	84.6kJ/kg(DA)

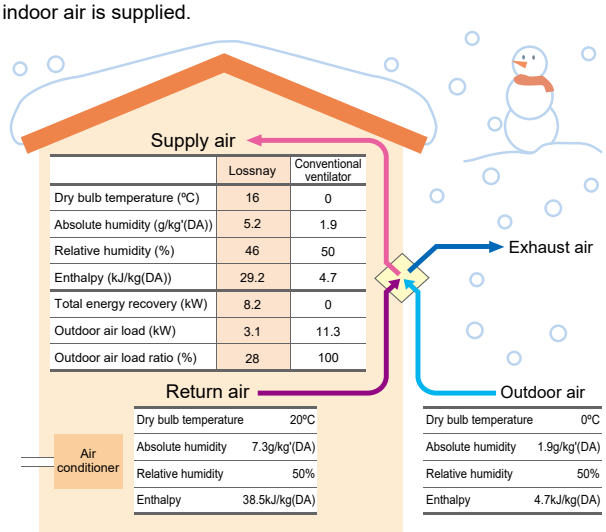
Indoor supply air temperature (ºC) = Outdoor temperature (ºC) − {Outdoor temperature (ºC) − Indoor temperature (ºC)} × Temp. recovery efficiency (%)

Calculation example: 28ºC = 33ºC − (33ºC − 26ºC) × 71.5%

*The above applies to LGH-100RVX (fan speed 4).

In winter

Air similar to the conditions of heated (humidified) indoor air is supplied.



	Lossnay	Conventional ventilator
Dry bulb temperature (ºC)	16	0
Absolute humidity (g/kg'(DA))	5.2	1.9
Relative humidity (%)	46	50
Enthalpy (kJ/kg(DA))	29.2	4.7
Total energy recovery (kW)	8.2	0
Outdoor air load (kW)	3.1	11.3
Outdoor air load ratio (%)	28	100

Return air	
Dry bulb temperature	20ºC
Absolute humidity	7.3g/kg'(DA)
Relative humidity	50%
Enthalpy	38.5kJ/kg(DA)

Outdoor air	
Dry bulb temperature	0ºC
Absolute humidity	1.9g/kg'(DA)
Relative humidity	50%
Enthalpy	4.7kJ/kg(DA)

Indoor supply air temperature (ºC) = {Indoor temperature (ºC) − Outdoor temperature (ºC)} × Temp. recovery efficiency (%) + Outdoor temperature (ºC)

Calculation example: 16ºC = (20ºC − 0ºC) × 80% + 0ºC

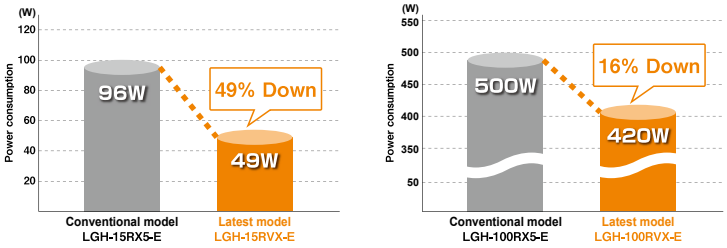
*The above applies to LGH-100RVX (fan speed 4).

LGH-RVX Series (Standard model)

- Further reduction of power consumption with the introduction of a DC motor

Low power consumption is realized with the introduction of a high efficiency brushless DC motor. Compared to models with an AC motor, power consumption is reduced.

Comparison between latest and conventional power consumption
(Latest model: Fan speed 4 at 230V 50Hz, Conventional model: Extra-high at 220V 50Hz)



- Improved airflow range

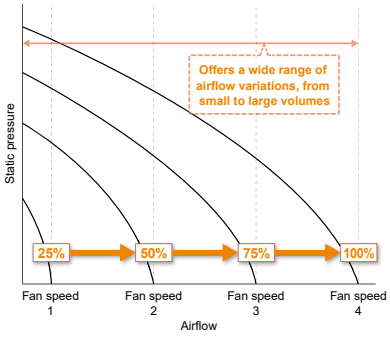
Wide airflow range

Each fan speed has a range setting of 25, 50, 75 and 100%, to allow much finer airflow control. When used in combination with the CO_2 sensor or timer function, airflow can be controlled even more precisely to realize better performance and reduce power consumption.

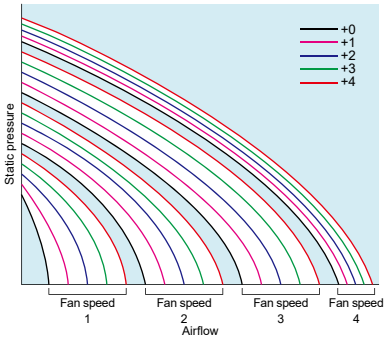
Fan speed adjustment

The default fan speed values can be minutely adjusted. Use the PZ-61DR-E remote controller to set the speed as desired.
1) Considering the total hours of Lossnay operation (filter clogging), fan power can be adjusted automatically after a given period of time.
2) After the unit is installed, fine adjustments may be made if the airflow is slightly lower than the desired airflow.

Characteristic curves of the LGH-RVX/RVXT Series



P-Q curve image



LGH-RVXT Series (Thin body type)

The LGH-RVXT Series has a large airflow of 1500 - 2500 CMH but a thin body of approximately 500mm. Therefore, installing the unit in the ceiling is easy.

LGH-150/200RVX-E

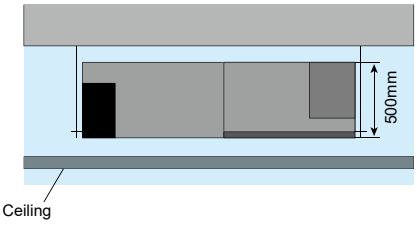
Height: 808mm

LGH-150/200/250RVXT-E

Height: 500mm

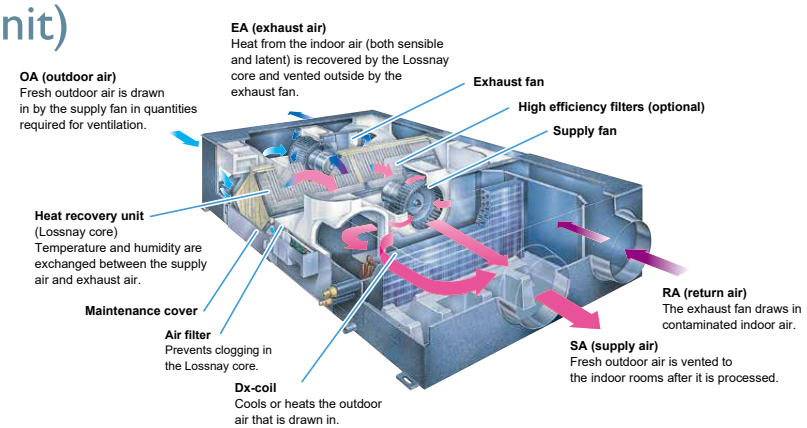
38% thinner body

LGH-RVXT Installation image



GUF Series (Lossnay with Dx-coil unit)

Along with Lossnay ventilation, the OA processing unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy.



• LGH-RVX Series

Model		LGH-15RVX-E				LGH-25RVX-E				LGH-35RVX-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		0.40	0.24	0.15	0.10	0.41	0.25	0.15	0.10	0.48	0.28	0.16	0.10	0.48	0.29	0.16	0.11	0.98	0.54	0.26	0.12	0.98	0.56	0.28	0.13
Input power (W)		49	28	14	7	52	28	14	8	62	33	16	7.5	63	35	17	9	140	70	31	11	145	72	35	13
Airflow	(m^3/h)	150	113	75	38	150	113	75	38	250	188	125	63	250	188	125	63	350	263	175	88	350	263	175	88
	(L/s)	42	31	21	10	42	31	21	10	69	52	35	17	69	52	35	17	97	73	49	24	97	73	49	24
External static pressure (Pa)		95	54	24	6	95	54	24	6	85	48	21	5	85	48	21	5	160	90	40	10	160	90	40	10
Temperature exchange efficiency (%)		80.0	81.0	83.0	84.0	–	–	–	–	79.0	80.0	82.0	86.0	–	–	–	–	80.0	82.5	86.0	88.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	73.0	75.5	78.0	79.0	–	–	–	–	69.5	72.0	76.0	83.0	–	–	–	–	71.5	74.0	78.5	83.5	–	–	–	–
	Cooling	71.0	74.5	78.0	79.0	–	–	–	–	68.0	70.0	74.5	83.0	–	–	–	–	71.0	73.0	78.0	82.0	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		28.0	24.0	19.0	17.0	29.0	24.0	19.0	18.0	27.0	22.0	20.0	17.0	27.5	23.0	20.0	17.0	32.0	28.0	20.0	17.0	32.5	28.0	20.0	18.0
Weight (kg)		20				23				30			
Specific energy consumption class		A				A				–			

Model		LGH-50RVX-E				LGH-65RVX-E				LGH-80RVX-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.15	0.59	0.26	0.13	1.15	0.59	0.27	0.13	1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16	1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)		165	78	32	12	173	81	35	14	252	131	49	15	262	131	47	17	335	151	60	18	340	151	64	20
Airflow	(m^3/h)	500	375	250	125	500	375	250	125	650	488	325	163	650	488	325	163	800	600	400	200	800	600	400	200
	(L/s)	139	104	69	35	139	104	69	35	181	135	90	45	181	135	90	45	222	167	111	56	222	167	111	56
External static pressure (Pa)		120	68	30	8	120	68	30	8	120	68	30	8	120	68	30	8	150	85	38	10	150	85	38	10
Temperature exchange efficiency (%)		78.0	81.0	83.5	87.0	–	–	–	–	77.0	81.0	84.0	86.0	–	–	–	–	79.0	82.5	84.0	85.0	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	69.0	71.0	75.0	82.5	–	–	–	–	68.5	71.0	76.0	82.0	–	–	–	–	71.0	73.5	78.0	81.0	–	–	–	–
	Cooling	66.5	68.0	72.5	82.0	–	–	–	–	66.0	69.5	74.0	81.0	–	–	–	–	70.0	72.5	78.0	81.0	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		34.0	28.0	19.0	18.0	35.0	29.0	20.0	18.0	34.5	29.0	22.0	18.0	35.5	29.0	22.0	18.0	34.5	30.0	23.0	18.0	36.0	30.0	23.0	18.0
Weight (kg)		33				38				48			

Model		LGH-100RVX-E				LGH-150RVX-E				LGH-200RVX-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		2.50	1.20	0.50	0.17	2.50	1.20	0.51	0.19	3.71	1.75	0.70	0.29	3.85	1.78	0.78	0.30	4.88	2.20	0.88	0.33	4.54	2.06	0.87	0.35
Input power (W)		420	200	75	21	420	200	75	23	670	311	123	38	698	311	124	44	850	400	153	42	853	372	150	49
Airflow	(m^3/h)	1000	750	500	250	1000	750	500	250	1500	1125	750	375	1500	1125	750	375	2000	1500	1000	500	2000	1500	1000	500
	(L/s)	278	208	139	69	278	208	139	69	417	313	208	104	417	313	208	104	556	417	278	139	556	417	278	139
External static pressure (Pa)		170	96	43	11	170	96	43	11	175	98	44	11	175	98	44	11	150	84	38	10	150	84	38	10
Temperature exchange efficiency (%)		80.0	83.0	86.5	89.5	–	–	–	–	80.0	82.5	84.0	85.0	–	–	–	–	80.0	83.0	86.5	89.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	72.5	74.0	78.0	87.0	–	–	–	–	72.0	73.5	78.0	81.0	–	–	–	–	72.5	74.0	78.0	87.0	–	–	–	–
	Cooling	71.0	73.0	77.0	85.5	–	–	–	–	70.5	72.5	78.0	81.0	–	–	–	–	71.0	73.0	77.0	85.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		37.0	31.0	23.0	18.0	38.0	32.0	24.0	18.0	39.0	32.0	24.0	18.0	40.5	33.0	26.0	18.0	40.0	36.0	28.0	18.0	41.0	36.0	27.0	19.0
Weight (kg)		54				98				110			

• LGH-RVXT Series

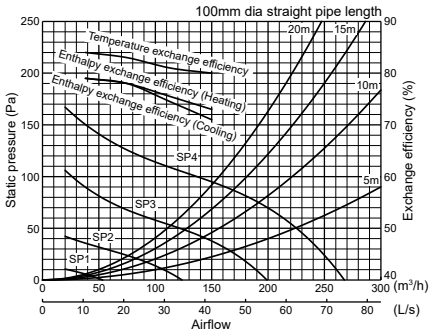
Model		LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E			
Electrical power supply		220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz				220-240V/50Hz, 220V/60Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		4.30	2.40	1.10	0.36	3.40	1.80	0.77	0.31	5.40	2.70	1.10	0.39	5.00	2.20	0.85	0.34	7.60	3.60	1.40	0.57	6.90	3.10	1.30	0.49
Input power (W)		792	421	176	48	625	334	134	37	1000	494	197	56	916	407	150	45	1446	687	244	82	1298	587	212	69
Airflow	(m^3/h)	1500	1125	750	375	1500	1125	750	375	2000	1500	1000	500	2000	1500	1000	500	2500	1875	1250	625	2500	1875	1250	625
	(L/s)	417	313	208	104	417	313	208	104	556	417	278	139	556	417	278	139	694	521	347	174	694	521	347	174
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11
	Return	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6
Temperature exchange efficiency (%)		80.0	80.5	81.0	81.5	–	–	–	–	80.0	81.0	82.5	84.0	–	–	–	–	77.0	79.0	80.5	82.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	70.0	71.0	73.0	75.0	–	–	–	–	72.5	73.5	77.0	83.0	–	–	–	–	68.0	71.5	74.0	79.0	–	–	–	–
	Cooling	69.0	70.0	72.0	74.0	–	–	–	–	70.0	71.0	74.5	80.5	–	–	–	–	65.5	69.0	71.5	76.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		39.5	35.5	29.5	22.0	39.0	33.0	26.5	20.5	39.5	35.5	28.0	22.0	40.5	34.5	27.0	20.5	43.0	39.0	32.0	24.0	44.0	38.5	31.0	22.5
Weight (kg)		156				159				198			

• GUF Series

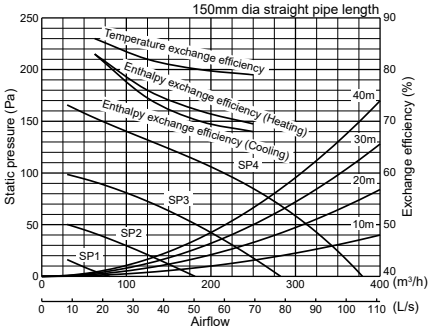
Model		GUF-50RD4				GUF-100RD4			
Electrical power supply		220-240V/50Hz				220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low	High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70	2.20	1.73	2.25	1.77
Input power (W)		235-265	150-165	235-265	150-165	480-505	370-395	490-515	385-410
Airflow	(m^3/h)	500	400	500	400	1000	800	1000	800
	(L/s)	139	111	139	111	278	222	278	222
External static pressure (Pa)		140	90	140	90	140	90	140	90
Temperature exchange efficiency (%)		77.5	80	–	–	79.5	81.5	–	–
Enthalpy exchange efficiency (%)	Heating	68	71	–	–	71	74	–	–
	Cooling	65	67	–	–	69	71	–	–
Cooling capacity (kW)		5.57 (1.94)				11.44 (4.12)			
Heating capacity (kW)		6.21 (2.04)				12.56 (4.26)			
Capacity equivalent to the indoor unit		P32				P63			
Humidifier	Humidifying	–				–			
	Humidifying capacity (kg/h)	–				–			
	Water supply pressure	–				–			
Noise (dB) (Measured at 1.5m under the center of the unit)		33.5-34.5	29.5-30.5	35-36	29.5-30.5	38-39	34-35	38-39	35-36
Weight (kg)		48				82			

■For LGH-RVX and LGH-RVXT Series
*The running current, the input power, the efficiency and the noise are based on the rating airflow, 230V/50Hz, and 220V/60Hz.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
■For GUF Series
*Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling: Indoor: 27°C DB/19°C WB Outdoor: 35°C DB/24°C WB
Heating: Indoor: 20°C DB/13.8°C WB Outdoor: 7°C DB/6°C WB
*The figures in ( ) indicates heat recovering capacity of heat exchange core.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

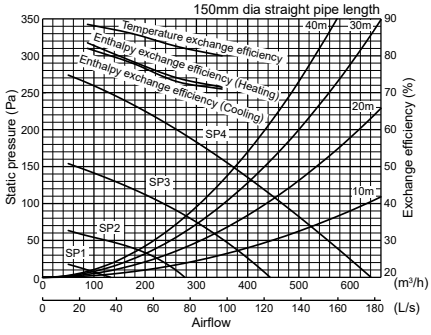
LGH-15RVX-E



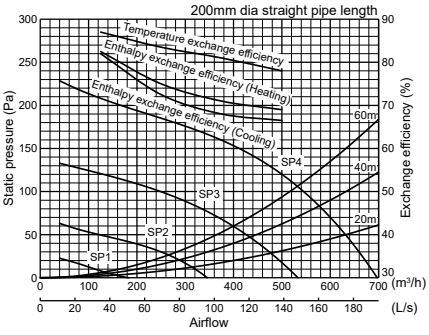
LGH-25RVX-E



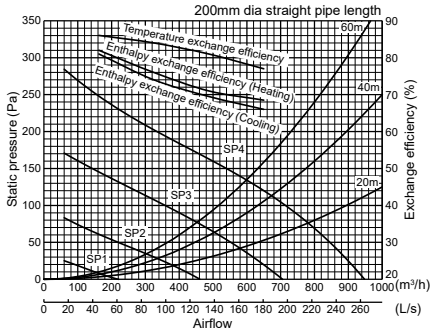
LGH-35RVX-E



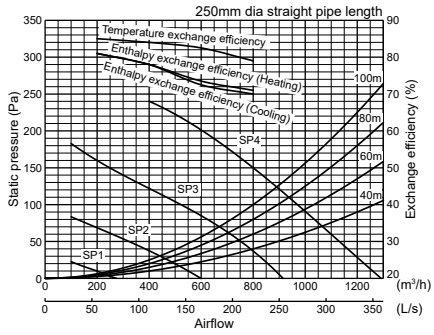
LGH-50RVX-E



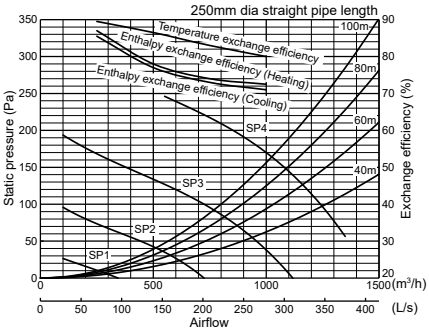
LGH-65RVX-E



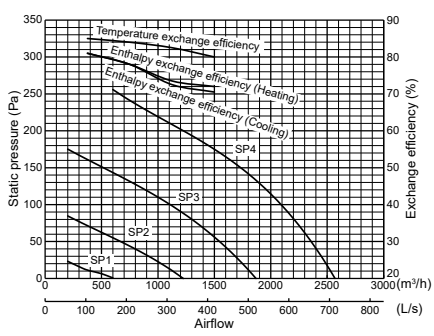
LGH-80RVX-E



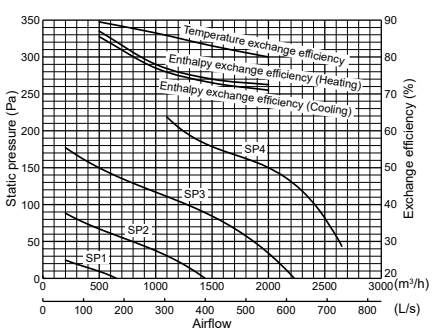
LGH-100RVX-E



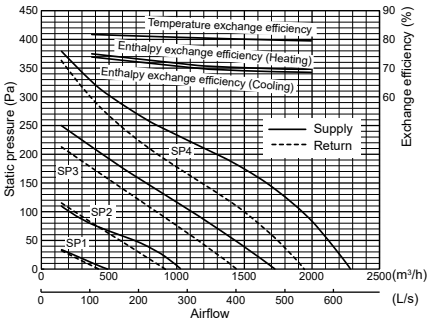
LGH-150RVX-E



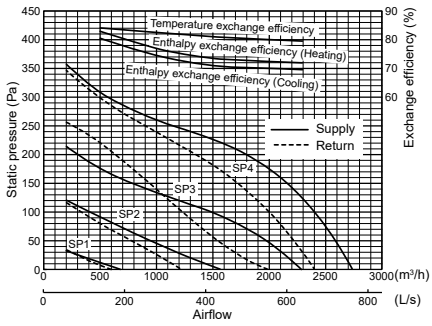
LGH-200RVX-E



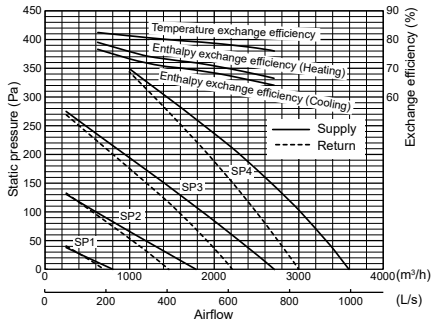
LGH-150RVXT-E



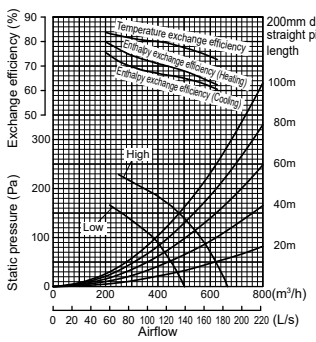
LGH-200RVXT-E



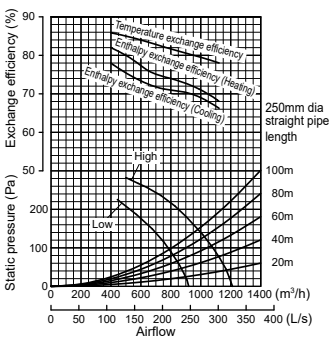
LGH-250RVXT-E



GUF-50RD4



GUF-100RD4



Filters

• Standard filters

Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Non-woven fabrics	Coarse 35%	G3 *	PZ-15RF$_8$-E	2	LGH-15RVX-E	2
			PZ-25RF$_8$-E	4	LGH-25RVX-E	4
			PZ-35RF$_8$-E	4	LGH-35RVX-E	4
			PZ-50RF$_8$-E	4	LGH-50RVX-E, GUF-50RD4	4
			PZ-65RF$_8$-E	4	LGH-65RVX-E	4
			PZ-80RF$_8$-E	4	LGH-80RVX-E	4
					LGH-150RVX-E	8
			PZ-100RF$_8$-E	4	LGH-100RVX-E, GUF-100RD4	4
					LGH-200RVX-E	8
	Coarse 50%	G3	PZ-150RTF-E	4	LGH-150RVXT-E	4
			PZ-250RTF-E	4	LGH-200RVXT-E, LGH-250RVXT-E	4

* The classification in EN779 (2002) is G3.

• High-efficiency filters Optional

Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Synthetic fiber	ePM$_{10}$ 75%	M6 *	PZ-15RFM-E	1	LGH-15RVX-E	1
			PZ-25RFM-E	2	LGH-25RVX-E	2
			PZ-35RFM-E	2	LGH-35RVX-E	2
			PZ-50RFM-E	2	LGH-50RVX-E, GUF-50RD4	2
			PZ-65RFM-E	2	LGH-65RVX-E	2
			PZ-80RFM-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFM-E	2	LGH-100RVX-E, GUF-100RD4	2
					LGH-200RVX-E	4

* The classification in EN779 (2002) is F7.

• Advanced high-efficiency filters Optional

Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	ASHRAE52.2 (2017)				
Synthetic fiber	ePM_1 75% $ePM_{2.5}$ 80% ePM_{10} 95%	MERV16	PZ-15RFP$_2$-E	1	LGH-15RVX-E	1
			PZ-25RFP$_2$-E	2	LGH-25RVX-E	2
			PZ-35RFP$_2$-E	2	LGH-35RVX-E	2
			PZ-50RFP$_2$-E	2	LGH-50RVX-E, GUF-50RD4	2
			PZ-65RFP$_2$-E	2	LGH-65RVX-E	2
			PZ-80RFP$_2$-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFP$_2$-E	2	LGH-100RVX-E, GUF-100RD4	2
					LGH-200RVX-E	4

• Advanced high-efficiency filters（For LGH-RVXT series） Optional

Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Non-woven fabrics	ePM_{10} 75%	M6 *	PZ-M6RTFM-E	3	LGH-150RVXT-E, LGH-200RVXT-E, LGH-250RVXT-E	3
	ePM_1 65% $ePM_{2.5}$ 75% ePM_{10} 90%	F8 *	PZ-F8RTFM-E	3		

* There is no data for the classification in EN779 (2002).

Air Handling Unit Controller

PAC-AH-M-J

The Air Handling Unit Controller is an interface to allow connection to third party manufacturers equipment.

Mitsubishi Electric City Multi outdoor units are used with this interface box, creating an ideal solution when a unique air handling unit is required. The Air Handling Unit Controllers are supplied with LEV expansion device(s).

- Discharge or return air temperature control
- Temperature set point by control 0-10VDC
- Auto mode available for ease of application
- Error input
- IP2x rated (only for internal use)

R410A

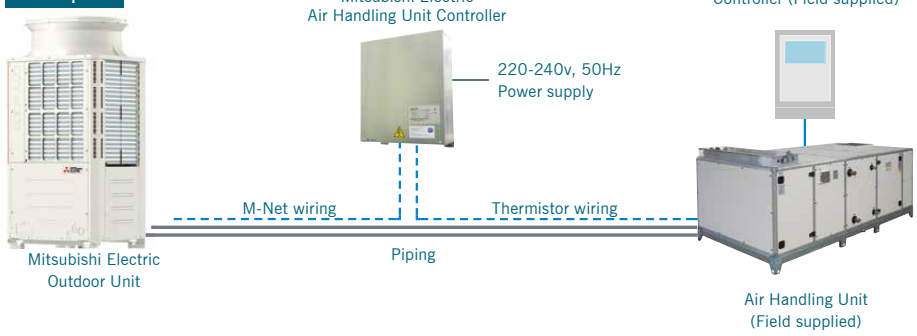
PAC-AH-M-J - AHU Controller

MODEL REFERENCE		PAC-AH125M-J	PAC-AH125M-J	PAC-AH140M-J	PAC-AH250M-J	PAC-AH250M-J	PAC-AH500M-J	PAC-AH500M-J
AIR HANDLING UNIT SIZE		P100	P125	P140	P200	P250	P400*2	P500*2
ALLOWED HEAT EXCHANGER CAPACITY (KW) - HEATING (MIN/MAX)		10.0 - 12.5	12.5 - 16.0	16.0 - 18.0	18.0 - 25.0	25.0 - 31.5	40.0 - 50.0	50.0 - 63.0
ALLOWED HEAT EXCHANGER CAPACITY (KW) - COOLING (MIN/MAX)		9.0 - 11.2	11.2 - 14.0	14.0 - 16.0	16.0 - 22.4	22.4 - 28.0	36.0 - 45.0	45.0 - 56.0
ALLOWED HEAT EXCHANGER VOLUME (CM^3)		1500 - 2850	1900 - 3550	2150 - 4050	3000 - 5700	3750 - 7100	6000 - 11400	7500 - 14200
REFERENCE AIR FLOW RATE (M3/H)*3		2000	2500	3000	4000	5000	8000	10000
STANDARD EVAPORATOR PATH NUMBER*1		4 - 5	4 - 5	5 - 6	6 - 10	8 - 10	16 - 20	16 - 20
DIMENSIONS (MM)	WIDTH	328	328	328	328	328	328	328
( ) = INC MOUNTINGS	DEPTH	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)	104 (122)
	HEIGHT	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)	378 (420)
WEIGHT (KG)		5	5	5	5	5	5	5
PIPE SIZE (MM)	GAS	15.88	15.88	15.88	19.05	22.22	28.58	28.58
	LIQUID	9.52	9.52	9.52	9.52	9.52	12.7	15.88

Note: One air handling unit controller is required per air handling unit. Saturated refrigerant temperature at exit of evaporator = 8.5°C, SH = 5K, liquid temperature = 25°C, air = 27°CDB/19°CWB.
*1 When the diameter of the heat exchanger tube is ø9.52.
*2 P400 and P500 are not compatible with PURY and PQRY.
*3 If using in combination with standard indoor units, then these figures do not apply.

APPLICABLE OUTDOOR UNITS	
PUHY-P Y(S)NW-A	PURY-P Y(S)NW-A
PUHY-EP Y(S)NW-A	PURY-EP Y(S)NW-A
PUHY-HP Y(S)HM-A	PQRY-P Y(S)LM-A
PQHY-P Y(S)LM-A	

Example:



Remote Controllers

The Importance of Control

The need for control is paramount in order to optimize the performance of any air-conditioning system and minimize its running costs. Mitsubishi Electric offers a wide range of control options designed to meet such needs.

Operating an air-conditioning system without the right control can prove costly. It is therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric has a wide range of controls available 'off-the-shelf' and individual control systems that can be specifically designed to match.

Good controls will benefit any application, large or small. Air-conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air-conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

- A Degree of Difference
  When an air-conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, while giving the optimum amount of control.

- The Simpler, The Better
  With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air-conditioning systems. From a simple hand-held controller to an AE-200E system, you are in control.

System Controller

Mitsubishi Electric's Air-conditioner Network System (MELANS) leads air-conditioner management in a PC browser and network era.

MELANS

Use of MELANS products enhances the efficiency and quality of air conditioning, contributing to energy savings and reduction in running cost. A wide variety of MELANS products are available to meet all requirements - from the smallest and simplest to the largest and most complex.
Mitsubishi Electric offers a wide lineup of individual remote controllers, various centralized controllers, and centralized integrated software, as well as BMS interface hardware and software, etc. Above all, with AE-200E/AE-50E/EW-50E, PC browser and long distance remote control (monitoring and operating) via communication network is possible and easy.

Individual Remote Controllers

All local remote controllers feature liquid crystal and LED displays and are easy to operate.

Remote Controller


PAR-40MAA


PAR-U02MEDA


PAR-CT01MAA

Simple Remote Controller


PAC-YT52CRA

Wireless Remote Controller


PAR-FL32MA


PAR-FA32MA


PAR-SL100A-E
(PLFY-P/WL VEM, PLFY-P/WL VFM, PKFY-P/WL VLM/VKM only)


PAR-SE9FA-E


PAR-SF9FA-E


PAR-SL94B-E

Centralized Remote Controllers

Advanced Touch Controller


AT-50B

ON/OFF Remote Controller


PAC-YT40ANRA


AE-200E/AE-50E


EW-50E

AHC Adapter


*1
PAC-IF01AHC-J

PI Controller


PAC-YG60MCA

DIDO Controller


PAC-YG66DCA

AI Controller


PAC-YG63MCA

*1. Advanced HVAC Controller

CITY MULTI

OUTDOOR UNIT
- S : PUMY
- Y : PUHY
- R2 : PURY
- WY : PQHY
- WR2 : PQRY

INDOOR UNIT
- PEFY
- PMFY
- PLFY
- PCFY
- PKFY
- PFFY

Interface


LMAP04-E

LonWorks® transmission line

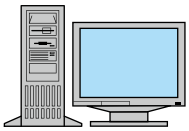
Interface

BACnet® transmission line (Ethernet)

Mitsubishi Electric's CITY MULTI can be easily connected to a building management system via BACnet®.

Ethernet

BUILDING MANAGEMENT SYSTEM



*Some controllers cannot be used in combination with certain models of devices.

Integrated Communications Control with Mitsubishi Electric's Unique Transmission Network (M-NET)

Model	Local remote controller *7						System controller *7							
	PAR-CT01MAA	PAR-40MAA	PAR-U02MEDA	PAC-YT52CRA	PAR-FL32MA	PAR-SL100A-E	PAC-YT40ANRA	AT-50B	AE-200E		AE-200E + AE-50E / EW-50E		EW-50E	
Controllable Groups / Indoors (Group / Indoor) *6	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 1	16 / 50	50 / 50	50 / 50		200 / 200		50 / 50	
									AE-200E	Browser	AE-200E	Browser	EW-50E	Browser
■Operation														
ON / OFF	○	○	○	○	○	○	◎	◎	◎■	◎■	◎■	◎■	▲	◎■
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	◎■	N	◎■
Temperature setting	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	◎■	N	◎■
Dual set point *8	○	○	○	○	N	○*9	○*10	◎	◎■	◎■	◎■	◎■	N	◎■
Local Permit / Prohibit	N	N	N	N	N	N	N	◎	◎■	◎■	◎■	◎■	N	◎■
Fan speed	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	◎■	N	◎■
Air flow direction	○	○	○	○	○	○	N	◎	◎■	◎■	◎■	◎■	N	◎■
■Status monitoring														
ON / OFF	○	○	○	○	○	○	◎	◎	◎	○	◎	○	▲	○
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Temperature setting	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Local Permit / Prohibit	○	○	○	○	○	N	○	○	○	○	○	○	N	○
Fan speed	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Air flow direction	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Indoor temperature	○	○	○	○	N	N	N	○	○	○	○	○	N	○
Filter sign	○	○	○	N	N	N	N	◎	○	○	○	○	N	○
Error flashing	○	○	○	○	○	N	○	◎	○	○	○	○	▲	○
Error code	○	○	○	○	N	N	○	○	○	○	○	○	N	○
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N
■Scheduling														
One day	○	○	○	N	N	N	N	○	◎■	◎■	◎■	◎■	N	◎■
ON / OFF times per day	1	1	1	N	1	1	N	16	24	24	24	24	N	24
Weekly	○	○	○	N	N	N	N	○	◎■	◎■	◎■	◎■	N	◎■
ON / OFF times per week	8 x 7	8 x 7	8 x 7	N	N	N	N	16 x 7	24 x 7	24 x 7	24 x 7	24 x 7	N	24 x 7
Annual	N	N	N	N	N	N	N	N	◎■	◎■	◎■	◎■	N	◎■
Optimized start-up	N	N	N	N	N	N	N	N	○	○	○	○	N	○
Auto-OFF timer	○	○	○	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	5	5	5	N	10	10	N	5	1	1	1	1	N	1
■Recording														
Error log	○	○	N	N	N	N	N	○	○	○	○	○	N	○
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Electricity charge	N	N	N	N	N	N	N	N	N	N	●	N	N	N
Energy management data	N	N	N	N	N	N	N	N	●	●	●	●	N	●
■Other														
Temp-set limitation by Local R / C	○	○	○	○	N	N	N	N	N	N	N	N	N	N
Temp-set limitation by System controller	○ *4	○ *4	○	○ *4	N	N	N	○*4	N	○*2 *4	N	○*2 *4	N	○*2 *4
Operation lock	○	○	○	○	N	N	N	◎	N	N	N	N	N	N
Night setback	○	○	○	N	N	N	N	◎	○	○*2	○	○*2	N	○*2
Sliding temperature control	N	N	N	N	N	N	N	N	○	○*2	○	○*2	N	○*2
BACnet® connection	N	N	N	N	N	N	N	N	●	●	●	●	●	●
■Management (Group / Interlocked)														
Ventilation interlock	N /○	N /○	N /○	N /○	N	N	○	○	○	○/○*2	○	○/○*2	N	○/○*2
Group setting	○ *1	○ *1	○	○ *1	N	N	○	○	○	○*2	○	○*2	N	○*2
Block setting	N	N	N	N	N	N	N	N	○	○*2	○	○*2	N	○*2
Review of electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N
■Operating on Lossnay interlocked (Group / Interlocked)														
ON / OFF	N /○	N /○	N /○	N /○	N /○*5	N /○*5	◎/◎*3	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎
Fan speed	N /○	N /○	N /○	N	N	N	N	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	N / N	◎/◎
Ventilation mode	N / N	N / N	N	N	N	N	N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	N / N	◎/ N
■Status monitoring on Lossnay interlocked (Group / Interlocked)														
ON / OFF	N /○	N /○	N /○	N /○	N	N	N	○/○	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎
Fan speed	N /○	N /○	N /○	N	N	N	N	○/○	○/○	○/○	○/○	○/○	N / N	○/○
Ventilation mode	N	N	N	N	N	N	N	○/ N	○/ N	○/ N	○/ N	○/ N	N / N	○/ N

◎: Each group / Batched ; ○: Each group ; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM) ; ●: AE-200E/AE-50E/EW-50E license registration possible.
N : Not Available (Not Used.) △: Batched only ; ▲: Batched handling (for maintenance) ■: Block

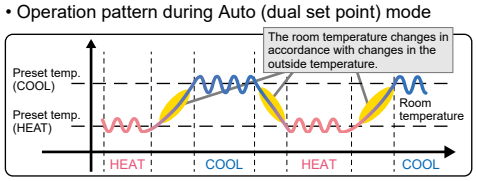
*1. Group setting via wiring between Indoor units with cross-over cable;
*2. Installation possible at Initial setting web browser;
*3. Interlock is set at Local remote controller.
*4. This function can only be set on the ME remote controller.
This function cannot be used with the MA/Simple MA remote controller.
(However, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and it is possible to use this function with them.)
*5. Interlock is set from system controllers (Except PAC-YT40ANRA) or local remote controllers.
*6. The maximum number of controllable units decreases depending on the indoor unit model.
*7. For indoor use only.

*8. Icon Indication: Dual Set Point
When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
This function is supported only when all of the indoor units, remote controllers, and system controllers that are connected to a given group features said function.
Contact your local distributor for details.

*9. Function setting of this remote controller is necessary.
*10. Please contact your local distributor regarding the availability of this function.

Air conditioner control system interface
LMAP04-E : LonWorks® Interface
Controls up to 50 Groups/ 50 units,
for details, refer to its description.

• Operation pattern during Auto (dual set point) mode



MA Touch Remote Controller

PAR-CT01MAA

Multiple color patterns

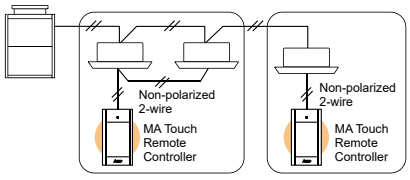
180 color patterns can be selected for the display's control parameters or background.

Language selection

The screen's display language can be selected from 14 languages.

English	French	Spanish	Italian
Portuguese	Greek	Turkish	Swedish
German	Dutch	Russian	Czech
Hungarian	Polish		

Example of system configuration



*When a PAR-CT01MAA is connected to a group, no other MA remote controllers can be connected to the same group.

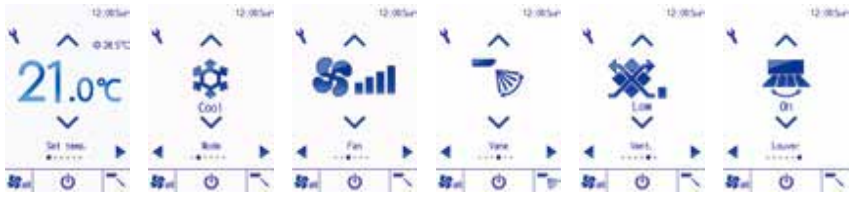
Full color touch panel & backlit display

Visible big size icons on the full color touch panel display.


Touch Panel


3.5 inch/HVGA Full Color LCD

Operation panels


Temperature setting | Operation mode | Fan speed | Vane control | Ventilation | Louver control

Control parameter customization

Users can customize the panel to display the selected parameters only.

Hotel setting

A simple operation panel is liked by uses, especially in hotels. It is capable of displaying only ON/OFF, set temp., fan speed.

Logo image customization

A logo image can be displayed on the initial screen.

* For PAR-CT01MAA-SB and PAR-CT01MAA-PB models only

PAR-CT01MAA-SB

Dimensions: 65(W) x 120(H) x 14.1(D) mm
: 2-9/16(W) x 4-3/4(H) x 9/16(D) in.

PAR-CT01MAA-PB

Dimensions: 68(W) x 120(H) x 14.1(D) mm
: 2-11/16(W) x 4-3/4(H) x 9/16(D) in.

PAR-CT01MAA-S

Dimensions: 65(W) x 120(H) x 14.1(D) mm
: 2-9/16(W) x 4-3/4(H) x 9/16(D) in.

For PAR-CT01MAA-SB and PAR-CT01MAA-PB models

Bluetooth® low energy technology

Remote controller can communicate with smart phone or tablet device via Bluetooth Low Energy. User & Setting App are available.

* The Bluetooth® word mark is trademark of Bluetooth SIG, Inc., USA.
* Contact the sales company for information on "Bluetooth" function.

<User App>

* For iOS (10.0 or later)

<Setting App>

* For iOS (10.0 or later)

App screen image

User App　　Setting App

To download the App, scan the QR code.
*QR code is a registered trademark of DENSO WAVE INCORPORATED.

• Functions

○: Each group　×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool/Dry/Fan/Auto/Heat.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI Lossnay units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	–	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	×	○
Operation lock	The following operations can be prohibited: "Location," "On/Off," "Mode," "Set temp.," "Menu," "Fan," "Louver," or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Auto descending panel *1	Raises and lowers the automatic elevating panel.	○	○
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the settings.	○	○
Weekly timer	Weekly ON/OFF times and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Night setback	The temperature range and the start/stop times can be set.	○	○
Bluetooth connection, Bluetooth, Screen update	The Bluetooth connection information can be acquired. Using an Application, a logo image as well as settings data can be sent to the remote controller. * For PAR-CT01MAA-SB and PAR-CT01MAA-PB models only	○	○
Remote controller information	The version of the remote controller can be checked. * For PAR-CT01MAA-SB and PAR-CT01MAA-PB models only	–	○

*1. Some models will have different display for the air flowdirection and fan speed. Set the air flow direction and fan speed when performing initial setting.

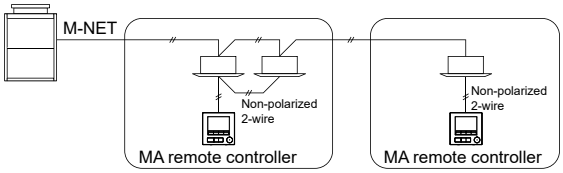
Wired MA Remote Controller

Dual Set Point

PAR-40MAA

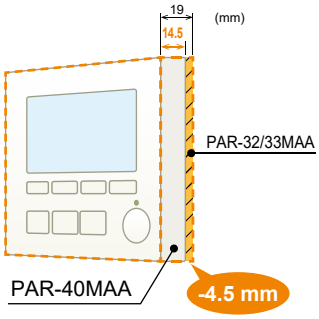
Dimensions: 120(W) x 120(H) x 14.5(D) mm
: 4-23/32(W) x 4-23/32(H) x 37/64(D) in.

• Example of system configuration



*When a PAR-40MAA is connected to a group, no other MA remote controllers can be connected to the same group.

• **Slim design**
Compared to the previous remote controller (PAR-32/33MAA), the latest controller is slimmer by 4.5 mm (depth), allowing for more flexible installation.



• **Backlit LCD (Liquid Crystal Display)**
Large, easy-to-see display.
Full-dot LCD display with large characters for easy viewing.
Contrast can also be adjusted.

• **Night setback**
When the room temperature goes outside a certain range during a prespecified time period, heating or cooling operation is automatically activated to prevent dew condensation or an excessive temperature increase in the room.

• **Language selection**
The screen display language can be selected from 14 languages:
English, French, Spanish, Italian, Portuguese, Greek, Turkish, Swedish, German, Dutch, Russian, Czech, Hungarian, and Polish.

• **3D i-see Sensor***
Settings can be made for the 3D i-see Sensor.

• **Draft reduction***
"Close" has been added to the manual vane angle selection. The air outlet can be closed to reduce drafts from the air conditioner.

• **Auto descending panel***
Panels can be lowered/raised using the remote controller. Panel position can also be selected from a number of patterns.

*Availability of the function depends on the indoor unit model. Contact your local distributor for details.

• Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool/Dry/Fan/Auto/Heat.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI Lossnay units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. The air-conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The above information needs to be entered in advance.) * An error code may not appear depending on the error.	–	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode, set temperature, filter sign reset, air direction, fan speed and timer. * While an operation is prohibited, the operation icon lights up (only on the Main display in the "Full" mode).	×	○
Operation lock	The following operations can be prohibited: "Location," "On/Off," "Mode," "Set temp.," "Menu," "Fan," "Louver," or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the setting contents.	○	○

ME Remote Controller

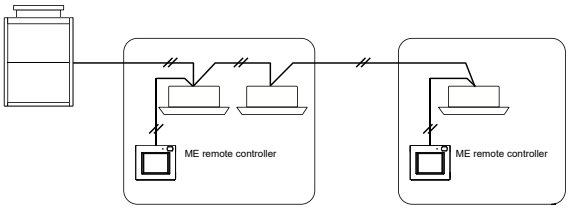
Dual Set Point

PAR-U02MEDA

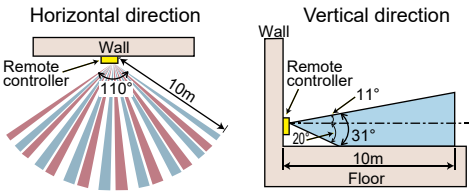
Dimensions : 140(W) x 120(H) x 25(D) mm
: 5-9/16(W) x 4-3/4(H) x 1(D) in.

- **Occupancy sensor**
  Detects vacancy for energy-save control.
- **Touch panel & backlit LCD**
  Shows the operation settings screen.
  When the backlight is off, touching the panel turns on the backlight, and it will stay lit for a prespecified period of time.
- **LED indicator**
  Shows the operation status in different colors.
  It lights up during normal operation, turns off when units are stopped, and blinks when an error occurs.
- **Brightness sensor**
  Detects the brightness of the room for energy-save control.
- **Temperature & humidity sensor**
  Detects room temperature and relative humidity.
- **Device control via AHC (Advanced HVAC Controller)**
  Allows control of other manufacturer's products connected via AHC.
- **Auto (dual set point) modes**
  Two temperatures (one each for cooling and heating) can be set.

• System configuration example



Occupancy sensor detection zone



• Functions

○:Each group ×:Not available

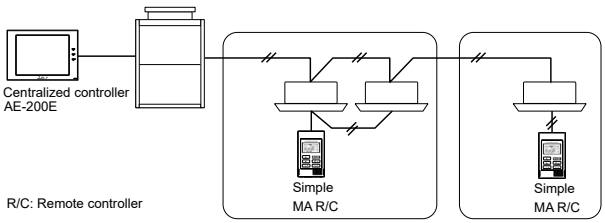
Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model. Auto mode is for CITY MULTI R2, and WR2-Series only.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up.	×	○
Error information	When an error occurs, an error code and the unit address appear. A contact number can be set to appear when an error occurs. (The above information needs to be entered in the Service menu.)	—	○
Schedule (Weekly timer)	Weekly ON/OFF times, operation mode, and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 in 10-minute increments.	○	○
Energy-save control during vacancy	When vacancy is detected by the occupancy sensor, the energy-save control assist function is activated. Four control types are available for selection: ON/OFF/Set temperature/Fan speed/Thermo-off. The brightness sensor can be used in conjunction with the occupancy sensor to detect the occupancy/vacancy status more accurately.	○	○

Simple Remote Controller

PAC-YT52CRA (MA)

Dimensions: 70(W) x 120(H) x 14.5(D) mm
: 2-3/4(W) x 4-3/4(H) x 19/32(D) in.

• System configuration example



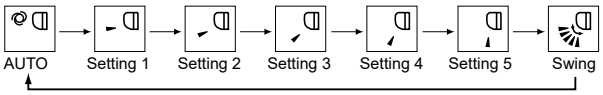
• **Dual set point**
When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
*Contact your Mitsubishi Electric sales office for details.

• **Backlit LCD**
Backlight for operation in dark places

• **Flat back**
The remote controller can be installed without making a hole in the wall.
Thickness is less than 14.5 mm (19/32 in).

• **Vane button (standard)**
The Vane button has been added to allow users to change airflow direction (ceiling cassette and wall mounted types).

Pressing the button changes the vane direction.



*The vane directions that can be set varies depending on the indoor unit model.
* If the unit has no vane function, vane direction cannot be set.
In this case, the vane icon blinks when the button is pressed.

• **Only cross-over wiring is required, based on two-wire signal lines.**

• **Room temperature sensors are built in.**

• **Compatible with all types of indoor units**
*As this controller has limited functions, it should always be used in conjunction with a standard controller or centralized controller.

• **LCD temperature setting and display in 1°C/1°F increments**

• Functions

□: Each unit ○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Changes between ON and OFF.	○	○
Operation mode switching	Select from COOL, DRY, FAN, AUTO, and HEAT. * AUTO mode is settable only when those functions are available on the indoor unit.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes the fan speed. * The settable fan speed varies depending on the indoor unit model to be connected.	○	○
Permit / Prohibit local operation	By setting a centralized controller, the following local operations can be prohibited: ON/OFF, operation mode, preset temperature; * The CENTRAL icon appears while local operations are prohibited.	×	○
Error	Displays the current error status with the address. * The address may not be displayed depending on the error status.	×	□
Ventilation equipment	When the CITY MULTI indoor unit is connected, interlocked setting of the CITY MULTI Lossnay unit is possible. When the Mr. SLIM indoor unit (A-control) is connected, interlocked operation of the LGH-R(V)X Type Lossnay unit is possible.	○	○
Set temperature range limit	The preset temperature range can be restricted for each operation mode (COOL/HEAT/AUTO).	○	○

Wireless Remote Controller

PAR-FL32MA
Dimensions: 58(W) x 159(H) x 19(D) mm
: 2-5/16(W) x 6-5/16(H) x 3/4(D) in.

PAR-SL100A-E
(PLFY-P/WL VEM, PLFY-P/WL VFM, PKFY-P/WL VLM/VKM only)
Dimensions: 66(W) x 188(H) x 22(D) mm
: 2-5/8(W) x 7-13/32(H) x 7/8(D) in.

PAR-FA32MA
Dimensions: 70(W) x 120(H) x 22.5(D) mm
: 2-3/4(W) x 4-3/4(H) x 7/8(D) in.

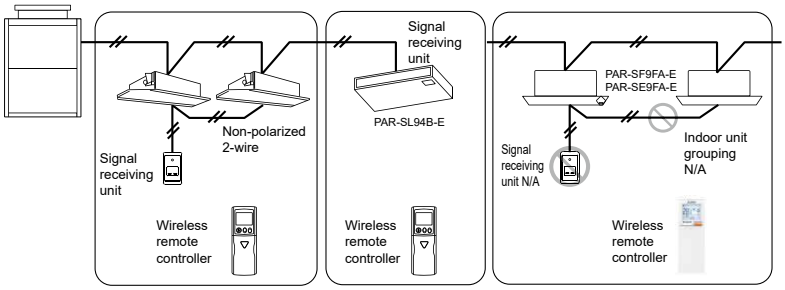
PAR-SE9FA-E
(4-way cassette signal receiver)
Dimensions: 273(H) x 29(D) mm

PAR-SF9FA-E
(2 x 2 cassette signal receiver)
Dimensions: 214(H) x 25.5(D) mm

PAR-SL94B-E
(Wireless remote controller kit for ceiling suspended type)
Dimensions: 182(W) x 57(H) x 31(D) mm

- **No need to configure addresses for group operation.**
- **The LED remains lit to show operation status. It also provides error information via the number of blinks.**
- **Can be used with the MA remote controller**.
  *When used in group configurations, wiring is required between indoor units.
  *ME remote controller and/or Lossnay remote controller cannot be combined in the same group.
- **Multiple indoor units cannot be controlled with the PAR-SL100A-E.**
  Only one indoor unit can be used in each group.
- **LCD temperature setting and display in 1°C/1°F increments.**

• System configuration example



PAR-FA32MA PAR-SL94B-E PAR-SL100A-E

Compatibility table (HVRF)

	Receiver	Transmitter
PEFY-WP*VMS1	PAR-FA32MA	PAR-FL32MA
PEFY-W*VMS		
PEFY-WP*VMA		
PEFY-W*VMA(L)(2)		
PFFY-WP*VLRMM		
PFFY-W*VCM		
PLFY-WL*VEM	PAR-SE9FA-E	PAR-SL100A-E
PLFY-WL*VFM	PAR-SF9FA-E	
PKFY-WL*VLM/VKM	Built-in	

Compatibility table (VRF)

	Receiver	Transmitter
PMFY-P*VBM PLFY-P*VLMD PEFY-P*VMR-E/VMH(S) PFFY-P*VLEM/VKM/VLRM/VLRMM PEFY-P*VMS1(L) PEFY-P*VMA(3)(L)	PAR-FA32MA	PAR-FL32MA

	Receiver	Transmitter
PCFY-P*VKM	PAR-FA32MA PAR-SL94B-E	PAR-FL32MA
PKFY-P*VKM	Built-in	
PKFY-P*VLM	Built-in	PAR-SL100A-E
PLFY-P*VEM	PAR-SE9FA-E	
PLFY-P*VFM-E1	PAR-SF9FA-E	

• Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	✳	✳
Timer operation	One ON/OFF setting can be set per day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *1 If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will sound and an LED will flash.	×	○*1
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one Lossnay. The Lossnay will run in interlock with the operation of the indoor unit. *2 The fan rate and mode cannot be changed.	×*2	×

*Some models will have a different display for the air flow direction and fan speed. Set the air flow direction and fan speed when performing initial settings.

Advanced Touch Controller

Advanced Touch Controller AT-50B ensures easy and simple operation on the touch panel to offer an optimal air environment by each unit.

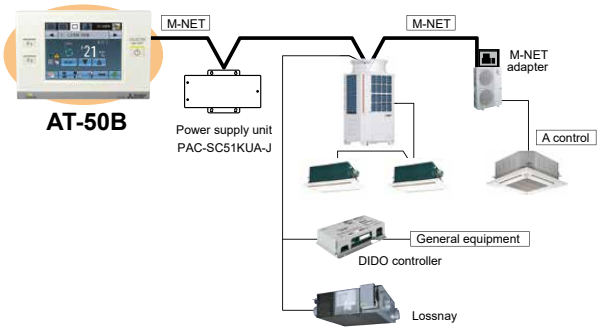
AT-50B

Dimensions: 180(W) x 120(H) x 30(D) mm
: 7-2/16(W) x 4-3/4(H) x 1-3/16(D) in.

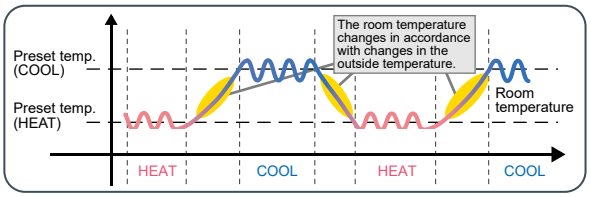
Dual Set Point

- **The color touch panel is easy to see and operate. The operation screen can be selected according to the intended use.**
- **Dual set point**
  When the operation mode is set to Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.
  *Contact your Mitsubishi Electric sales office for details.

• System structure



• Operation pattern during Auto (dual set point) mode



Backlit LCD touch panel

A 5-inch color LCD (Liquid Crystal Display) touch panel enables easy and simple operation.
When the backlight is off, touching the panel turns it back on.
The touch panel displays the operation status of the units in GRID, LIST or GROUP form.

GRID (zoom out) screen
Displays the operation status of all groups.

GRID (zoom in) screen
Displays the operation status details of each group.

LIST screen
Displays the operation status details of each group by group name.

GROUP screen
Displays the operation status details of each group. Sets group operations.

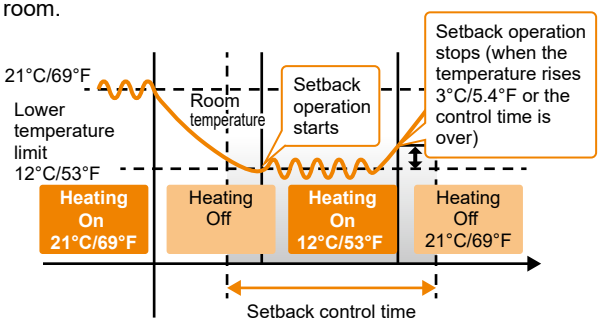
Controls 50 indoor units
One screen shows the operation conditions of 50 connected indoor units.

Weekly and daily schedules
5 daily schedule patterns and 12 weekly schedule patterns (max. 16 settings per pattern).
Two types of weekly schedules can be set.

System changeover
Operation mode can be switched depending on the indoor temperature setting and target temperature of each group or a representative indoor unit.

Functions
[Basic Functions]
- ON/OFF
- Operation mode switching
- Temperature setting
- Fan speed setting
- Airflow direction setting
- Louver setting

Night setback
When the room temperature goes outside a certain range during a prespecified time period, this heating or cooling operation is automatically activated to prevent dew condensation or an excessive temperature increase in the room.



When the temperature drops below the lower temperature limit (heating control)

Main system controller/Sub system controller
The AT-50B can be used as the main or sub system controller. When it is connected to a system controller such as the AE-200E, it is used as a sub controller. When multiple units of the AT-50B are connected, the main and sub controllers can be specified.

Simple button arrangement
The F1 (Function 1) and F2 (Function 2) buttons can be set as a run button for the following collective operations. (Setback/Schedule/Operation mode/Temperature correction/Disable remote controller operation)

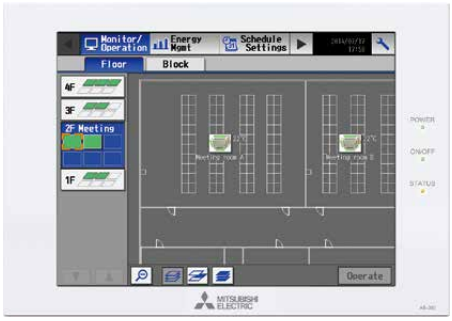
• Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the Lossnay group. *The settable items vary depending on the models.	◎	◎
Operation lock	The operation lock can be set to the input operation of the AT-50B. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	◎	◎
Error display	When an error is occurring on an air conditioner unit, the affected unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen shows an abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□◎
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for Lossnay groups.	◎	◎
Ventilation (interlocked)	The Lossnay will run in interlock with the operation of the indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	◎	◎
Temperature set limitation	Batch-setting to temperature range limit in cooling, heating, and auto modes. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	◎	◎
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/ heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited: When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	◎	◎
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
Checking the Gas Amount	Use this function to check for a refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded.) Series only.	□	□
Schedule operation	Weekly schedule setting of up to 12 patterns is available. In one pattern, up to 16 settings of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction", and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedules (Summer/Winter) can be set. Today's schedule allows setting of up to 5 patterns.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.

Centralised Controller



AE-200E/AE-50E

Dimensions: 284(W) x 200(H) x 65(D) mm
: 11-3/16(W) x 7-7/8(H) x 2-9/16(D) in.

Dual Set Point

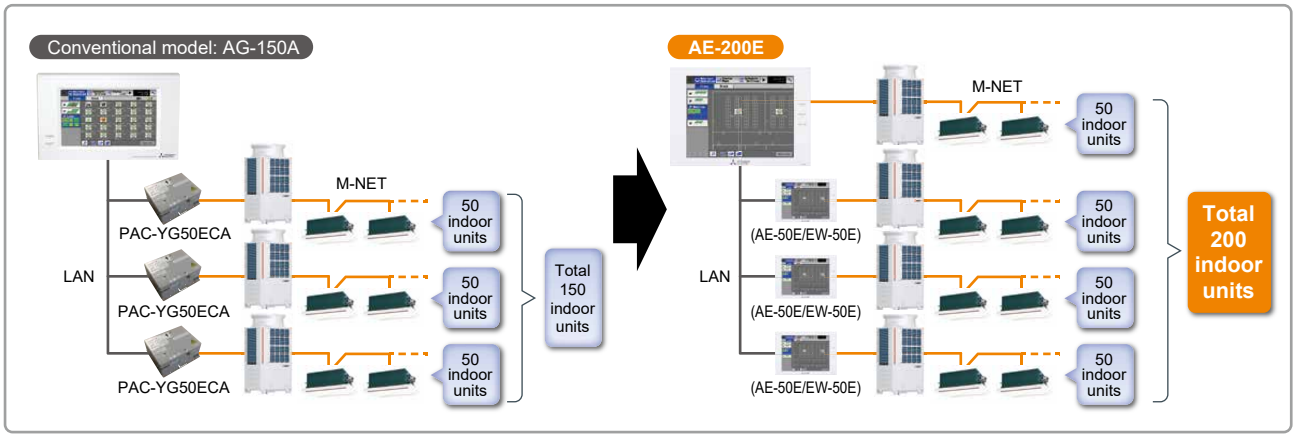
- **Promotes energy savings through the comprehensive display of the air-conditioning equipment's energy consumption.**
  - The energy consumption of the air-conditioning equipment can be displayed by individual area in graph form for easy viewing.
  - Operating status can be easily confirmed by comparing power consumption with the previous year and with the electrical power target.
  - Floor layout is displayed on the 10.4-inch LCD touch panel for easy management of air-conditioning equipment.
- **An optimal system can be easily and flexibly established according to the size of the facility.**
  - Up to 50 indoor units can be managed.
  - Centralized control of up to 200 indoor units can be performed with three "AE-50E/EW-50E" expansion controllers.
  - Up to 2,000 indoor units can be managed by connecting the PC to a web browser.*1
    *1. Contact your local distributor regarding support for this feature.
- **Features for operating and monitoring the hot water heat pump are also available on PWFY, CAHV, CRHV, QAHV, and EAHV/EACV.**
  - Centralized batch control on PWFY, CAHV, CRHV, QAHV, and EAHV/EACV is possible in addition to that on each air-conditioning unit.

• Control screen for power consumption

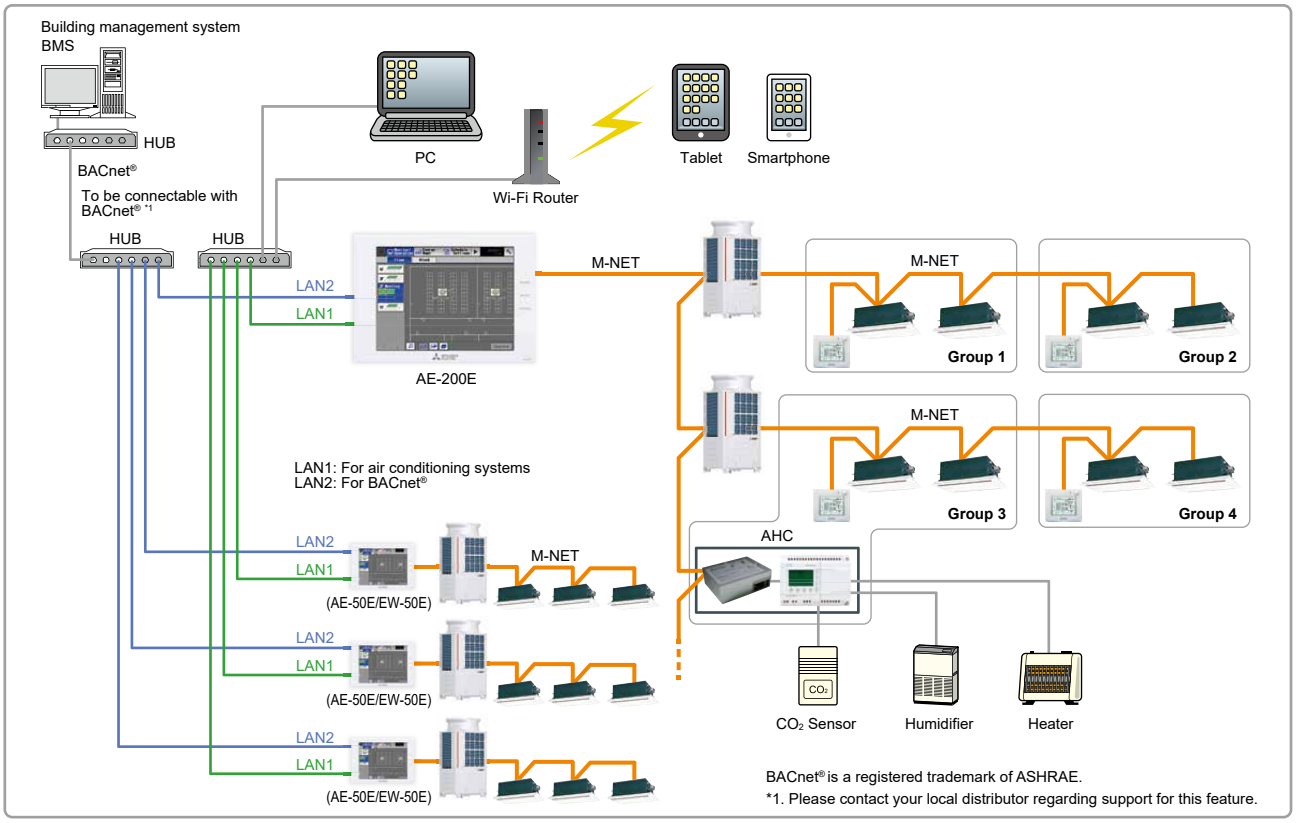
Energy consumption of a targeted area is displayed by month, day, and hour.
Energy consumption of two different units, groups, and blocks can be compared.
Fan operation time and energy consumption can be displayed.

The energy consumption of each air-conditioning equipment is ranked and displayed by area, thus visualizing high-load components.
Energy consumption can also be compared with electrical energy targets.

• Comparing the number of connectable units



• System structure



• Functions

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable number of units	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (PAC-YG66DCA is required to operate general equipment.)	○ ◎ △ ●	○ ◎
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit: Cool/Dry/Auto(*)/Fan/Heat Lossnay unit: Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units: Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 Series only. ** Only PWFY	○ ◎ △ ●	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○ ◎ △ ●	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ◎ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○ ◎ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ◎ △ ●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ◎ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is occurring on an air conditioning unit, the affected unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioning units in test run mode.	○ ◎ △ ●	○
Ventilation interlock	The ventilation unit (Lossnay) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ◎ △ ●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following: Input: By level signal: "Batch ON/OFF", "Batch emergency stop" By pulse signal: "Batch ON/OFF", "Enable/disable local remote controller" Output: "ON/OFF", "Error/Normal"	◎	◎
Energy Management *1	Bar Graph: Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily, and monthly. Line Graph: Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□ ○ ●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	×	○
ME remote controller	The status of sensor on this controller can be monitored.	×	○
Smartphone/Tablet	The specified web browser on iOS and Android OS can monitor and operate the AE-200E/AE-50E/EW-50E.	○	○
New web design	Revised web screen design for a more user friendly interface.	○ ◎ △ ●	○
Initial setting software	The initial setting can be configured without the connection of AE-200E/AE-50E/EW-50E.	×	×
Apportionment of power consumption	Apportionment of power consumption can be calculated on AE-200 without TG-2000A. *2	●	□ ●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL.	○	×

*1. Energy consumption can also be compared with electrical energy targets.
*2. Even when the number of indoor units is 50 or less, the system must consist of AE-200E and EW-50E/AE-50E.
AE-200E M-NET cannot be used.

Centralised Controller

Dual Set Point

EW-50E

Dimensions: 209(W) x 172(H) x 92(D) mm
: 8-1/4(W) x 6-25/32(H) x 3-5/8(D) in.

• Main Features

Can be used as an expansion controller for the AE-200E

Up to 200 indoor units can be operated and monitored by connecting three EW-50E units to an AE-200E controller.

Apportionment of electricity charges

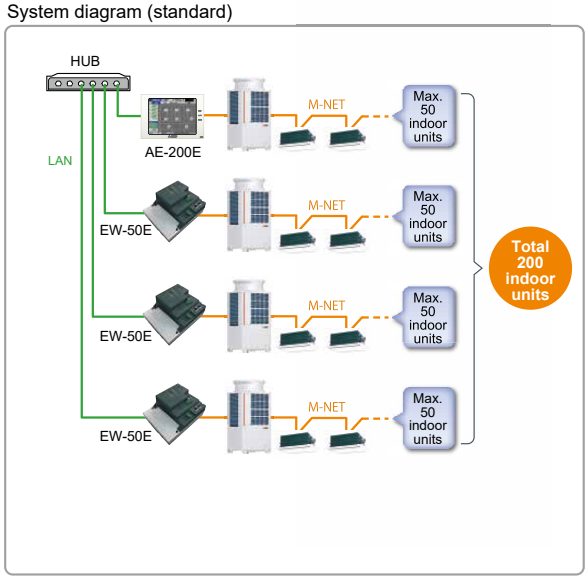
The power consumption of each air conditioner can be calculated with an AE-200E controller. The calculated data can be output to a PC via a USB memory device or LAN, and billing charges can be prepared using a specific charge calculation tool.

*The function to apportion electricity charge requires the use of both the AE-200E and EW-50E.

*For other restrictions, refer to the Installation Manual and Instruction Book.

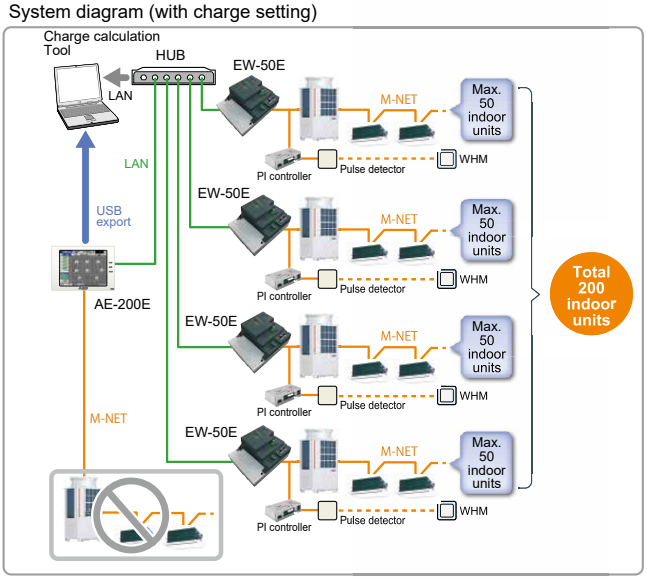
• System structure

System diagram (standard)



* When the AE-200E M-NET is not used, a maximum of four EW-50E units can be connected.

System diagram (with charge setting)



• Air conditioner units can be operated and monitored independently using a PC

Even without an AE-200E controller, the EW-50E can operate and monitor air-conditioner units using browser software*1.
Air conditioners can be operated and monitored remotely via the Internet. In addition, air conditioners in multiple buildings can be collectively operated.*2

* 1. This operation has been confirmed on Internet Explorer 11, Edge, Google Chrome ver.83, and Safari13.
Microsoft® Internet Explorer is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
Google is a registered trademark of Google LLC.
Google Chrome is a registered trademark of Google LLC. in the U.S. and other countries.
Edge is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
Windows is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
Safari is a trademark or registered trademark of Apple Inc. in the U.S.
Company names and product names in this brochure may be trademarks or registered trademarks of the respective rights holder.

* 2. When connecting an EW-50E via the Internet, do not connect the EW-50E directly to the Internet. Instead, always connect via a router using the VPN function to ensure security.

• Manage air conditioner usage conditions

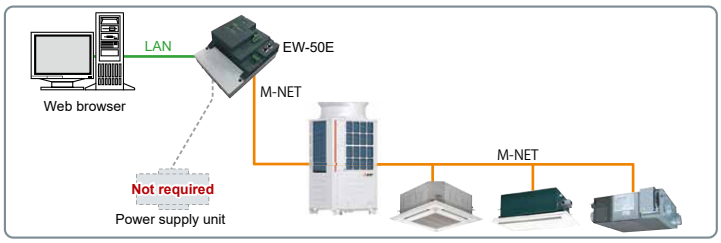
Energy consumption of air conditioners can be displayed in an easy-to-understand manner using a web browser.

* The billing function requires a PI Controller and watt-hour meter with pulse transmitter (procured locally).



• Operable without a transmission line power supply unit

The EW-50E unit is equipped with a power supply function. Power supplied by a transmission line power supply unit is not necessary. Since an outside power supply is not needed, self-sustained operation is possible even when the outdoor unit system is down. (In cases where the power consumption factor exceeds 1.5, a power supply unit is needed.)



• Energy-saving control

With the addition of an energy-saving control license (optional product), the temperature setting can be automatically changed*1 according to the room temperature around the air-conditioner unit to allow greater energy savings without sacrificing comfort.

* 1. With this function, the temperature setting can be changed in +2°C/4°F increments for cooling and -2°C/4°F increments for heating during a set time interval. In cases where the intake temperature and the temperature setting are significantly different, exclusion from the energy-saving target is possible.

• Functions

* The functions and specifications are subject to change.

◎: By group or multiple groups ○: By group □: Batch only

Item	Remarks	Setting	Display
ON/OFF	Switches air conditioners and general equipment ON or OFF.	◎	◎
Operation mode switching	Switches to cool, dry, auto, fan, or heat operation. * Some modes are not available depending on the unit.	◎	○
Room temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	◎	○
Set temperature 0.5°C/1°F increments	The temperature can be set and displayed in 0.5°C/1°F increments. * With some unit combinations, the temperature is set in 1°C/1°F increments.	◎	○
Fan speed setting	The fan speed can be set to 4 levels, 3 levels, 2 levels, or automatic. * Available fan speeds differ depending on the unit.	◎	○
Air direction setting	Fixed swing in 5 levels or auto air direction can be set. * Available air directions differ depending on the unit.	◎	○
Prohibition of local remote controller operation	It is possible to disable the ability to use local remote controllers to run or stop the operation mode, set temperature, filter sign reset, wind speed, wind direction and timer operation. * In the Lossnay group, only ON/OFF and filter reset can be disabled. * Disabling of the fan speed, air direction, and timer operation can be set for the AT-50B, PAR-33MA, PAR-U02MEDA, and PAC-YT52CR models.	◎	○
Room temperature display	Displays the suction temperature of the indoor unit.	—	○
Error display	Displays the current error content together with the address.	—	◎
Schedule operation	Today/weekly/weekly by season/yearly Setting content: ON/OFF, operation mode, set temperature, disable local remote controller, air direction/fan	◎	○
Energy management	Displays the power consumption* or operating hours. * Optional part required.	—	◎
Ventilator operation (solo)	Group operation is possible for free plan Lossnay units only. * The above group operation mode includes auto ventilation, heat exchange, and normal ventilation.	◎	○
Ventilator operation (interlocked)	Free plan Lossnay units and indoor units can be interlocked and operated together. * At this point, air volume can be operated, but the ventilation mode cannot be selected.	◎	○
External input (timer connection, emergency stop input, etc.)	Using a level signal or pulse signal, it is possible to input the following: Level signal: Emergency Stop Input, Batch ON/OFF, and Demand Input. Pulse signal: Batch ON/OFF or Operation Disable/Enable * Requires an external power supply and external I/O adapter (PAC-YG10HA) sold separately. Only one input can be selected from the above inputs.	□	—
External output (error output, operation output)	Using the level signal, ON/OFF, and Error/Normal are output. * Requires an external power supply and external I/O adapter (PAC-YG10HA) sold separately.	—	□
Web browser	Monitor/operation, failure, filter sign monitoring, schedule setting, interlocked control setting (option), energy-saving control setting (option), energy-saving peak cut setting (option), set temperature range restrictions, other	◎ *1	◎ *1
Filter reset	Filter sign reset	○	○
Connectable location	Centralized system transmission line: Connectable Recommended Indoor and outdoor transmission line: Connectable	—	—

* Functions and specifications differ depending on the connected equipment and model.
* Electric energy can be proportionally divided using the EW-50E alone. However, the apportioned electricity charge function requires an AE-200E or TG-2000A.

• Connectable equipment: CITY MULTI, HYBRID CITY MULTI
A Control Mr. Slim (Can be connected using an M-NET adapter or special outdoor unit)
Room air conditioner (Requires a system control interface or M-NET control interface)
Lossnay/OA Processing Unit
AI controller, PI controller, DIDO controller

• Notes
* 1. Some items do not support the multi group setting and display.

ON/OFF Remote Controller

Just press a switch to start. All units can be switched ON/OFF by pressing the main switch, and each unit in the group can be switched ON/OFF with individual switches. The PAC-YT40ANRA also has a hardwired connection available (ON/OFF input, fire alarm input, run output, fault output).

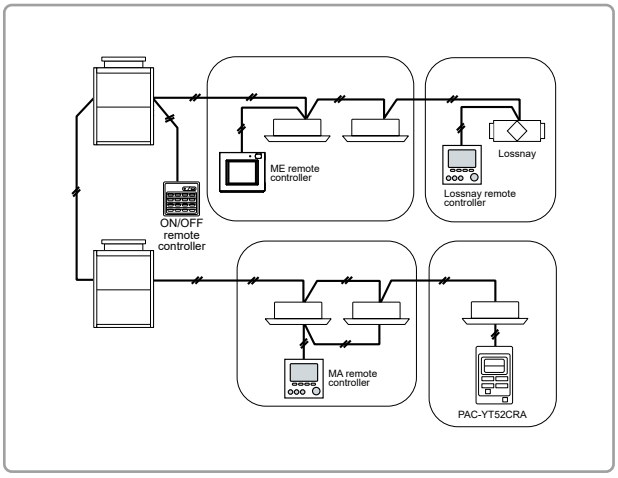
PAC-YT40ANRA

Dimensions: 130(W) x 120(H) x 19(D) mm
: 5-1/8(W) x 4-3/4(H) x 3/4(D) in.

- **Control of up to 16 groups/50 indoor units**
  - Up to 16 groups/50 units can be operated with a single ON/OFF remote controller.
  - A general-purpose interface is also available for turning ON/OFF general devices.
- **Just press a switch to start**
  - All units can be started and stopped by pressing the main switch, and each unit in the group can be started and stopped with individual switches.
- **LED flashing during failure**
  - Any error in an air conditioner can be easily confirmed by the flashing of the LED. The LED also indicates whether each group is running or stopped.
- **Interlock operation with an external system**
  - On/off operation can be flexibly interlocked with a card reader, fire alarm system, or building management system, etc. using the external input/output function.
- **Flexible group setting**
  - Groups can be easily configured, allowing group patterns to be set freely according to the layout.
  - The ON/OFF remote controller can be connected to the indoor/outdoor transmission line without a power supply unit.

NOTE
The dual set point function is available depending on the controller version.
Contact your local distributor regarding the availability of this function.

• System example



• Function

○: Each group □: Batch only ×: Not available

Item	Description	PAC-YT40ANRA	
UNITS	Max No.Units	50 units/16 groups	
		Operations	Display
ON/OFF	ON and OFF operation	○	○
Error indication	LED flashes during failure. (The error code can be confirmed by removing the cover.)	×	○
Ventilation operation (Independent)	Group operation is only possible with Lossnay units. *Only ON/OFF of group.	○	○
Ventilation operation (Interlocked)	The Lossnay will run in interlock with the operation of the indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	○	○
External input	ON and OFF operation / Fire Alarm*	□	×
External output	ON and OFF operation / Faults*	×	□

* Applicable to collective only
Not applicable to groups

AHC adapter

PAC-IF01AHC-J

Dimensions: 116(W) x 90(H) x 40(D) mm
: 4-9/16(W) x 3-1/2(H) x 1-9/16(D) in.

The Advanced HVAC Controller (AHC) comprises Mitsubishi Electric's AHC adapter (PAC-IF01AHC-J) and α2 simple application controller* (ALPHA2).

*The α2 simple application controller is a programming logic controller manufactured by Mitsubishi Electric Corporation.

AHC allows Mitsubishi Electric's air-conditioning network system (M-NET) to be connected to other systems, which was not possible with the use of ALPHA2 alone. AHC provides the following functions:

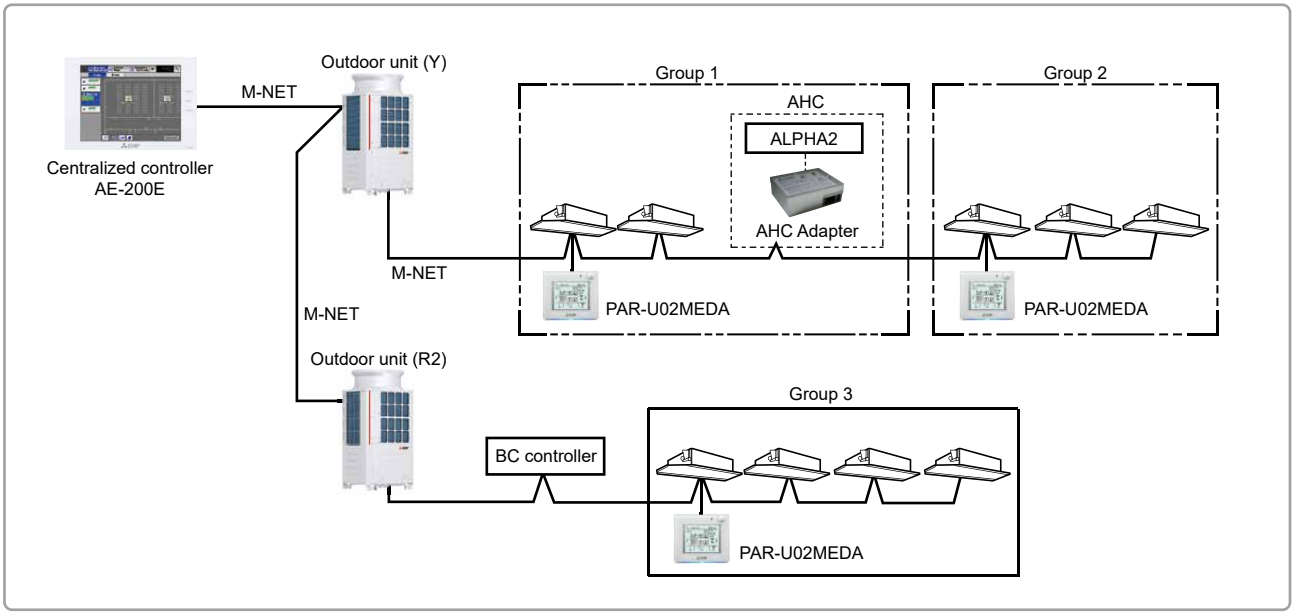
① Controls external devices using the sensor data of air-conditioning units connected to M-NET.
② Interlocks the operation of air-conditioning units and external devices that are connected to ALPHA2.
③ Controls air-conditioning units that are connected to M-NET.
④ Allows for the combined use of items ①-③ above.
⑤ Monitors the input/output status of ALPHA2 via a remote controller or centralized controller.

Compatible controllers

- Remote controller: PAR-U02MEDA
- Centralized controller: AE-200E, AE-50E, EW-50E

* Refer to the ALPHA2 manual for detailed information about ALPHA2.
* Use of the AHC adapter requires either a remote controller or centralized controller.

• System structure



PI Controller

PAC-YG60MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

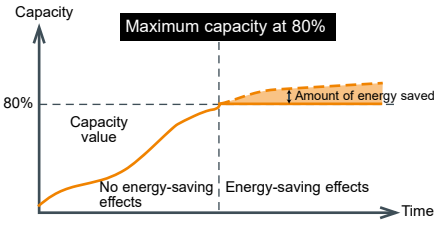
The PI controller counts pulses from a power meter, gas meter, water meter, and calorimeter.
By combining the AE-200E/AE-50E/EW-50E, the charges for each unit can be calculated and peak cut (e.g., demand control) operations can be performed.
The meters can be monitored on the AE-200E/AE-50E LCD.

Energy Saving Control (Peak Cut)

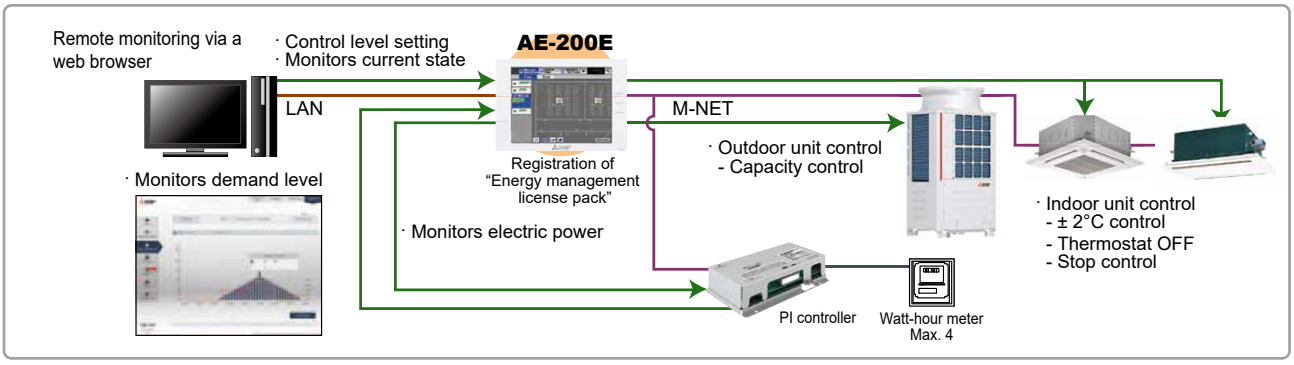
The PI controller enables energy saving control.
(Registration of the "Energy management license pack" is required.)

Energy saving is achieved by controlling the capacity of the outdoor unit.

*Note that when using energy saving control, there are no warranties for failures such as usages exceeding the contracted electricity amount.



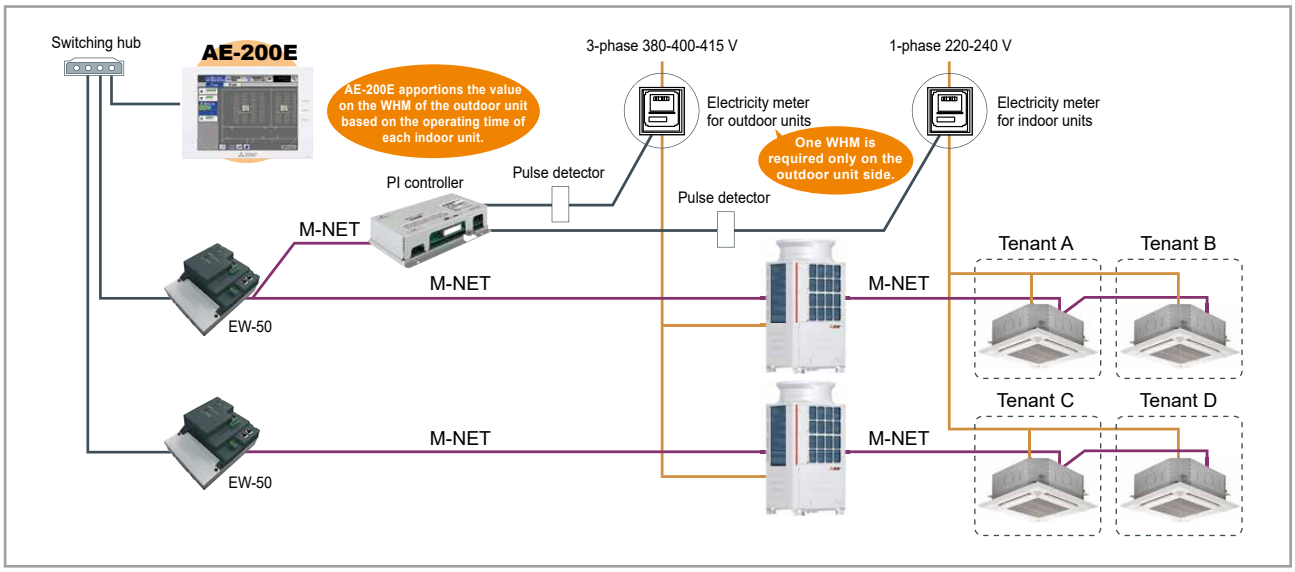
• System structure



Charge Calculation

• System structure

The charges for each tenant are calculated and output as a CSV file.



DIDO Controller

PAC-YG66DCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The DIDO controller is used in combination with an AE-200E/AE-50E/EW-50E to operate general-purpose equipment, as well as to monitor operating and error status. It is equipped with two sets of standard terminals (Channels 1 and 2), and four sets of expansion connectors for the input/output terminals.
The expansion cable is optional.
Operation can be monitored or performed from the AE-200E/AE-50E LCD. In addition, this device includes a function that interlocks M-NET devices such as indoor units, general equipment, etc.

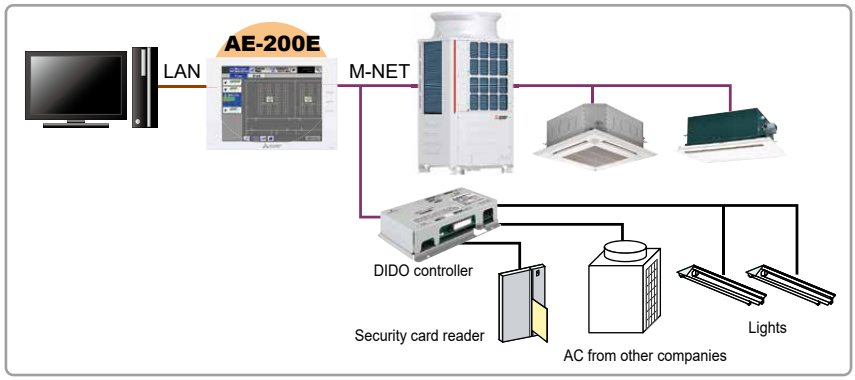
Control of general-purpose equipment

Equipment other than air conditioners (air conditioners from other companies, lights, ventilators, etc.) can be controlled and monitored.

- In addition to above, air conditioners can be interlocked with general-purpose equipment.
  E.g.: Interlock between indoor units and a security system
- Indoor units can be turned ON/OFF when the security system is activated/deactivated.

Icon display (Lights)

• System structure



AI Controller

PAC-YG63MCA

Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The AI controller measures temperature and humidity; it also has an alarm capability if the measurement data exceeds defined setpoints.
Measurement data history can be displayed only via the AE-200E/AE-50E/EW-50E web browser.
Temperature and humidity can be displayed on the AE-200E/AE-50E LCD. Furthermore, an alarm can be output if measurement data exceeds a preset upper or lower limit.
The AI controller also features a function that interlocks M-NET devices for indoor units, etc.

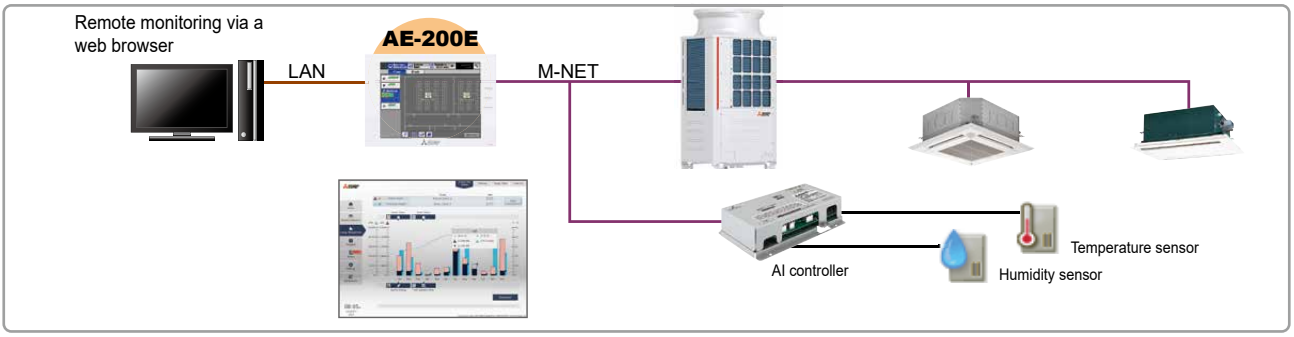
Temperature/humidity monitoring

Monitors the values measured by the temperature/humidity sensor connected to the AI controller

Temperature: Pt100, 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC
Humidity: 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC

- Measurement data trends can be displayed on a web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

• System structure



Open network supported

The following options are available to connect CITY MULTI to an open network.

- **LONWORKS®**
- **BACnet®**

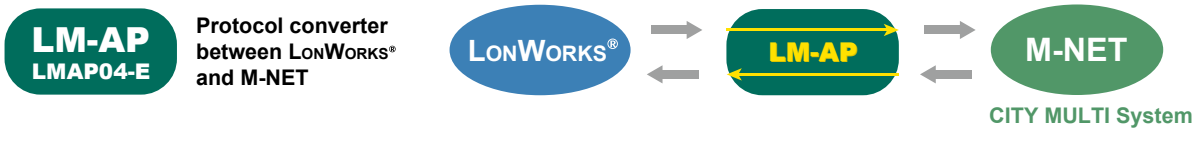
LONWORKS®

LMAP04-E

CITY MULTI can be easily combined with a Building Management System (BMS) via LONWORKS® and M-NET adapter LMAP04-E. LONWORKS® is an open transmission protocol widely used in BMS and related equipment control.
CITY MULTI is therefore compatible with large-scale BMS management via LONWORKS®.

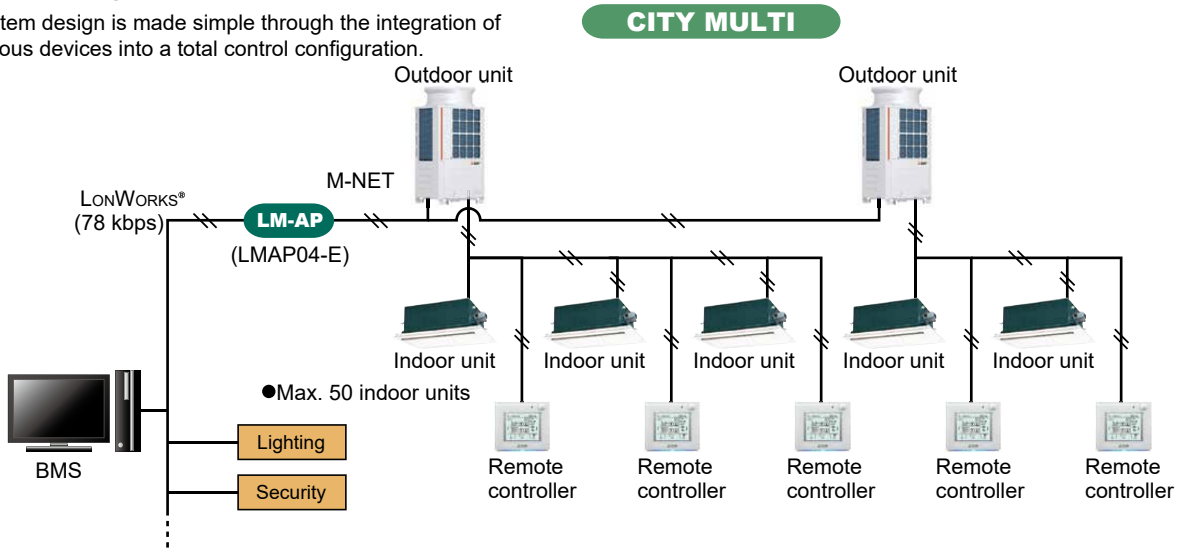
Dual Set Point

One LM adapter unit can connect up to 50 groups/50 indoor units.
Using a single LONWORKS® adapter (LM-AP), up to 50 indoor units can be connected.



System configuration example

System design is made simple through the integration of various devices into a total control configuration.



LONWORKS®
The building management system is connected to the CITY MULTI air conditioning system using LONWORKS®, which is widely used in field networks, facilitating an open network and construction savings.

• LONWORKS® INTERFACE

FUNCTION	CONTENT
Control	
ON/OFF	ON/OFF
Mode Operation	Cool/Dry/Heat/Auto/Fan
Set point Adjustment	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Fan Speed Control	High/Mid-1/Mid-2/Low
Permit/Prohibit	ON/OFF, Mode, Set point
Emergency Stop	-
Monitoring	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Set point	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Fan Speed	High/Mid-1/Mid-2/Low
Permit/Prohibit	ON/OFF, Mode, Set point
Alarm State	Normal/Error
Room Temperature	-10°C-50°C/14°F-122°F
Thermo ON/OFF	ON/OFF

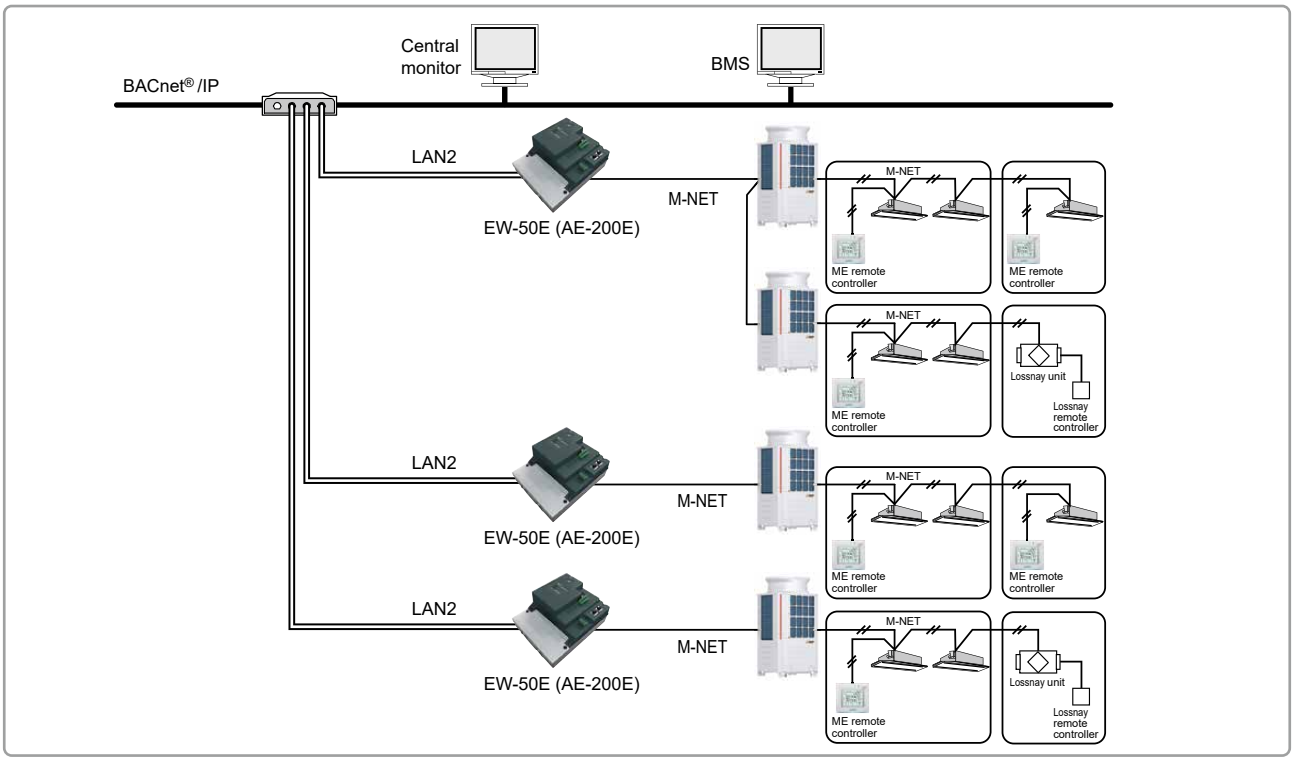
BACnet®

CITY MULTI can be easily combined with a Building Management System (BMS) via EW-50E (AE-200E). BACnet® is an open transmission protocol widely used in BMS and related equipment control. CITY MULTI is compatible with large-scale BMS management via BACnet®.

EW-50E (AE-200E) can control up to 50 units/groups (including Lossnay).

*To use the BACnet® function on EW-50E (AE-200E), BACnet® license registration is required.

• System example



• BACnet® and M-NET adapter

FUNCTION	CONTENT
Operation	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-Downblow 60%-80%-100%-Swing
Set Temperature	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Filter Sign Reset	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Forced Off	Reset/Execute
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/Heating ECO/Hot Water/ Anti-freeze/Cooling

FUNCTION	CONTENT
Monitoring	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-Downblow 60%-80%-100%-Swing
Set Temperature	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Filter Sign	ON/OFF
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Indoor Temperature	Temperature
Alarm Signal	Normal/Error
Error Code	2 Character code- Indicates all unit alarms
Error Code Detail	4 Character code- Indicates all unit alarms
Communication State	Normal/Error
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/Heating ECO/Hot Water/Anti-freeze/Cooling
Apportioned Electric Energy	Group, Interlocked Units 0.1 kWh
PI controller Electric Energy	0.1 kWh
Apportionment Parameter	Available*
Night Purge State	ON/OFF
Thermo On/Off State	ON/OFF
External Heat Source State	ON/OFF
Trend Log	Indoor Temp, Apportioned Electric Energy, PI controller Electric Energy, Apportionment Parameter

* To use this function, the license to charge, AE-200E (not connected to the M-NET), PI controller, watt-hour meter with pulse transmitter (locally available one) are required.

BACnet®/Modbus®

Product Information

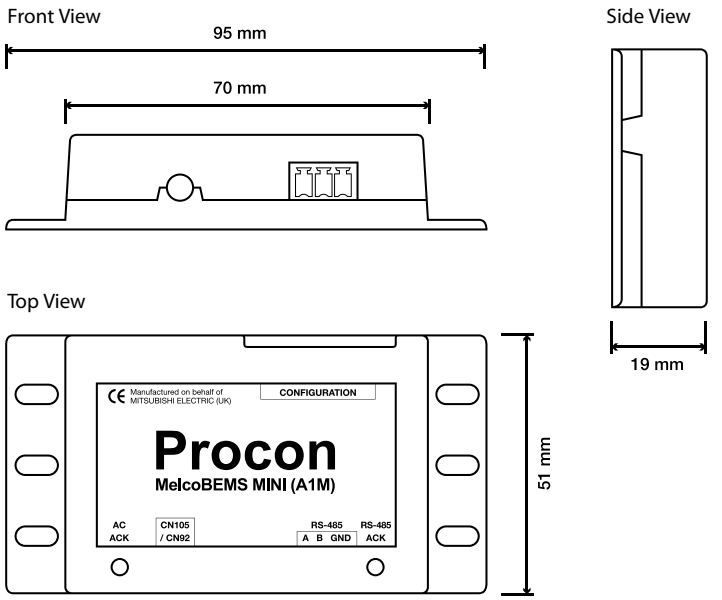
MELCOBEMS MINI
BMS Interface

Making a World of Difference

BEMS INTERFACES		MELCOBEMS MINI	
Description		Air to Air Splits Modbus/BACnet Interface. Air (Water) to Water Modbus Interface	
Connect to		Indoor	
Max Number of Units		1	
Compatibility		M Series, Mr Slim, Ecodan, Lossnay, City Multi indoors, CAHV, CRHV, QAHV	
Power Supply		-	
Dimensions (mm) (WxDxH)		70 x 19 x 50	
Network		Modbus / BACnet RS485	
BEMS Compatibility		Cylon, Satchwell, Crestron, Invensys, Interactive Homes, North BT, Andover, Siemens, WEMS, RDM	
Control		Air to Air Splits	Air (Water) to Water
	On/Off	DI	AI
	Mode	AI	AI
	Setpoint	AI	AI
	Fan Speed	AI	-
	Air Direction	AI	-
	Permit/Prohibit	x	AI
	Filter Sign	DI	-
Monitor	On/Off	DO	DO
	Mode	AO	AO
	Setpoint	AO	AO
	Fan Speed	AO	-
	Air Direction	AO	-
	Permit/Prohibit	x	AO
	Filter Sign	DO	-
	Fault Codes	AO	AO
	Room Temperature	AO	AO
	Daily kW Energy	-	AO
	Monthly kW Energy	-	AO

Key: DI = Digital Input. DO = Digital Output. AI = Analogue Input. AO = Analogue Output.

DIMENSIONS



SYSTEM DIAGRAM

Note: Power supply provided by connected Indoor unit. No additional power supply required.

Optional parts

• For CONTROL

Model	Description
PAC-SE41TS-E	Remote Sensor
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit
PAC-725AD	Remote Display Adaptor for Indoor Unit
PAC-SC37SA-E	Output signal connector for Outdoor Unit
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA-G	Transmission booster
PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-YG10HA	External input/output adapter for AE-200E

Model	Description
PAC-YG82TB	Mounting attachment for AE-200E wall-mount installations
PAC-YG84UTB	Electrical box for AE-200E wall-embed installations
PAC-YG86TK	Mounting kit for AE-200E wall-mount installations
PAC-YG72CWL	Surface cover with USB port for AE-200E

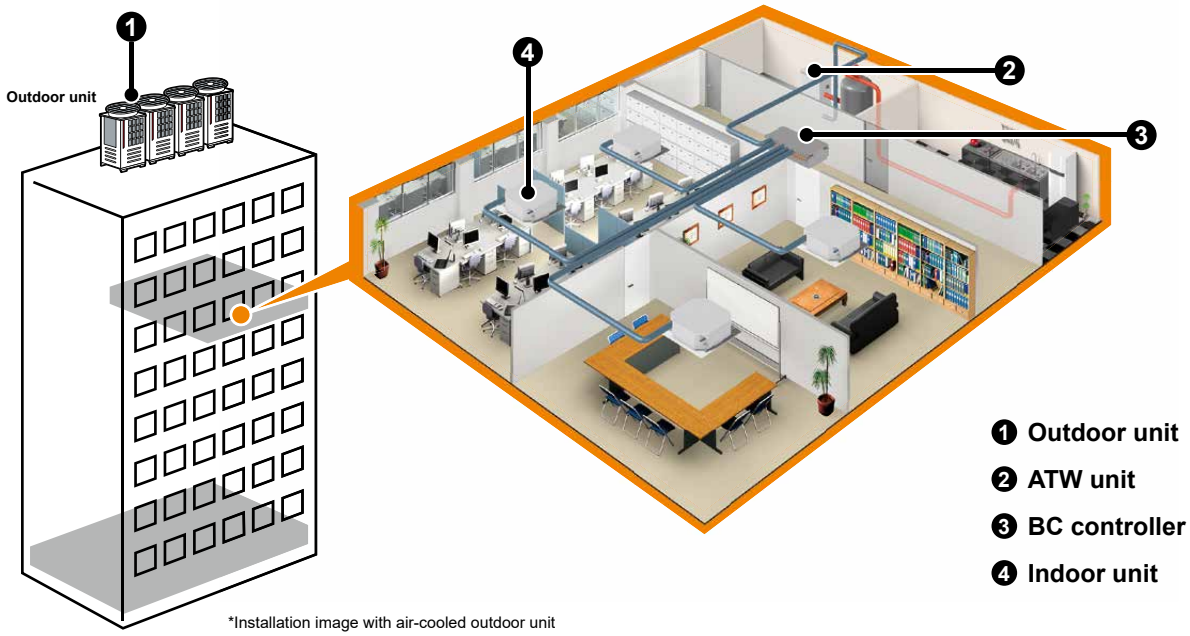
Hot Water Solution/ Air to Water Series

Air to Water Series is a system that can create cold and hot water and be used with a VRF system as with the indoor units.
It can supply hot water of up to 70ºC, and can be used in any situation, such as for showers or floor heating in homes and hotels, as well as for supplying hot water in offices and restaurants.
Using the Air to Water Series in combination with the heat recovery series (R2/WR2-Series) allows exhaust heat from the cooling operation to be used effectively to create hot water, ensuring efficient heat recovery operation.

System structure

Air to Water (ATW) Series offers a choice between two types of units: a booster unit and a HEX (heat exchanger) unit. The booster unit offers hot water to a maximum of 70°C and the HEX unit offers 40°C for heating and down to 8°C for cooling. Applying heat pump and heat recovery technology to provide hot water, the units are suitable for residences, office buildings, restaurants and hotels, providing an optimal environment with the benefits of reduced running costs and reduced impact on the environment.

The ATW system consists of an outdoor unit, a BC controller when connected with the R2-Series, an ATW unit, indoor unit and controller.



*Installation image with air-cooled outdoor unit

Lineup

Type	Booster unit		HEX unit	
Model name	PWFY-P100VM-E-BU 		PWFY-EP100VM-E1-AU 	
Applications	Sanitary water, shower, etc.		Floor heating, panel heater, fan-coil unit (AHU), etc.	
Operation	Up to 70°C		Hot water up to 40°C/Cold water down to 8°C	
Connectable to	Outdoor unit	CITY MULTI R2/WR2 Series	CITY MULTI R2/WR2 Series	CITY MULTI Y/WY Series
	BC controller	CMB-M104-1016V-J1 CMB-M108-1016V-JA1 CMB-P1016V-KA1 CMB-M104, 108V-KB1		
	WCB	CMB-PW202V-J		

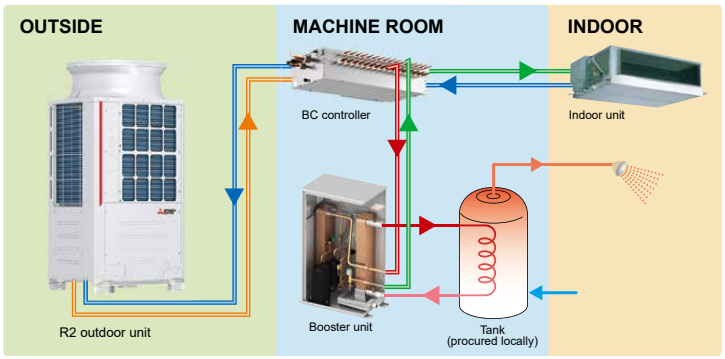
ATW Unit - Booster Unit

PWFY-P100VM-E-BU

Benefiting from the heat recovery operation of the CITY MULTI R2/WR2 system, the booster unit converts energy from the air to higher temperatures suitable for supplying hot water with virtually no wasted energy.

Connectable to	Applications	Operation
CITY MULTI R2/WR2 Series	Sanitary water, shower, etc.	Up to 70°C

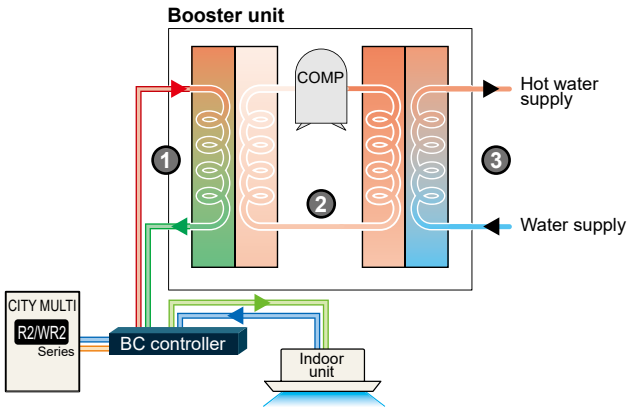
• System outline



The booster unit is connected to a BC controller with refrigerant pipes and to the water tank with water pipes. The waste heat from cooling operation is utilized in the heating operation for providing hot water.

Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

What makes the booster unit unique?



Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
Green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

Refrigerant flow

1 From the BC controller, high pressure R410A gas refrigerant is delivered to the Booster unit to exchange heat with the low pressure R134a liquid refrigerant circulating through 2 and returns to the BC controller as a high pressure liquid refrigerant.

2 Refrigerant R134a circulates inside the two plate heat exchangers inside the unit.
Temperature rises as low pressure R134a gas refrigerant is compressed by the compressor and becomes a high pressure gas refrigerant.

Water supply

3 Water entering the Booster unit exchanges heat with high pressure R134a gas refrigerant. The hot water circulates to heat the water inside the tank, to be used for showers, sanitary water, etc.

ATW Unit - HEX Unit

PWFY-EP100VM-E1-AU

By utilizing waste heat from the R2/WR2 Series for heating operation in the HEX unit, hot water can be supplied highly efficiently. Also, when connected with the Y/WY Series, it provides higher efficiency operation compared to a conventional system.

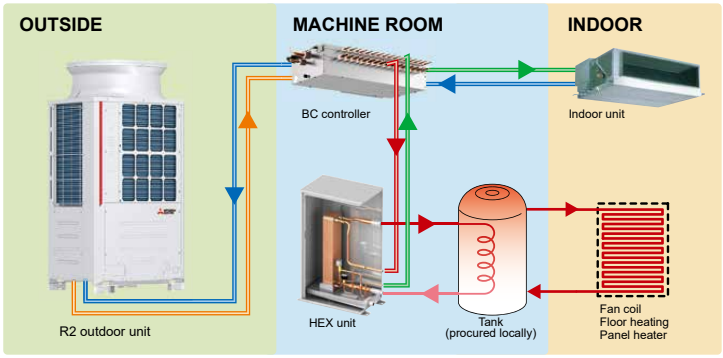
Connectable to
CITY MULTI R2/WR2/ Y/WY Series

Applications
Floor heating, panel heater, fan-coil unit (AHU), etc.

Operation
Hot water up to 40°C
Cold water down to 8°C*

*8°C indicates the outlet water temperature.
To use the 8°C water, set the inlet water temperature to 10°C on the remote controller.

• System outline of the HEX unit with R2-Series



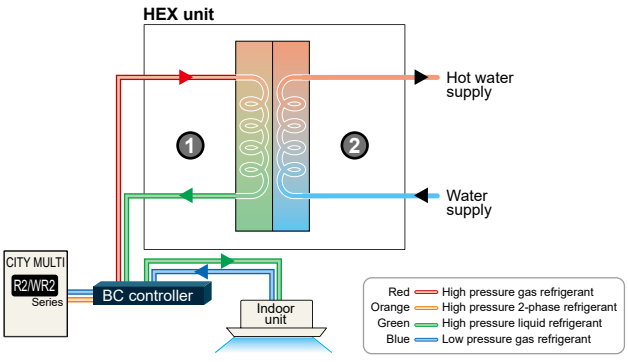
The HEX unit is connected to BC controller with refrigerant pipes and to the water tank with water pipes. It is not equipped with a compressor.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
Green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

*The image shows a system example for the heating mode.
*The necessity of the tank depends on the system configuration.

What makes the HEX unit unique with the R2/WR2 Series?

Hot water supply



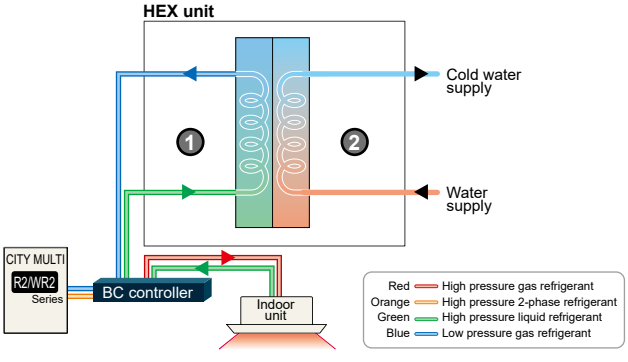
Refrigerant flow

1 From the BC controller, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as high pressure liquid refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and circulates to heat the water inside the tank.

Cold water supply



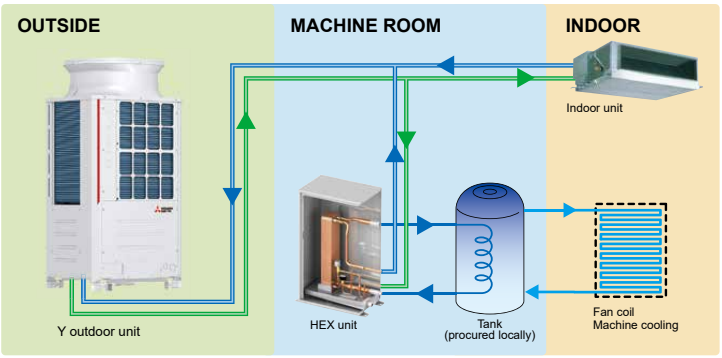
Refrigerant flow

1 From the BC controller, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and circulates to cool the water inside the tank.

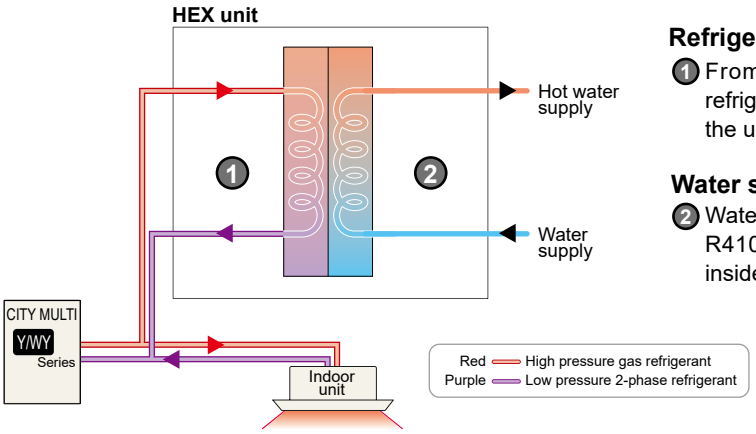
• System outline of the HEX unit with Y-Series



The HEX unit is connected to the Y outdoor unit with refrigerant pipes and to the water tank with water pipes. It is not equipped with a compressor.

What makes the HEX unit unique with the Y/WY Series?

Hot water supply



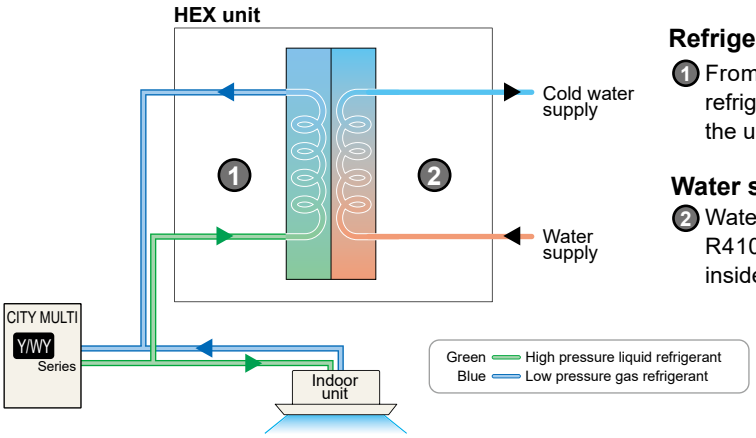
Refrigerant flow

1 From the outdoor unit, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as low pressure 2-phase refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and circulates to heat the water inside the tank.

Cold water supply



Refrigerant flow

1 From the outdoor unit, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and circulates to cool the water inside the tank.

BC Controller

CMB-M/P104-1016V-J(1)
CMB-M/P108-1016V-JA(1)
CMB-P1016V-KA(1)
CMB-M/P104, 108V-KB(1)

To connect the R2/WR2 Series outdoor units and ATW indoor units, a BC controller is required.

		BC controller
Model		CMB-M104-1016V-J1 CMB-M108-1016V-JA1 CMB-P1016V-KA1 CMB-M104, 108V-KB1
Connectable ATW system		Booster/HEX
Outdoor unit	Connectable series	R2/WR2
	Connectable capacity	P200-P1100
ATW/ Indoor unit	Connectable quantity	1-50
	Connection method	With a BC port
	Operation mode	Cooling AND heating
Product image		 *Product images are J1/JA1/KA1/KB1 models.

Note: ATW indoor units cannot be connected to HBC controller.

APPLICATION EXAMPLE

The application examples here indicate why ATW systems are chosen and how the great potential offered by using ATW systems can be best utilized.

RESTAURANTS

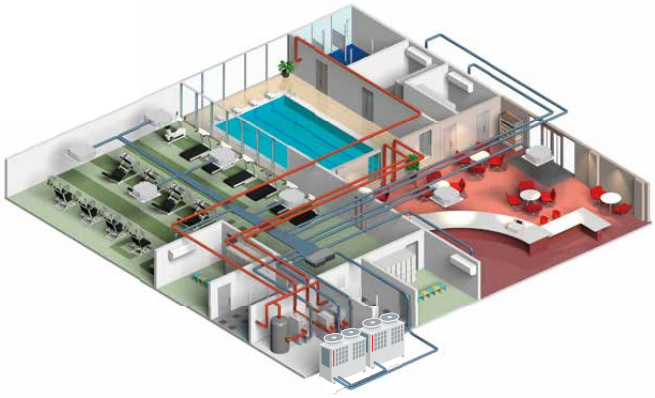
Reason for ATW

>Hot water is almost always required in the kitchen.
>Waste heat from the kitchen can be used to cool the dining hall in the summer and increase efficiency of the system.

HEALTH CLUBS

Reason for ATW

>Gym space requires year-round cooling.
>Swimming pools and shower rooms require hot water.



OFFICES

Reason for ATW

>Different requirements for different tenants/rooms mean cooling/heating/hot water is expected throughout the year.
>In the winter, waste heat from the cooling operation in rooms with large numbers of computers can be used for hot water in small kitchens.
>In the summer, cooling operation can be performed in all rooms while hot water is available in small kitchens.

RESIDENCES

Reason for ATW

>Hot water is required throughout the year for the shower and kitchen.
>Can be used for under floor heating in winter and cooling in summer.

Booster unit

PWFY-P100VM-E-BU

Model			PWFY-P100VM-E-BU
Power source			1 - phase 220 - 230 - 240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5
	*1	kcal / h	10,800
	*1	BTU / h	42,700
	Power input	kW	2.48
	Current input	A	11.63 - 11.12 - 10.66
Temp. range of heating	Outdoor unit/Heat source unit condition	W.B.	-20 ~ 32°C (-4~90°F) R2-Series
		-	10 ~ 45°C (50~113°F) WR2-Series
	Booster unit inlet water temp.	-	10 ~ 70°C (50 ~ 158°F)
Connectable outdoor unit/ heat source unit	Total capacity		50 ~ 100% of outdoor unit/heat source unit capacity
	Model / Quantity		PURY-(E)P•Y(S)NW-A1(-BS), PQRY-P•Y(S)LM-A1
Sound pressure level (measured in anechoic room)		dB <A>	44
Diameter of refrigerant pipe	Liquid	mm (in.)	ø9.52 (ø3/8") Brazed
	Gas	mm (in.)	ø15.88 (ø5/8") Brazed
Diameter of water pipe	Inlet	mm (in.)	R3/4
	Outlet	mm (in.)	Rc3/4
Field drain pipe size		mm (in.)	ø32 (1-1/4")
External finish			NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg (lbs)	59 (131)
Compressor	Type		Inverter rotary hermetic compressor
	Starting method		Inverter
	Motor output	kW	1.0
	Lubricant		NEO22
Circulating water	Operation volume Range	m^3 / h	0.6 ~ 2.15
Protection on internal circuit (R134a)	High pressure protection		High pressure sensor, High pressure switch at 3.60 MPa (601 psi)
	Inverter circuit (COMP)		Over-heat protection, Over-current protection
	Compressor		Discharge thermo protection, Over-current protection
Refrigerant	Type × original charge	*2	R134a × 1.1kg (0.50lb)
	GWP	*3	1,430
	CO_2 equivalent *3	t	1.6
	Control		LEV
Design pressure	R410A	MPa	4.15
	R134a	MPa	3.60
	Water	MPa	1.00
Drawing	External		WKB94L762
	Wiring		WKE94C229
Standard attachment	Document		Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, Wire x 1 set
Optional parts			NONE
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Note: *1Nominal heating conditions

<R2-Series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp. 65°C (149°F) Water flow rate 2.15m^3/h

<WR2-Series>
Inlet water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp. (for PWFY side) 65°C (149°F) Water flow rate 2.15m^3/h

*2Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

*3These values are based on Regulation (EU) No.517/2014.

Unit converter

BTU / h =kW × 3,412
cfm =m^3 / min × 35.31
lbs =kg / 0.4536

* The specification data is subject to rounding variation.

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the Outdoor unit (R2-Series) in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

HEX unit
Solenoid valve is not installed

PWFY-EP100VM-E1-AU

Model			PWFY-EP100VM-E1-AU
Power source			1 - phase 220 - 230 - 240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5
	*1	kcal / h	10,800
	*1	BTU / h	42,700
	Power input	kW	0.015
	Current input	A	0.068 - 0.065 - 0.063
Temp. range of heating	Outdoor temp.	W.B.	-20 ~ 32°C (-4 ~ 90°F) R2-Series
	for outdoor unit	W.B.	-20 ~ 15.5°C (-4 ~ 60°F) Y-Series
	Inlet Water temp.	-	10 ~ 45°C (50 ~ 113°F) WR2-Series
	for heat source unit	-	10 ~ 45°C (50 ~ 113°F) WY-Series
	Inlet Water temp. for PWFY	-	10 ~ 40°C (50~104°F) R2/Y/WR2/WY-Series
Cooling capacity (Nominal)	*2	kW	11.2
	*2	kcal / h	9,600
	*2	BTU / h	38,200
	Power input	kW	0.015
	Current input	A	0.068 - 0.065 - 0.063
Temp. range of cooling	Outdoor temp.	D.B.	-5 ~ 46°C (23 ~ 115°F) R2-Series
	for outdoor unit	D.B.	-5 ~ 46°C (23 ~ 115°F) Y-Series
	Inlet Water temp.	-	10 ~ 45°C (50 ~ 113°F) WR2-Series
	for heat source unit	-	10 ~ 45°C (50 ~ 113°F) WY-Series
	Inlet Water temp. for PWFY	-	10 ~ 35°C (50 ~ 95°F)
Connectable outdoor unit/ heat source unit	Total capacity		50~100% of outdoor/heat source unit capacity
	Model / Quantity		PUHY-P•Y(S)NW-A1(-BS), PUHY-EP•Y(S)NW-A1(-BS), PQHY-P•Y(S)LM-A1, PURY-(E)P•Y(S)NW-A1(-BS), PQRY-P•Y(S)LM-A1
Sound pressure level (measured in anechoic room)		dB <A>	29
Diameter of refrigerant pipe	Liquid	mm (in.)	ø9.52 (ø3/8") Brazed
	Gas	mm (in.)	ø15.88 (ø5/8") Brazed
Diameter of water pipe	Inlet	mm (in.)	R1 (R3/4 without expansion joint)
	Outlet	mm (in.)	Rc1 (Rc3/4 without expansion joint)
Field drain pipe size		mm (in.)	ø32 (1-1/4")
External finish			NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg (lbs)	33 (73)
Circulating water	Operation Volume Range	m^3 / h	1.8 ~ 4.30
Design pressure	R410A	MPa	4.15
	Water	MPa	1.00
Drawing	External		WKJ94T340
	Wiring		WKE94C951
Standard attachment	Document		Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, Expansion joint, Flow switch × 1 set, Buffer material
Optional parts			Solenoid valve kit: PAC-SV01PW-E
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Note: *1Nominal heating conditions (PWFY conditions are indicated in the parentheses.)

<Y/R2-Series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
(Inlet water Temp. 30°C (87°F), Water flow rate 4.30m^3/h)

<WY/WR2-Series>
Inlet water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
(Inlet water Temp. for PWFY side 30°C (87°F), Water flow rate 4.30m^3/h)

*2Nominal cooling conditions (PWFY conditions are indicated in the parentheses.)

<Y/R2-Series>
Outdoor Temp. : 35°CDB (95°FDB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
(Inlet water Temp. 23°C (73°F), Water flow rate 3.86m^3/h)

<WY/WR2-Series>
Inlet water Temp. : 30°C (86°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
(Inlet water Temp. for PWFY side 23°C (73°F), Water flow rate 3.86m^3/h)

Unit converter

BTU / h =kW × 3,412
cfm =m^3 / min × 35.31
lbs =kg / 0.4536

* The specification data is subject to rounding variation.

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use ground water and well water.
* Install the outdoor unit (R2-Series) in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

Remote Controller

PAR-W21MAA

○ : Each group × : Not available

Item	Description	Operations	Display
ON / OFF	ON and OFF the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Heating 30°C ~ 50°C (87°F ~ 122°F) Heating ECO 30°C ~ 45°C (87°F ~ 113°F) Hot Water 30°C ~ 70°C (87°F ~ 158°F) Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Cooling 10°C ~ 30°C (50°F ~ 87°F) • The settable range varies depending on the unit to be connected.	○	○
Preset temperature range limit	Preset temperature range setting can be limited via a remote controller.	○	○
Water temperature display	10°C ~ 90°C (50°F ~ 194°F) (in increments of 1°C or 1°F) • The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function : ON / OFF, Operation modes, water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	×	○
Schedule operation	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	×	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
Circulating water replacement warning	Displays the circulating water replacement warning via the unit message. Clears the display by pressing the CIR.WATER button twice. * Circulating water replacement warning is not available depending on the unit to be connected.	○	○
Operation locking function	Remote controller operation can be locked or unlocked. • All-switch locking • Locking except ON / OFF switch	○	○

Centralized Controller

AE-200E
AE-50E
EW-50E

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable unit	Up to 50 units / 50 groups “Up to 200 units / 200 groups via expansion controllers”		
ON / OFF	ON and OFF the operation of a group of units	○ ◎ △ ●	○ ◎
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○ ◎ △ ●	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) [Booster unit]* [Water HEX unit]* Heating 30°C ~ 50°C (87°F ~ 122°F) Heating 30°C ~ 45°C (87°F ~ 113°F) Heating ECO** Invalid Heating ECO** Invalid Hot Water 30°C ~ 70°C (87°F ~ 158°F) Hot Wate Invalid Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Cooling Invalid Cooling 10°C ~ 30°C (50°F ~ 87°F) • The settable range varies depending on the unit to be connected. * “Air To Water” on the AE-200E screen indicates Booster unit group and Water HEX unit group. ** The temperature is controlled automatically in the Heating ECO. The user cannot change the temperature settings.	○ ◎ △ ●	○
Water temperature display	10°C ~ 90°C (50°F ~ 194°F) (in increments of 1°C or 1°F) • The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON / OFF, Change operation mode, Set temperature).	○ ◎ △ ●	○
Schedule operation	Group is the smallest unit to which a weekly schedule can be assigned. The same schedule can be applied collectively, or to each group, groups in a block, or groups on a floor. • Up to 24 events can be scheduled for each day. • “ON/OFF”, “Operation mode”, “Temperature Setting”, and "Permit / Prohibit local operation" can be scheduled. • Five types of weekly schedule patterns (summer and winter) are available. • Five operation patterns (A-E) can be set for each year, up to 50 days can be allocated to each pattern.	○ ◎ △ ●	○
Error display	When an error is currently occurring on an unit, the afflicted unit and the error code are displayed.	×	□ ◎
Test run	This operates air conditioner units in test run mode.	○ ◎ △ ●	○
External input / output	By using optional external input / output adaptor (PAC-YG10HA) you can set and monitor the following. Input : By level signal : “Batch ON / OFF”, “Batch emergency stop” By pulse signal : “Batch ON / OFF”, “Enable / disable local remote controller” Output : “ON / OFF”, “Error / Normal”	◎	◎

Note: Operation and displayed content vary depending on the indoor unit model.
EW-50E can be operated and monitored only from the Integrated Centralized Control Web.
However, when EW-50E is used as an expansion controller of AE-200E, EW-50E can be operated and monitored via AE-200E.

Advanced touch controller

AT-50B

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable unit	Up to 50 units / 50 groups of units		
ON / OFF	ON and OFF operation of a group of units. Even when only a single ATW unit or indoor unit is operated in the system, the advanced touch controller will operate and collective ON/OFF lamp will light up.	○ ◎	○ ◎
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected.	○ ◎	○ ×
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) [Booster unit] [Water HEX unit] Heating 30°C ~ 50°C (87°F ~ 122°F) Heating 30°C ~ 45°C (87°F ~ 113°F) Heating ECO* 30°C ~ 45°C (87°F ~ 113°F) Heating ECO* 30°C ~ 45°C (87°F ~ 113°F) Hot Water 30°C ~ 70°C (87°F ~ 158°F) Hot Water Invalid Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Anti-freeze 10°C ~ 45°C (50°F ~ 113°F) Cooling Invali Cooling 10°C ~ 30°C (50°F ~ 87°F) • The settable range varies depending on the unit to be connected. * The temperature is controlled automatically in the Heating ECO mode. The user cannot change the temperature settings.	○ ◎	○ ×
Water temperature display	10°C ~ 90°C (50°F ~ 194°F) (in increments of 1°C or 1°F)	×	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start / Stop, Change operation mode, Set temperature, Circulating water replacement warming reset).	○ ◎	○ ×
Schedule operation	Weekly schedule setting up to 12 patterns is available. In one pattern, up to 16 settings of "ON / OFF", "Operation mode", “Temperature Setting”, and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule patterns (summer and winter) are available. Today's schedule setting up to 5 patterns in available. * Time setting unit: 5 minutes / unit	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON / OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□ ◎

Optional Parts

Description	Model	Applicable system
Solenoid valve kit	PAC-SV01PW-E	Y or WY* + PWFY-EP100VM-E1-AU + Indoor Unit

*Solenoid valve kit will be used only when operating the WY at the water temperature below 10°C (50°F).

Note:

When you intend to adopt PWFY-EP100VM-E1-AU with above system configuration, you may need to use optional part (PAC-SV01PW-E).
Please contact your Mitsubishi Electric sales office for details.

Model			PAC-SV01PW-E
Power source			1 - phase 220 - 230 - 240V 50 / 60Hz
Diameter of refrigerant pipe	Applicable models		PWFY-EP100VM-E1-AU
	Liquid	mm (in.)	ø15.88
	Gas	mm (in.)	ø9.52
External dimension H × W × D		mm	462 × 320 × 207
		in.	18-1/4" × 12-5/8" × 8-3/16"
Net weight		kg (lbs)	8.5 (19)
Drawing	External		WKD94T532
Standard attachment	Document		Installation Manual
	Accessory		Specification label, Refrigerant conn.pipe, Strainer, Flow switch

QAHV Hot Water Heat Pump Series

As a leading manufacturer of air-to-water heat pumps, Mitsubishi Electric have developed QAHV; the latest innovation in their comprehensive lineup of Hot Water Heat Pump products. QAHV has been specifically designed to produce high volume hot water and is suitable for commercial and industrial applications where hot water demand is high. By adopting Mitsubishi Electric's unique technology, QAHV ensures highly reliable performance as well as high heating capacity even at low outdoor temperatures.

Ideal Applications

- ✔ Gyms
- ✔ Hotels
- ✔ Motels
- ✔ Aged Care Facilities
- ✔ Schools
- ✔ Universities

Main Features of QAHV

- Utilises natural refrigerant (CO_2)
- High efficiency (Achieved COP 3.88*)
- Supplies high temperature hot water of up to 90°C
- Operable even at low outdoor temperature of -25°C

Increased Energy Savings

Unique to Mitsubishi Electric, QAHV utilises a twisted and spiral gas cooler. Using twisted pipes as water pipes and running the refrigerant pipes along their grooves helps to increase the heat-conductive area; allowing for better heat transfer and an impressive COP of 3.88*. The continuous spiral groove design accelerates the turbulence effect of water and helps to reduce pressure loss within the heat exchanger, enhancing efficiency. Equipped with the latest inverter scroll compressor, QAHV offers unparalleled efficiency when compared to fixed speed systems.

Superior Heating Performance in Low Temperatures

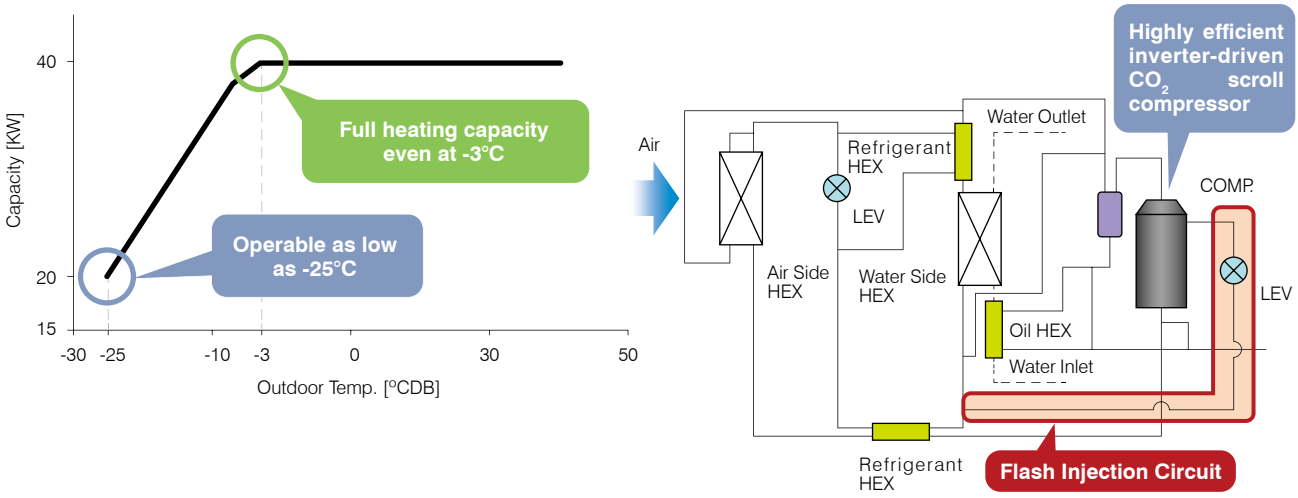
QAHV is able to provide its full heating capacity of 40kW even at ambient temperatures as low as -3°C. Furthermore, the unit operates to supply 90°C hot water in ambient temperatures as low as -25°C. This superior level of performance is achieved using Mitsubishi Electric's industry-first Flash Injection Circuit which provides the optimum amount of refrigerant to the system via a compressor through a specially designed injection port, ensuring highly stable operation.

Why is CO_2 Refrigerant Used?

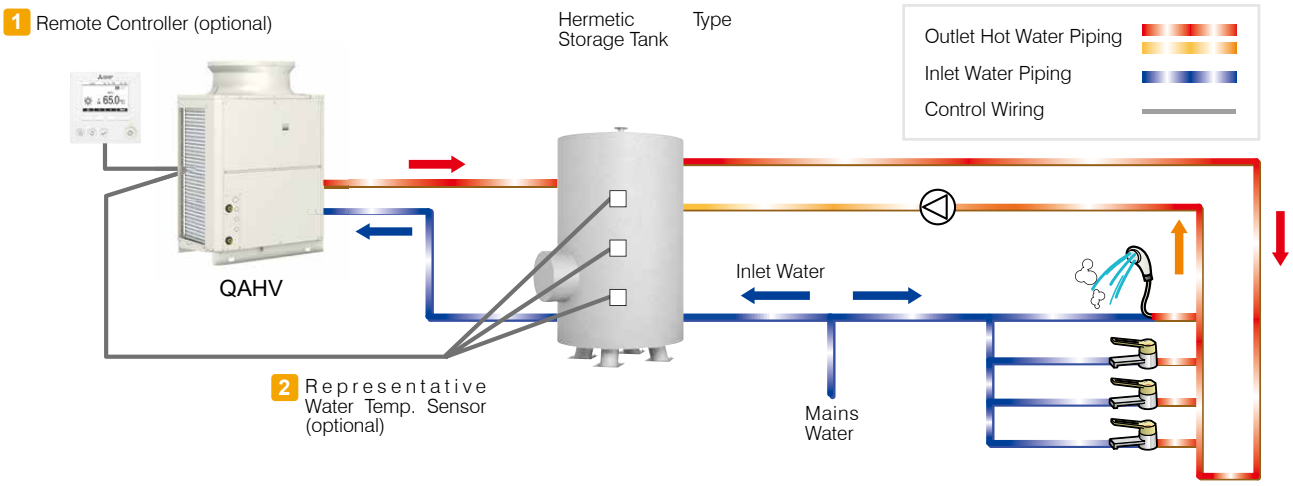
QAHV adopts CO2 (R744) as it is an environmentally-friendly, natural refrigerant which has zero Ozone Depletion Potential (ODP) and has a Global Warming Potential (GWP) of 1.

*Under normal heating conditions at outdoor temp:16°CDB/12°CWB, inlet water temp 17°C, outlet water temp 65°C

Stable Heating Capacity Even at Low Temperatures

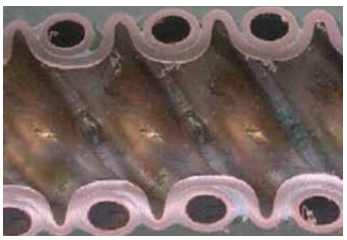


QAHV System Schematic Image



Mitsubishi Electric Patented Twisted and Spiral Gas Cooler

Twisted water pipe with the refrigerant pipe spiralled around it



Cut section detail

Using twist pipes as water pipes and running the refrigerant pipes along their grooves helps to increase the heat-conductive area, allowing for better heat transfer.

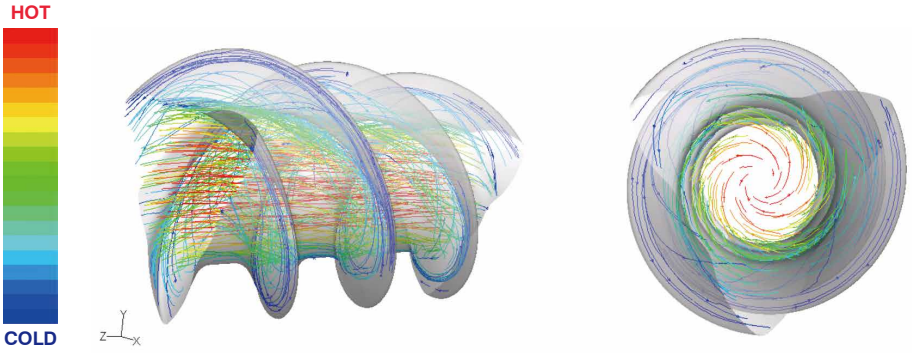
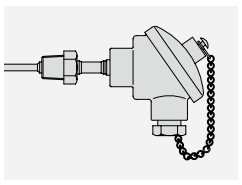


Illustration showing water flow and water temperature distribution

			QAHV-N560YA-HPB
Power Source			3-phase 4-wire 380-400-415V 50Hz
Capacity *1		kW	40
		Btu/h	136480
	Power Input	kW	10.31
	Current Input	A	17.8-16.9-16.3
	COP(kW/kW)		3.88
Capacity *2		kW	40
		Btu/h	136480
	Power Input	kW	10.97
	Current Input	A	20.0-19.0-18.3
	COP(kW/kW)		3.65
Capacity *3		kW	40
		Btu/h	136480
	Power Input	kW	11.6
	Current Input	A	20.4-19.4-18.7
	COP(kW/kW)		3.44
Maximum Current Input *4		A	28.8-27.4-26.4
Allowable External Pump Head			77kPa
Temperature Range	Outlet Water Temp		55–90°C
	Outdoor Temp	D.B.	-25~43°C
Sound Pressure Level (measured 1m below the unit in an anechoic room) *1		dB(A)	56
Water Pipe Diameter and Type	Inlet	mm(in.)	19.05(Rc 3/4"), screw pipe
	Outlet	mm(in.)	19.05(Rc 3/4"), screw pipe
External Finish			Acrylic painted steel plate <MUNSELL 5Y 8/1 or similar>
External Dimension H x W x D		mm	1837(1777 not including legs) x 1220 x 760
Net Weight		kg(lbs)	400(882)
Design Pressure	R744	MPa	14
	Water	MPa	1.0
Heat Exchanger	Water-side		Copper tube coil
	Air-side		Plate fin and copper tube
Compressor	Type		Inverter scroll hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Motor Output	kW	11.0
	Case Heater	kW	0.045
FAN	Air Flow Rate	m3/min	220
		L/s	3666
	Type x Quantity		Propeller fan
	Control, Driving Mechanism		Inverter-control, Direct-driven by motor
	Motor Output	kW	0.92
HIC (HIC: Heat inter-changer) Circuit			Copper pipe
Protection	High Pressure Protection		High pres.Sensor & High pres. Switch at 14MPa(643psi)
	Inverter Circuit		Overheat and overcurrent protection
	Compressor		Overheat protection
	Fan Motor		Thermal switch
Defrosting Method			Auto-defrost mode (Hot gas)
Refrigerant	Type x Original Charge		CO_2 (R744) 6.5kg

Optional Parts

Remote Controller
PAR-W31MAA-J



Representative Water Temperature Sensor
TW-TH16-E

Notes:

*1.Under Normal heating conditions at the outdoor temp, 16°CDB/12°CWB(60.8°FDB/53.6°FWB), the outlet water temperature 65°C(149°F), and the inlet water temperature 17°C(62.6°F)

*2.Under Normal heating conditions at the outdoor temp, 7°CDB/6°CWB(44.6°FDB/42.8°FWB), the outlet water temperature 65°C(149°F), and the inlet water temperature 9°C(48.2°F)

*3.Under Normal heating conditions at the outdoor temp, 7°CDB/6°CWB(44.6°FDB/42.8°FWB), the outlet water temperature 65°C(149°F), and the inlet water temperature 15°C(59.0°F)

*4.Under Normal heating conditions at the outdoor temp, 7°CDB/6°CWB(44.6°FDB/42.8°FWB), when the unit is set to the "Capacity Priority" mode through the dry NC-contact.

*Due to continuing improvements, specifications may be subject to change without notice

*Do not use steel pipes as water pipes.

*Keep the water circulated at all times. Blow the water out of the pipes if the unit will not be used for an extended period time.

*Do not use ground water or well water

*Do not install the unit in an environment where the wet bulb temperature exceeds 32°C

*The water circuit must use the closed circuit

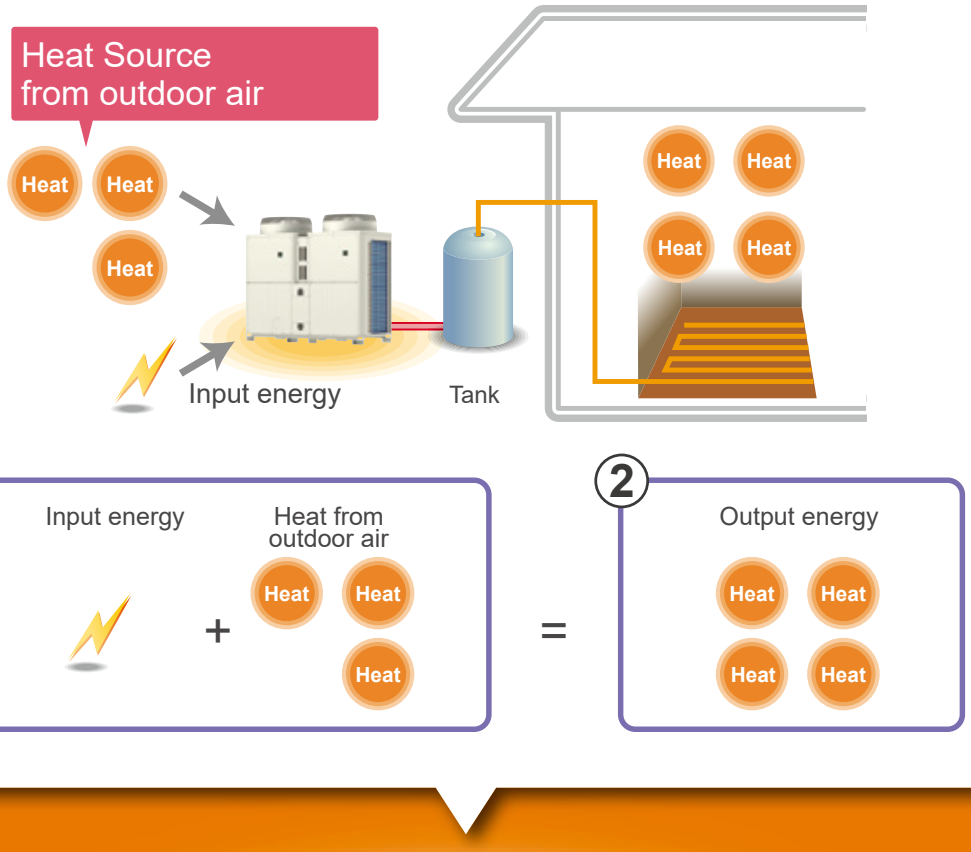
*There is a possibility that the unit may abnormally stop when it operates outside its operating range. Provide backup (ex. boiler start with error display output signal (blue CN511 1-3)) for abnormal stop.

UNIT CONVERTER
BTU/h = kW x 3,412
lbs = kg/0.4536

Air Source Heat Pump

CAHV-P500YB-HPB

Heat Pump System



70°C High temperature COP Over 4*

*COP 4.13
Outdoor temp.: 7°C DB/ 6°C WB
Outlet water temp.: 35°C

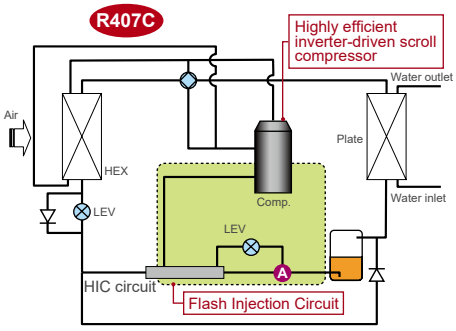
A "Flash Injection Circuit," which is designed for our ZUBADAN CITY MULTI air conditioning system for cold regions, is incorporated in our new hot water heat pump. Through utilizing this advanced "Flash Injection Circuit" and the latest high-efficiency compressor, the hot water heat pump is able to provide hot water of 70°C with the use of R407C and with better retention of capacity at low outdoor temperatures.

Built-in inverter-driven scroll compressor

Highly efficient

Flash Injection Circuit

High performance even at low outdoor temp



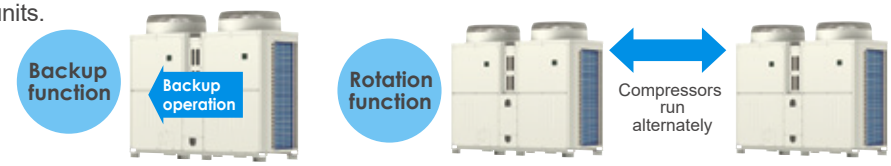
Two-phase refrigerant is separated into liquid refrigerant and gas refrigerant at the point of A.
Liquid refrigerant, whose pressure is reduced by the linear expansion valve (LEV), exchanges heat in the HIC circuit and become gas-liquid two-phase refrigerant. This two-phase refrigerant flows into the injection port in the compressor for controlling the increase of the discharge temperature. Therefore the optimal amount of refrigerant can be provided to the system via the compressor, which makes it possible to provide hot water of 70 °C.

Backup function

Rotation function

The hot water heat pump ensures an exceptionally high level of reliability through a backup function.* If either of the compressors malfunctions, the other compressor maintains operation to avoid a complete stop of the system.
A rotation function is also available. When two or more units are in the system, the unit runs alternately, ensuring an optimum product lifecycle for both component units.

*If the main circuit board malfunctions, the backup function and rotation function are not available.
*Capacity drops by 50%.

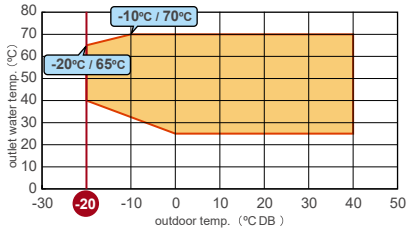


Depending on settings, the rotation function is available for units.

Operable even at -20°C

The hot water heat pump can be operated at outdoor temp. between -20°C and 40°C.
It delivers precise comfort even on the coldest days of the year.

Range of operation temperature and outlet water temperature



During defrosting, two compressors, which are equipped within one unit, run alternately resulting in less drop in outlet water temperature.

51dB(A)* Low sound pressure level

Lower sound pressure levels have been achieved thanks to the development of a new fan.

*Based on theoretical calculations for a distance of 10m.

Wide variety of external input/output

Various system configurations are available.
· Two external output for backup heater
· Analog input to control capacity
· Defrost signal

* Refer to the Data Book for other functions.

60Pa External static pressure

Ducting can be connected to the inlet or outlet of the outdoor unit.
Either "60 Pa" or "0 Pa" can be selected. * The factory setting is "0 Pa."

Support for open network

With the CRHV model, now allowing connection of an IT terminal, the connection to the open network is now possible.
It will allow energy monitoring for the entire building including air conditioners and other electric appliances.
It is also possible to control the water temperature and capacity of the CRHV model.

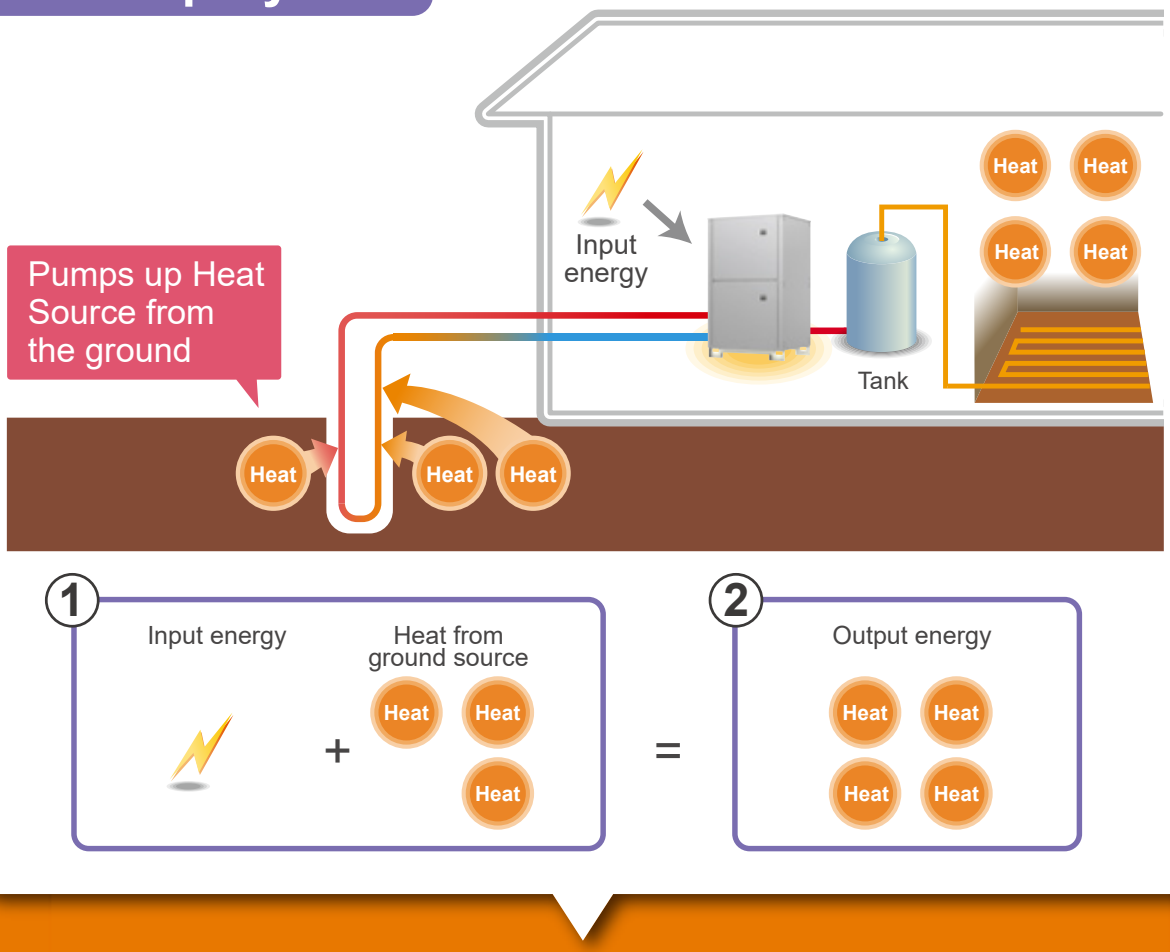
Other features

· The system is equipped with **"Efficiency Priority Mode"** and **"Capacity Priority Mode."** "Capacity Priority Mode" is more effective when used with a boiler because the boiler's fuel cost and CO_2 emissions can be reduced.

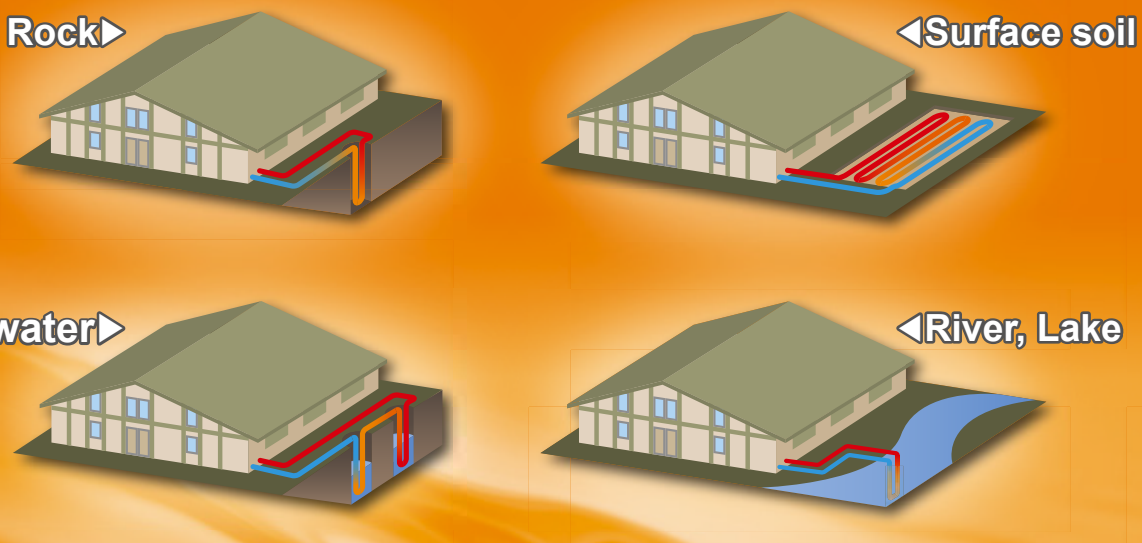
Ground Source Heat Pump

CRHV-P600YA-HPB

Heat Pump System

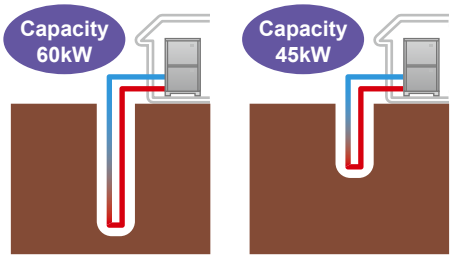


Heat Sources



Support for system renewal

Since the CRHV model is inverter-controlled, the unit-side capacity can be adjusted to suit the existing bore hole heat quantity (demand control).



65°C High temperature

SCOP Over 4*

*SCOP 4.33
Brine outlet temp.: -3°C
Outlet water temp.: 35°C

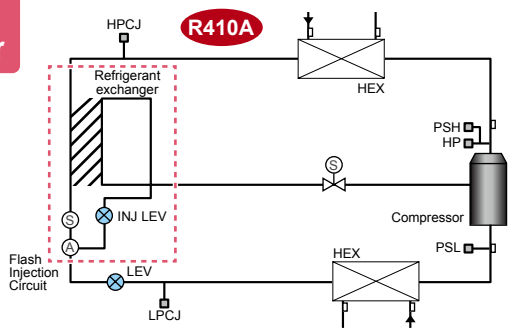
A "Flash Injection Circuit," which is designed for our ZUBADAN CITY MULTI air conditioning system for cold regions, is incorporated in our new hot water heat pump. Through utilizing this advanced "Flash Injection Circuit" and the latest high-efficiency compressor, the hot water heat pump is able to provide hot water of 65°C with the use of R410A, and with better retention of capacity at low outdoor temperatures.

Built-in inverter-driven scroll compressor

Highly efficient

Flash Injection Circuit

High performance even at low water temp.



Two-phase refrigerant is separated into liquid refrigerant and gas refrigerant at the point of Ⓐ.
Liquid refrigerant, whose pressure is reduced by the linear expansion valve (LEV), exchanges heat in the HIC circuit and become gas-liquid two-phase refrigerant. This two-phase refrigerant flows into the injection port in the compressor for controlling the increase of the discharge temperature. Therefore the optimal amount of refrigerant can be provided to the system via the compressor, which makes it possible to provide hot water of 65 °C.

Backup function

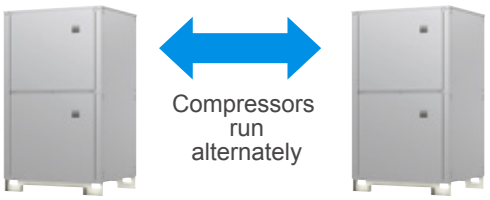
Rotation function

The hot water heat pump ensures an exceptionally high level of reliability through a backup function.* If either of the compressors malfunctions, the other compressor maintains operation to avoid a complete stop of the system.
A rotation function is also available. When two or more units are in the system, the unit runs alternately, ensuring an optimum product lifecycle for both component units.

*If the main circuit board malfunctions, the backup function and rotation function are not available. *Capacity drops by 50%.

Backup function

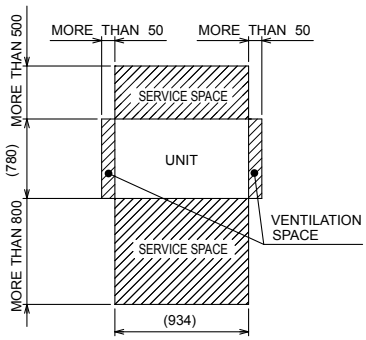
Rotation function



Depending on settings, the rotation function is available for units.

Small space

A smaller footprint has been achieved through developing a new highly efficient heat exchanger with low pressure loss.
Installation footprint of 0.73m²*
*Installation footprint for one unit without service space.



A coated model is also available.

Selection is available from uncoated (standard) and coated specifications.

Standard (uncoated)

Coated

*Color selection is available from silver (uncoated) or white (coated).
*Additional charge is necessary for the coated type.

Specifications

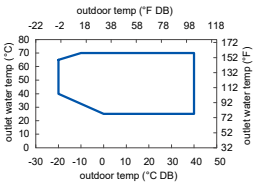
Model			CAHV-P500YB-HPB
Power Source			3-phase 4-wire 380-400-415V 50/60Hz
Capacity *1		kW	45
		kcal/h	38,700
		BTU/h	153,540
	Power input	kW	12.9
	Current input	A	21.78 - 20.69 - 19.94
	COP (kW / kW)		3.49
Capacity *2		kW	45
		kcal/h	38,700
		BTU/h	153,540
	Power input	kW	25.6
	Current input	A	43.17 - 41.01 - 39.53
	COP (kW / kW)		1.76
Seasonal space heating energy efficiency class for medium-temperature application			A++
Seasonal space heating energy efficiency class for low-temperature application			A+
Maximum current input *3		A	57.77 - 54.88 - 52.90
Water pressure drop *1			12.9kPa (1.87psi)
Temp range	Outlet water temp *4		25~70°C 77~158°F
	Outdoor temp *4	D.B	-20~40°C -4~104°F
Circulating water volume range			7.5 m³/h-15.0m³/h
Sound Pressure level (measured in anechoic room) *1		dB (A)	59
Sound Pressure level (measured in anechoic room) *3		dB (A)	63
Diameter of water pipe	Inlet	mm (in.)	38.1 (Rc 1 1/2") screw
	Outlet	mm (in.)	38.1 (Rc 1 1/2") screw
External finish			Acrylic painted steel plate <MUNSELL 5Y 8/1 or similar>
External dimension H × W × D		mm in.	1,710 (without legs 1,650) × 1,978 × 759 67.3 (without legs 65.0) × 77.9 × 29.9
Net weight		kg (lbs)	511 (1127)
Accessories			Y strainer Rc 1 1/2
Design Pressure	R407C	MPa	3.85
	Water	MPa	1.0
Drawing	Wiring		KC94R746
	External		KC94R745
Heat exchanger	Water side		stainless steal plate and copper brazing
	Air side		Plate fin and copper tube
Compressor	Type		Inverter scroll hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Starting method		Inverter
	Motor output	kW	7.5 × 2
	Case heater	kW	0.045 × 2
	Lubricant		MEL32
FAN	Air flow rate	m³/min	185 × 2
		L/s	3,083 × 2
		cfm	6,532 × 2
	External static press *5		0Pa, 60Pa (0mmH₂O/6.1mmH₂O)
	Type × Quantity		Propeller fan × 2
	Control, Driving mechanism		Inverter-control, Direct-driven by motor
	Motor output	kW	0.46 × 2
HIC circuit (HIC:Heat inter-Changer)			Copper pipe
Protection	High pressure protection		High pres.Sensor & High pres.Switch at 3.85MPa (643psi)
	Inverter circuit		Over-heat protection, Over current protection
	Compressor		Over-heat protection
	Fan motor		Thermal switch
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)
Control			LEV and HIC circuit
Type			R407C
GWP *6			1,774
Original charged	Weight		11.0
	CO_2 equivalent		161.3

*1 Under Normal heating conditions at outdoor temp, 7ºC DB/6ºC WB(44.6°F DB/42.8°F WB) outlet water temp 45ºC(113°F), inlet water temp 40ºC(104°F)

*2 Under Heating conditions at outdoor temp, 7ºC DB/6ºC WB(44.6°F DB/42.8°F WB), outlet water temp 70ºC (158°F)

*3 Under Heating conditions at outdoor temp, 7ºC DB/6ºC WB(44.6°F DB/42.8°F WB) when this unit is set to capacity priority mode by non-voltage B contact

*4



Outdoor temp -20°C DB/ Outlet water temp 40~65°C
(Outdoor temp -4°F DB/ Outlet water temp 104°F~149°F)
Outdoor temp -10°C DB/ Outlet water temp 33°C~70°C
(Outdoor temp 14°F DB/ Outlet water temp 91°F~158°F)
Outdoor temp 0°C DB/ Outlet water temp 25°C~70°C
(Outdoor temp 32°F DB/ Outlet water temp 77°F~158°F)

*5 Dip SW on the unit control board need to be changed.

*6 This table is based on Regulation(EU) No517/2014

* Due to continuing improvement, the above specifications may be subject to change without notice.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the unit in an environment where the wet bulb temp will not exceed 32ºC (89.6°F).
* The water circuit must use the closed circuit.

Unit converter

kcal/h =kW × 860
BTU/h =kW × 3,412
cfm =m³/min × 35.31
lbs =kg/0.4536

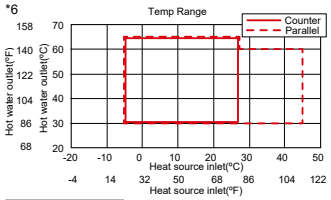
<External input/output from the unit>
*The unit can be operated and the operation status can be monitored with external input/output terminals.

SPECIFICATIONS

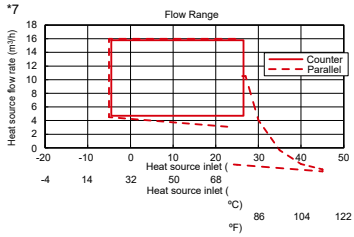
Model			CRHV-P600YA-HPB
Power Source			3-phase 4-wire 380-400-415V 50Hz
SCOP(TDesign60kW):EN14825	Heat source temp 0/-3, Hot water temp 30/35		4.33
Average climate conditions	Heat source temp 0/-3, Hot water temp 47/55		2.86
Capacity1 *1		kW	60.0
		kcal/h	51,600
		BTU/h	204,720
	Power input *2	kW	14.2
	Current input 380-400-415V	A	24.0 - 22.8 - 22.0
	COP (kW / kW)		4.23
	Hot water flow rate	m^3/h	10.3
	Heat source flow rate	m^3/h	14.7
Capacity2 *1		kW	45.0
		kcal/h	38,700
		BTU/h	153,540
	Power input *2	kW	10.2
	Current input 380-400-415V	A	17.2 - 16.4 - 15.8
	COP (kW / kW)		4.41
	Hot water flow rate	m^3/h	7.7
	Heat source flow rate	m^3/h	11.2
Seasonal space heating energy efficiency class for medium-temperature application			A++
Seasonal space heating energy efficiency class for low-temperature application			A++
Maximum current input		A	44
Heat source fluid type			ethylene glycol 35WT% (freezing point -18ºC (-0.4ºF))
Water pressure drop	Hot water side *3	kPa	14
	Heat source side *3	kPa	38
Temp range	Hot water side	ºC	(inlet) less than 55, (outlet) 30~65 *6
		ºF	(inlet) less than 131, (outlet) 86~149 *6
	Heat source side *4	ºC	(inlet) less than 45, (outlet) -8~27
		ºF	(inlet) less than 113, (outlet) 17.6~80.6
Circulating water volume range	Hot water side	m^3/h	3.2 - 15.0
	Heat source side *7	m^3/h	2.0 - 16.0
Sound pressure level (measured in anechoic room) at 1m *3		dB (A)	50
Sound power level (measured in anechoic room) *3		dB (A)	66
Installation location*5			Indoor use only
Diameter of water pipe (hot water side)	Inlet	mm (in.)	50.8 (R2") screw
	Outlet	mm (in.)	50.8 (R2") screw
Diameter of water pipe (heat source side)	Inlet	mm (in.)	50.8 (R2") screw
	Outlet	mm (in.)	50.8 (R2") screw
External finish			Unpainted steel plate
External dimension H × W × D		mm	1,561 × 934 × 780
Net weight		kg (lbs)	413 (910)
Design Pressure	R410A	MPa	4.15
	Water	MPa	1.0
Drawing	Wiring		KC94L652X01
	External		KC94L810X01
Heat exchanger	Hot water side		stainless steel plate and copper brazing
	Heat source side		stainless steel plate and copper brazing
Compressor	Type		Inverter scroll hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Starting method		Inverter
	Case heater	kW	0.035 × 2
	Lubricant		MEL32
Protection	High pressure protection		High pres.Sensor & High pres.Switch at 4.15MPa (601psi)
	Inverter circuit		Over-heat protection, Over current protection
	Compressor		Over-heat protection
Control			LEV and HIC circuit
Type			R410A
GWP *8			2,088
Original charged	Weight		9.0
	CO_2 equivalent		232

*1 Under Normal heating conditions at outlet hot water temp 35ºC(95ºF) outlet heat source temp -3ºC(26.6ºF) inlet hot water temp 30ºC(86ºF) inlet heat source temp 0ºC(32ºF).
Heating performance indicates the performance with counter flow of brine and refrigerant at the heat source HEX. (Standard pipe connection)
*2 Includes pump input based on EN14511.
*3 Under Normal heating conditions at outlet hot water temp 35ºC(95ºF) outlet heat source temp -3ºC(26.6ºF) inlet hot water temp 30ºC(86ºF) inlet heat source temp 0ºC(32ºF) capacity 60kW hot water flow rate 10.3m^3/h heat source flow rate 14.7m^3/h
Heating performance indicates the performance with counter flow of brine and refrigerant at the heat source HEX. (Standard pipe connection)
*4 When using in inlet heat source temp is more than 27ºC, please change to parallel piping at the heat source side.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water in direct.
* The water circuit must use the closed circuit.
* Due to continuing improvement, the above specifications may be subject to change without notice.
*5 Install the unit indoors only. Do not install outdoors.

*6



*7



Unit converter
kcal/h =kW × 860
BTU/h =kW × 3,412
lbs =kg/0.4536

*8 This table is based on Regulation(EU) No517/2014

PAR-W21MAA Specifications

[CAHV-P500YB-HPB]

Item	Description	Operations	Display
ON/OFF	Runs and stops the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti-freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Hot Water 25°C ~ 70°C Heating 25°C ~ 55°C Heating ECO 30°C ~ 45°C Anti-freeze 25°C * The settable range varies depending on the unit to be connected.	○	○
Water temperature display	10°C ~ 90°C (in increments of 1°C or 1°F) * The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function :ON/OFF, Operation modes,water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	×	○
Weekly scheduler	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	×	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
LANGUAGE setting	The language on the dot matrix LCD can be changed. (Seven languages) English/German/Spanish/Russian/Italian/French/Swedish	○	○
Operation locking function	Remote controller operation can be locked or unlocked. • All-switch locking • Locking except ON/OFF switch	○	○

[CRHV-P600YA-HPB]

Item	Description	Operations	Display
ON/OFF	Runs and stops the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti-freeze * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Hot Water 30°C ~ 65°C Heating 30°C ~ 45°C Heating ECO 30°C ~ 45°C Anti-freeze 30°C * The settable range varies depending on the unit to be connected.	○	○
Water temperature display	10°C ~ 90°C (in increments of 1°C or 1°F) * The settable range varies depending on the unit to be connected.	×	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function :ON/OFF, Operation modes,water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	×	○
Weekly scheduler	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	×	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
LANGUAGE setting	The language on the dot matrix LCD can be changed. (Seven languages) English/German/Spanish/Russian/Italian/French/Swedish	○	○
Operation locking function	Remote controller operation can be locked or unlocked. • All-switch locking • Locking except ON/OFF switch	○	○

Installation Information

* Refer to the enclosed Installation Manual for details on installation. Arrange to have an expert install the system correctly.

1. General precautions

1-1. Usage

♦The air-conditioning system described in this catalogue is designed for human comfort.

♦This product is not designed to assist in the preservation of food, provide conditions to maintain plants or animals, or stabilize environments for the preservation of precision equipment or art objects. To prevent loss of quality, do not use the product for purposes other than those it is designed for.

♦To reduce the risk of water leakage and electric shock, do not use the product for air-conditioning vehicles or vessels.

1-2. Installation environment

♦Do not install any unit other than the dedicated unit in an area where the voltage changes significantly, large amounts of mineral oil (e.g., cutting oil) are present, cooking oil may splash, or a large quantity of steam can be generated, such as a kitchen.

♦Do not install the unit in acidic or alkaline environments.

♦Installation should not be performed in locations exposed to chlorine or other corrosive gases. Avoid installation near sewers.

♦To reduce the risk of fire, do not install the unit in an area where flammable gas may leak or flammable material is present.

♦This air-conditioning unit has a built-in microcomputer. The effects of noise should be taken into consideration when deciding on the installation position. It is recommended that the air-conditioning unit be installed in a position away from antennas or electronic devices.

♦Install the unit on a solid foundation in accordance with local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, or falling.

1-3. Backup system

♦In regions in which the malfunctioning of the air conditioner may have a critical effect, it is recommended to have two or more systems made up of single outdoor/heat source units and multiple indoor units.

1-4. Unit characteristics

♦The heat pump efficiency of the outdoor unit depends on the outdoor temperature. In heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air will continue to be trapped near the ceiling and the floor level will remain cold. In such cases, heat pumps require a supplemental heating system or air circulator. Before purchasing, consult your local distributor for assistance in selecting the unit and system.

♦When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor/heat source unit side tends to collect frost, which reduces its heating performance. The Auto-defrost function will be activated in order to remove the frost, and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of the defrost process.

♦An air conditioner with a heat pump requires time to warm up the whole room after the heating operation begins, because the system circulates warm air in order to warm up the whole room.

♦Sound levels were obtained in an anechoic room. Sound levels during actual operation are usually higher than the simulated values due to ambient noise and echoes. Refer to the section on "SOUND LEVELS" in the DATA BOOK for the measurement location.

♦Depending on the operating conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Try to avoid positioning the air conditioner in locations where quietness is required.
With regard to the BC/HBC controller, it is recommended that the unit be installed in areas such as corridor ceilings, restrooms and plant rooms.
♦The total capacity of the connected indoor units can be greater than the capacity of the outdoor/heat source unit.
However, when the connected indoor units operate simultaneously, each unit's capacity may become smaller than the rated capacity.
♦When the unit is started up for the first time within 12 hours after the power comes on, i.e. after a power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires a maximum of 90 minutes to complete, depending on the operating load.

1-5. Related equipment

♦Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 second or less.
♦Consult your local distributor or a qualified technician when installing an earth leakage breaker.
♦If the unit is an inverter type, select an earth leakage breaker able to respond to high harmonic waves and surges.
♦Leakage current is generated not only through the air-conditioning unit but also through the power wires. The leakage current of the main power supply is therefore greater than the total leakage current of each unit. Take the capacity of the earth leakage breaker or leakage alarm into consideration when installing one at the main power supply. To measure the leakage current simply on site, use a measurement tool equipped with a filter, and clamp all the four power wires together. The leakage current measured on the ground wire may not be accurate because the leakage current from other systems may be included in the measurement value.
♦Do not install a phase-advancing capacitor on a unit connected to the same power system as an inverter-type unit and its related equipment.
♦If a large current flows due to the malfunctioning of the product or faulty wiring, both the earth leakage breaker on the product side and the upstream overcurrent breaker may trip almost at the same time. Separate the power system or coordinate all the breakers depending on the system's priority level.

1-6. Unit installation

♦Your local distributor or a qualified technician must read the Installation Manual that is provided with each unit carefully before performing installation work.
♦Consult your local distributor or a qualified technician when installing the unit. Improper installation by an unqualified person may result in water leakage, electric shock, or fire.
♦Ensure that there is enough space around each unit.

1-7. Optional accessories

♦Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician when installing them. Improper installation by an unqualified person may result in water leakage, power leakage, system breakdown, or fire.
♦Some optional accessories may not be compatible for use with the air-conditioning unit or may not be suitable for the installation conditions. Check the compatibility when considering any accessories.
♦Note that some optional accessories may affect the air conditioner's external form, appearance, weight, operating sound, and other characteristics.

1-8. Operation/Maintenance

♦Read the Instruction Book that is provided with each unit carefully prior to use.
♦Maintenance or cleaning of each unit may be risky and require expertise. Read the Instruction Book to ensure safety. Consult your local distributor or a qualified technician when special expertise is required, such as when the indoor unit needs to be cleaned.

2. Precautions for Indoor unit, HBC controller, and BC controller

2-1. Operating environment

♦The refrigerant (R410A) used in the air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant leaks.

♦If the units operate in cooling mode at a humidity above 80%, condensation may collect and drip from the indoor units.

♦Regular checking and cleaning of the drain drainage paths, such as the drain pan or the drain pump, is recommended to prevent clogging. The neglect of a clogged drain pump may trigger the water-leakage protection function which stops operation of the entire system.

2-2. Unit characteristics

♦The return air temperature display on the remote controller may differ from the displays on the other thermometers.

♦The clock on the remote controller may be displayed with a time lag of approximately one minute every month.

♦The temperature measured by the built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.

♦Use the built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.

♦The room temperature may rise drastically due to Thermo OFF in areas where the air-conditioning load is large, such as computer rooms.

♦Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and operating noise may increase.

♦The room temperature may increase above the preset temperature in environments in which the heating or air-conditioning load is small.

2-3. Unit installation

♦The insulation for the gas pipe between the HBC controller and the outdoor/heat source unit must be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.

♦The insulation for the low-pressure pipe between the BC controller and the outdoor/heat source unit must be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.

♦Do not have any branching points on the downstream of the refrigerant pipe header.

♦When a field-supplied external thermistor is installed or when a device for demand control is used, the unit may stop abnormally or damage may occur to the electromagnetic contactor. Consult your local distributor for details.

♦When indoor units employ fresh air intake, install a filter in the duct (locally procured) to remove dust from the air.

♦The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" in the DATA BOOK for the available range for fresh air intake volume.

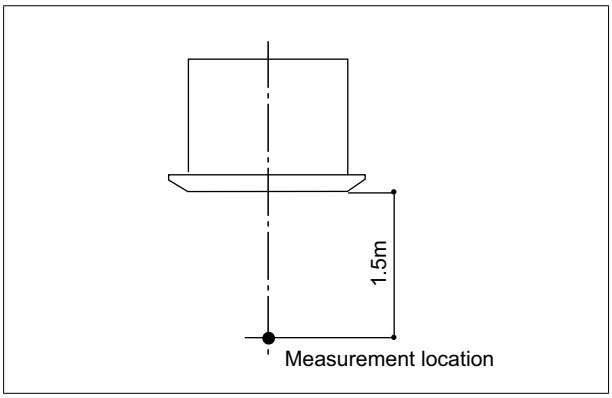
♦Employing fresh air intake for the indoor unit may increase the sound pressure level.

2-4. Noise level (Sound pressure level)

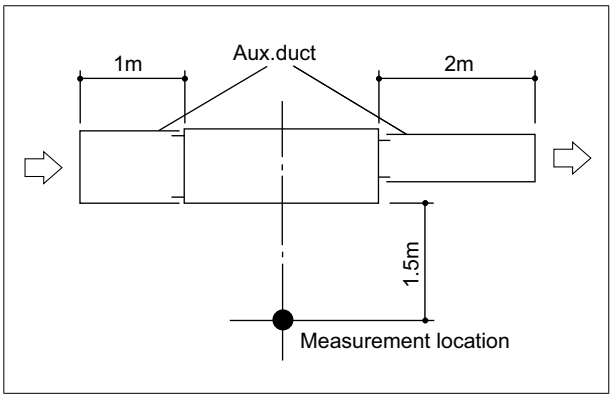
♦The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the value indicated in this catalogue due to the influence of ambient noise and echoes.

<Measurement location>

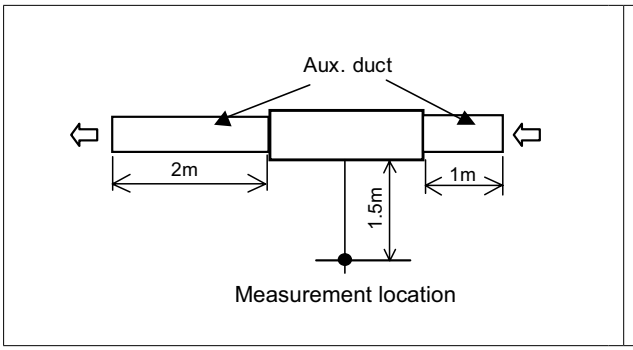
■PLFY-P-VEM-E/A, PLFY-P-VFM-E1, PLFY-P-VLMD-E, PMFY-P-VBM-E, PLFY-WL-VEM-E, PLFY-WL-VFM-E

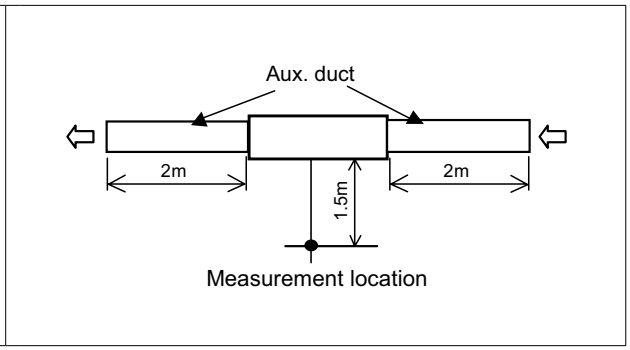


■PEFY-P-VMR-E-L/R, PEFY-P-VMX(L)-E(1), PEFY-P-VMS1(L)-E, PEFY-P-VMHS-E, PEFY-P-VMHS-E-F, PEFY-P-VMH-E-F, PEFY-WP-VMS1-E, PEFY-W-VMS-A

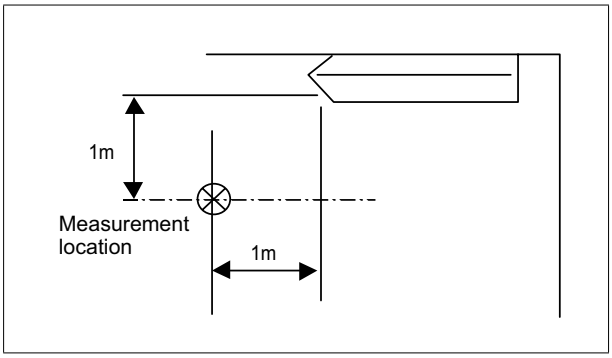


■PEFY-P-VMA(L)-E, PEFY-WP-VMA-E, PEFY-W-VMA(L)-A, PEFY-W-VMA2-A

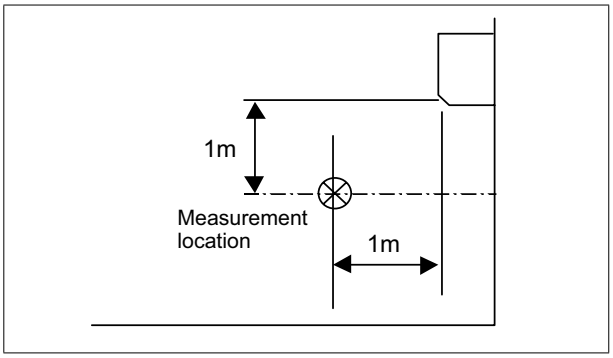




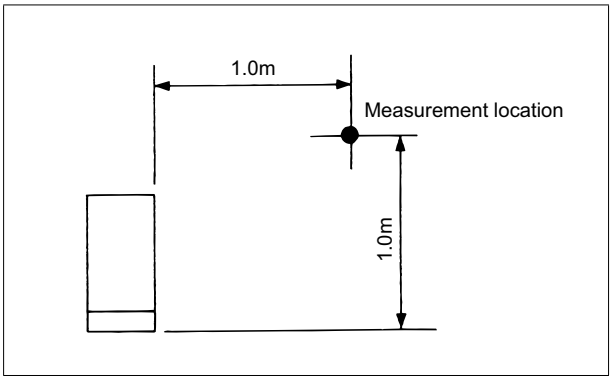
■PCFY-P-VKM-E



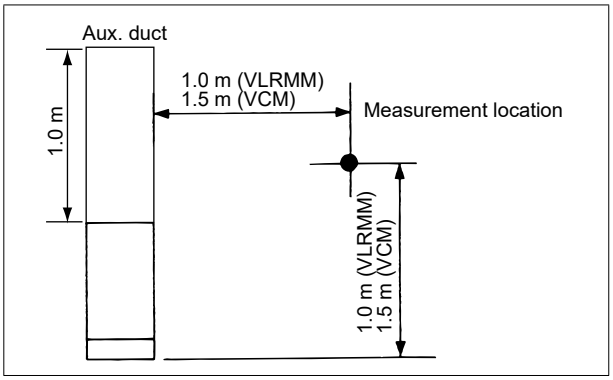
■PKFY-P-VLM-E, PKFY-P-VKM-E, PKFY-WL-VLM-E, PKFY-WL-VKM-E



■PFFY-P-VKM-E2, PFFY-P-VLEM-E, PFFY-P-VLRM(M)-E



■PFFY-WP-VLRMM-E, PFFY-W-VCM-A



3. Precautions for fresh air intake-type indoor unit

3-1. Usage

♦The fresh air intake-type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.

3-2. Unit characteristics

For PEFY-P-VMH-E-F and PEFY-P-VMHS-E-F

♦This unit cannot perform drying operation. The unit will continue fan operation and blow fresh air (air that is not air-conditioned) when the Heating Thermo OFF or Cooling Thermo OFF mode is selected.

♦The fan may stop temporarily when the unit is connected to a simultaneous cooling/heating operation-type outdoor/heat source unit (R2, WR2-Series) or during the defrost cycle.

♦If only this unit is used as an indoor unit, condensation may form at the supply air grille while the unit is operated in cooling mode. This unit cannot perform dehumidifying operation.

♦The maximum connectable indoor units for 1 outdoor unit is 110% (100% in case of heating below -5°C).

♦When fresh air intake-type indoor units are connected to an outdoor unit together with other types of indoor unit, the total capacity of the fresh air intake-type indoor units must be no more than 30% of the capacity of the connected outdoor unit.

♦The AUTO mode on the local remote controller is available only when the fresh air intake-type indoor unit is connected to the R2 or WR2-Series outdoor units.

♦The system changeover function is available only when all the connected indoor units are fresh air intake-type indoor units.

♦Untreated outside air such as humid air or cold air will be blown into the indoor environment during Thermo OFF operation, which may cause dew condensation on the grilles and ducts. Ensure that the grilles, ducts, and rooms are properly insulated to prevent dew condensation.

♦An air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible if using locally procured filters.

For PEFY-P-VMH-E-F

♦Outside air temperature ranges for the operation must be as follows:
Cooling: 21ºCD.B./15.5ºCW.B. ~ 43ºCD.B./35ºCW.B.
Heating: -10ºCD.B.~ 20ºCD.B.
The unit is forced to operate Thermo OFF (fan operation) when the outside air temperature is as follows.
Cooling: 21ºCD.B. or below; Heating: 20ºCD.B. or above

♦This unit switches the Thermo ON or OFF depending on the room temperature. The outside air is directly supplied into the room during Thermo OFF. Take caution of the cold supply air due to low outside air temperature and of condensation in the room due to high humidity of the outside air.

♦Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.

♦Use the unit in the way that the airflow rate will not exceed the 110% of the rated airflow.

♦Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.

For PEFY-P-VMHS-E-F

♦The outside air temperature ranges for operation are as follows:
Cooling: 17ºCD.B./15.5ºCW.B.–43ºCD.B./35ºCW.B.
Heating: -10ºCD.B.–+20ºCD.B.
The unit is forced to operate in Thermo OFF (fan operation) mode when the outside air temperature is as follows:
Cooling: 17ºCD.B. or below
Heating: 20ºCD.B. or above

♦Outside air is directly supplied into the room during Thermo OFF. Be careful with regard to cold supply air due to low outside air temperatures and of condensation in the room due to high humidity of the outside air.
♦If the airflow rate is higher than the usable range, condensation may drip from the air outlet, and the air flow rate will be automatically reduced by the fan motor control. If the air flow rate is lower than the usable range, condensation may form on the surface of the unit.
♦Combining fresh air intake-type indoor units with other types of indoor units to respond to the internal thermal load may cause conflict in operating modes. It is not recommended when a fresh air intake-type indoor unit is connected to a Y or WY-Series unit.
♦Depending on the air-conditioning load, outside temperature, and the activation of protection functions, the desired preset temperature may not always be achieved and the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
♦Fresh air intake-type indoor units cannot be connected to PUMY and cannot be connected to an outdoor unit together with PWFY-Series units.

4. Precautions for outdoor unit/heat source unit

4-1. Installation environment

♦The outdoor unit with the salt-resistant specification is recommended for use in an area in which it will be exposed to salt air.
♦Even when the unit with the salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in the Instruction Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to in the guidelines published by JRAIA (JRA9002).
♦Install the unit in an area where the flow of discharge air is not obstructed. If the flow of discharge air is obstructed, short-cycling of discharge air may occur.
♦Provide proper drainage around the base of the units; condensation may collect and drip from outdoor units. Provide water-proofing protection to the floor when installing the unit on the rooftop.
♦In regions where snowfall can be expected, install the unit so that the outlet faces away from the direction of the wind, and install a snow guard to protect the unit from snow. Install the unit on a base approximately 50 cm higher than the expected snowfall. Close the openings for pipes and wiring, because the ingress of water and small animals may cause equipment damage. If a SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and be careful with the installation to avoid the risk of corrosion.
♦When the unit is expected to operate continuously for a long period of time at outside air temperatures of below 0ºC, take appropriate measures, such as the use of a unit base heater, to prevent ice forming on the unit base. (Not applicable to the PUMY-Series)
♦Install the snow guard so that the outlet/inlet faces away from the direction of the wind.
♦When approximately 50 cm or more of snow accumulates on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand loads caused by snow in areas where snow accumulates.
♦Provide proper protection around the outdoor units in places such as schools to avoid the risk of injury.
♦A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere.
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air to ensure that the oxygen dissolved in the water is 1 mg/L or less.
♦Install a strainer (50 mesh or more recommended) on the water pipe inlet on the heat source unit.
♦Interlock the heat source unit and water circuit pump.
♦Note the following to prevent the freezing and bursting of pipes when the heat source unit is installed in an area where the ambient temperature can be 0ºC or below.
  ♦Keep the water circulating to prevent it from freezing when the ambient temperature is 0ºC or below.
  ♦Before a long period of non-use, be sure to purge the water from the unit.

♦The salt-resistant unit is resistant to salt corrosion, but not salt-proof.
Please note the following when installing and maintaining outdoor units in a marine environment.

1. Install the salt-resistant unit in an area in which it is not directly exposed to sea breezes, and minimize exposure to salt water mist.
2. Avoid installing a sun shade over the outdoor unit, so that rain will wash away salt deposits off the unit.
3. Install the unit horizontally to ensure proper water drainage from the base of the unit. Accumulation of water in the base of the outdoor unit will significantly accelerate corrosion.
4. Periodically wash salt deposits off the unit, especially when the unit is installed in a coastal area.
5. Repair all noticeable scratches after installation and during maintenance.
6. Periodically check the unit, and apply an anti-rust agent and replace corroded parts as necessary.

4-2. Circulating water

♦Regularly check the quality of the water in the heat source unit, following the guidelines published by JRAIA (JRA-GL02-1994).

♦A cooling tower and heat source water circuit should be a closed circuit so that water is not exposed to the atmosphere.
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air to ensure that the oxygen dissolved in the water is 1 mg/L or less.

4-3. Unit characteristics

♦When the Thermo ON and OFF is frequently repeated on the indoor unit, the operating status of outdoor/heat source units may become unstable.

4-4. Related equipment

♦Provide grounding in accordance with the local regulations.

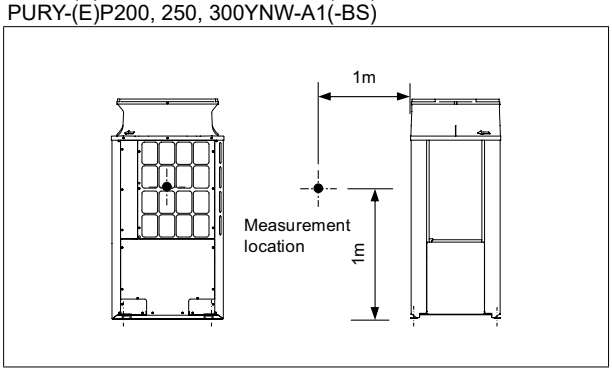
4-5. Noise level (Sound pressure level)

♦The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the indicated value in this catalogue due to the influence of ambient noise and echoes.
Valve operation noise and refrigerant flow noise may occur from inside the outdoor unit/heat-source unit.

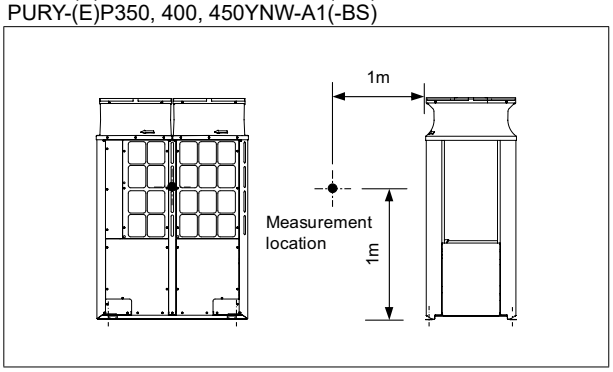
<Measurement location>

■PUHY-(E)P-Y(S)NW-A(-BS), PURY-(E)P-Y(S)NW-A(-BS)

PUHY-(E)P200, 250, 300YNW-A1(-BS)
PURY-(E)P200, 250, 300YNW-A1(-BS)



PUHY-(E)P350, 400, 450YNW-A1(-BS)
PURY-(E)P350, 400, 450YNW-A1(-BS)



PUHY-(E)P500YNW-A1(-BS)
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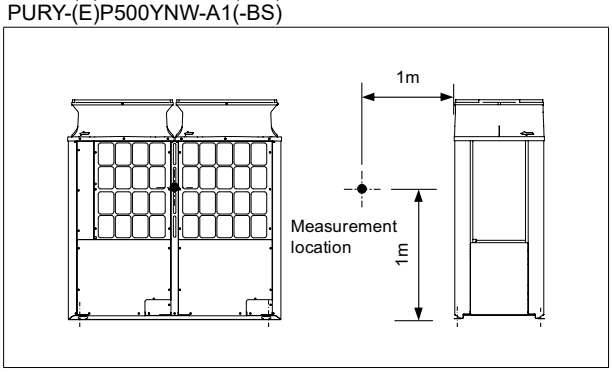
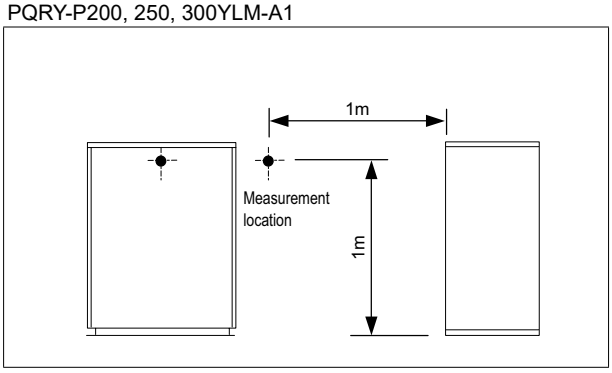


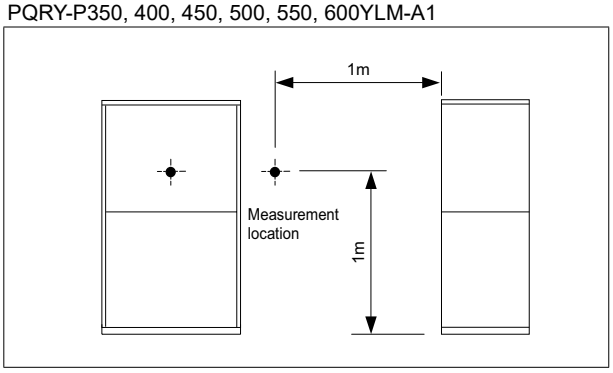
*See the DATA BOOK for information on the combination models.

■PQHY-P-Y(S)LM-A1, PQRY-P-Y(S)LM-A1

PQHY-P200, 250, 300YLM-A1
PQRY-P200, 250, 300YLM-A1



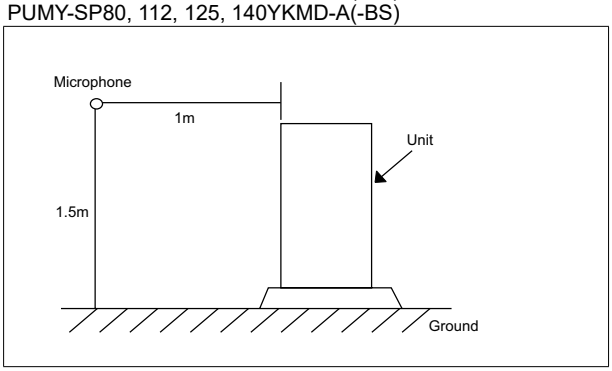
PQHY-P350, 400, 450, 500, 550, 600YLM-A1
PQRY-P350, 400, 450, 500, 550, 600YLM-A1



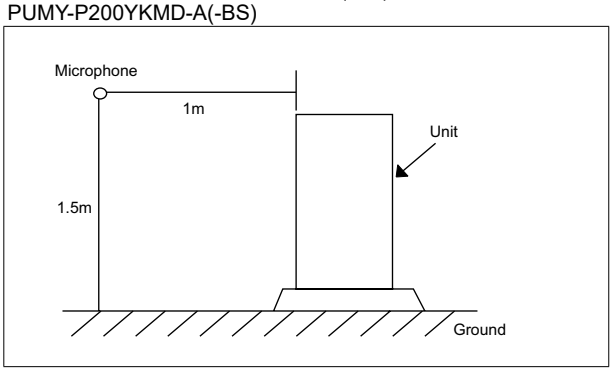
*See the DATA BOOK for information on the combination models.

■PUMY-SP-VKMD-A(-BS), PUMY-SP-YKMD-A(-BS)
PUMY-P-VKM4/5(-BS), PUMY-P-YKMD-A(-BS)

PUMY-SP80, 112, 125, 140VKMD-A(-BS)
PUMY-SP80, 112, 125, 140YKMD-A(-BS)



PUMY-P112, 125, 140VKM5/YKM4(-BS)
PUMY-P200YKMD-A(-BS)



5. Precautions for control-related items

5-1. Product specification

♦To introduce the MELANS system, a consultation with us is required in advance. Especially to introduce the electricity charge-apportioning function or energy save function, further detailed consultation is required. Consult your local distributor for details.

♦Billing calculation for AE-200E/AE-50E/EW-50E, or the billing calculation unit is unique and based on our original method. (Backup operation is included.) It is not based on the metering method, and do not use it for official business purposes. It is not the method that the amount of electric power consumption (input) by air conditioner is calculated. Note that the electric power consumption by air conditioner is apportioned by using the ratio corresponding to the operation status (output) for each air conditioner (indoor unit) in this method.

♦In the apportioned billing function for AE-200E/AE-50E and EW-50E, separate watt-hour meters should be used for A-control units, K-control units, and CITY MULTI packaged air conditioners. It is recommended that an individual watt-hour meter should be used for large-capacity indoor units (with two or more addresses).

♦When using the peak cut function on the AE-200E/AE-50E or EW-50E, note that the control is performed once every minute and it takes time to obtain the effect of the control. Take appropriate measures such as lowering the criterion value. Power consumption may exceed the limits if the AE-200E/AE-50E or EW-50E malfunctions or stops. Provide a back-up remedy as necessary.

♦The controllers cannot operate while the indoor unit is OFF. (No error)
Turn ON the power to the indoor unit when operating the controllers.

♦When using the interlocked control function on the AE-200E/AE-50E/EW-50E/PAC-YG66DCA or PAC-YG63MCA, do not use the control for fire prevention or security. (This function should never be used in a way that would put people's lives at risk.) Employ any methods or circuits that allow ON/OFF operation using an external switch in case of failure.

5-2. Installation environment

♦Surge protection may be required for the transmission line in areas where lightning strikes occur frequently.

♦The receiver for a wireless remote controller may not work properly due to the effect of general lighting. Leave a space of at least 1 m between the general lighting and the receiver.

♦When the auto-elevating panel is used and the system is operated using a wired remote controller, install the wired remote controller in a place where all the air conditioners being controlled (at least the bottom part of them) can be seen from the wired remote controller. If not, the descending panel may cause damage or injury; be sure to use a wireless remote controller designed for use with the elevating panel (sold separately).

♦Install the wired remote controller (switch box) in a place where the following conditions are met.

♦Where the installation surface is flat

♦Where the remote controller can detect an accurate room temperature

The temperature sensors that detect the room temperature are installed both in the remote controller and in the indoor unit.

When the room temperature is detected using the sensor in the remote controller, the main remote controller is used to detect the room temperature. In this case, follow the instructions below.

♦Install the controller in a place where it is not affected by a heat source.
(If the remote controller faces direct sunlight or the direction of the supply air flow, the remote controller cannot detect the accurate room temperature.)

♦Install the controller in a place where the average room temperature can be detected.

♦Install the controller in a place where no other wires are present around the temperature sensor.
(If other wires are present, the remote controller cannot detect an accurate room temperature.)

♦To prevent unauthorized access, always use a security device such as a VPN router when connecting the AE-200E/AE-50E or EW-50E to the Internet.

Maintenance Equipment

Maintenance cycle
[Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPs (The number of START/STOPs is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

When the equipment is used under the following conditions, the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where the temperature and humidity are high or change dramatically
- When equipment is used in an environment where power supply fluctuations (the distortion of voltage, frequency, and waveform) are large (Only within the allowable range)
- When equipment is used in an environment where the unit may receive vibration or mechanical shock
- When equipment is used in an environment where dust, salt, toxic gases such as sulfur dioxide and hydrogen sulfide, and oil mist are present
- When equipment starts/stops frequently and operates for long periods (24-hour air-conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearings		15,000 hours	Sensor (thermistor, pressure sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note 1 This table shows major components. Refer to the maintenance contract for details.
Note 2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) The Checking/ Maintenance cycle may be shorter than the one shown on this table depending on the contents of the maintenance check contract.

- Sudden unpredictable accidents may occur even if check-ups are performed.

Replacement cycle for consumable components
[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note 1 This table shows major components. Refer to the maintenance contract for details.
Note 2 This replacement cycle shows a period in which products are expected to require no replacement. Use this cycle for planning maintenance (budgeting expenses for replacing equipment, etc.)

B.S. Salt Protection Specifications
City Multi VRF Outdoor Units

Name	Base material	PUHY, PURY		Surface treatment	Paint thickness	
		YNW	YNW-BS			
		Standard	Salt damage protection		External	Internal
Bottom frame	Alloyed galvanized sheet	•	•	Polyester resin coating	70μm or more	70μm or more
Front panel	Galvanized sheet	•		Polyester resin coating	15μm or more	5μm or more
			•	Polyester resin coating	85μm or more	75μm or more
Pillar	Alloyed galvanized sheet	•		Polyester resin coating	30μm or more	
			•	Polyester resin coating	70μm or more	70μm or more
Compressor cover	Galvanized sheet	•		No treatment		
	Galvanized aluminum sheet		•	Polyester resin coating	70μm or more	70μm or more
Fin guard	Steel wires	•	•	Polyethylene resin (Weather proof)	300μm or more	300μm or more
Fan guard & Drum	Plastic	•	•	Polypropylene resin (Weather proof)		
Fan	Plastic	•	•	Acrylics nitril styrene resin		
Motor	Frame; Spcc	•	•	Zinc plating filming	8μm or more	
	Shaft; S35C	•	•	Rust prevention coloured coating		
Motor support	Galvanized sheet	•		No treatment		
			•	Polyester resin coating	70μm or more	70μm or more
Heat exchanger	Aluminum plate	•		Cellulose series and urethane series resin coating	1μm or more	
(Only fin)			•	Cellulose series and urethane series resin coating	3μm or more	
Electrical parts box	Galvanized sheet	•		No treatment		
	Galvanized aluminum sheet		•	Polyester resin coating	70μm or more	
Printed circuit board	Epoxy resin	•		Polyurethane coating	10μm or more	
			•	Polyurethane coating	10μm or more	10μm or more
Screw	Steel for screws	•	•	Zinc-nickel alloy plating + Geomet filming		

CAUTION:

1 Do not position the outdoor in a direct sea breeze.

2 Don't protect the unit from rain. (Rain will clean the salt from the coil).

3 Install the outdoor unit level to allow condensate drainage.

4 Wash the outdoor unit regularly.

5 Repair any scratches on the panels.

6 Inspect regularly. Paint or change parts as required.

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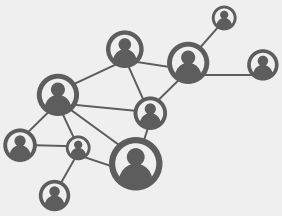

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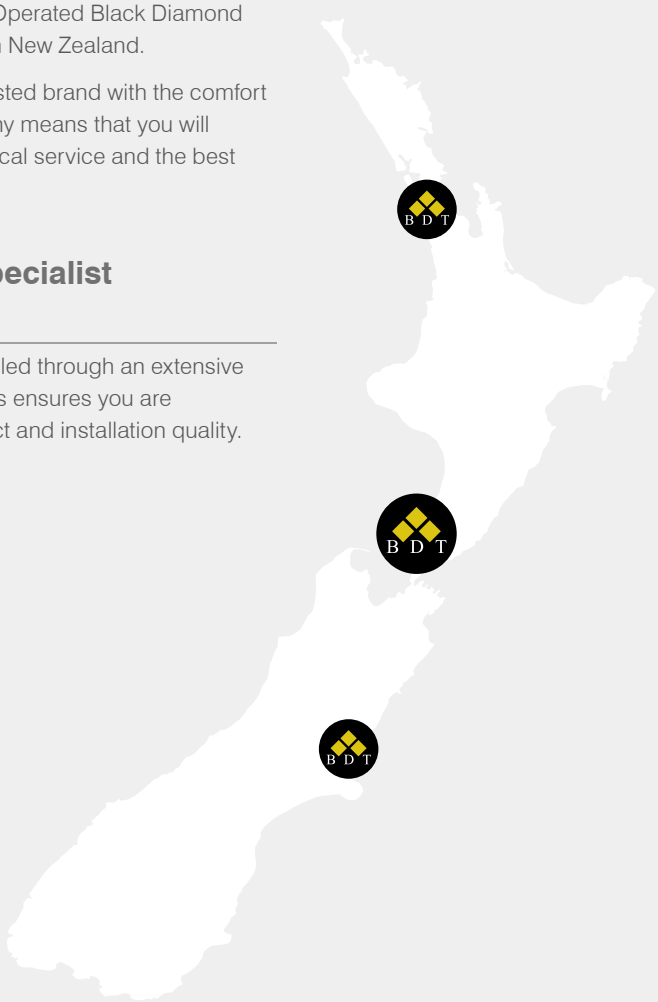

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For more information on Mitsubishi Electric Heat Pumps please visit our website or call our Customer Service Team.