



Hybrid VRF Catalogue

Next Generation 2-Pipe VRF Heat Recovery Systems



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The Hybrid VRF Advantage

Water, rather than traditional refrigerant, is at the heart of the indoor units. This means there is no risk of refrigerant leaking into small confined spaces.



What is Hybrid VRF?

Next Generation 2-Pipe Water Based VRF Technology

Hybrid VRF is a unique 2-Pipe Heat Recovery VRF System that replaces refrigerant with water between the Hybrid Branch Circuit Controller and the indoor units.

This revolutionary design minimises the need for expensive and on-going leak detection servicing and is specifically designed for occupied spaces where quiet, energy efficient, simultaneous heating and cooling is valued. Hybrid VRF is quick, easy and flexible to design and install using the same control and network as traditional VRF systems. Furthermore, the decentralised system means phased installation is possible with similar high levels of seasonal efficiency expected with VRF.

With water at the indoor units, Hybrid VRF provides comfortable, stable air temperature control with no refrigerant in occupied spaces, minimising the need for leak detection to comply with AS/NZS 5149. (1-4) 2016.

Hybrid VRF is a truly integrated modern heating and cooling solution for office buildings, hotels, hospitals, medical centres, schools, high-rise buildings, shopping centres and other commercial premises, where occupant comfort is paramount.

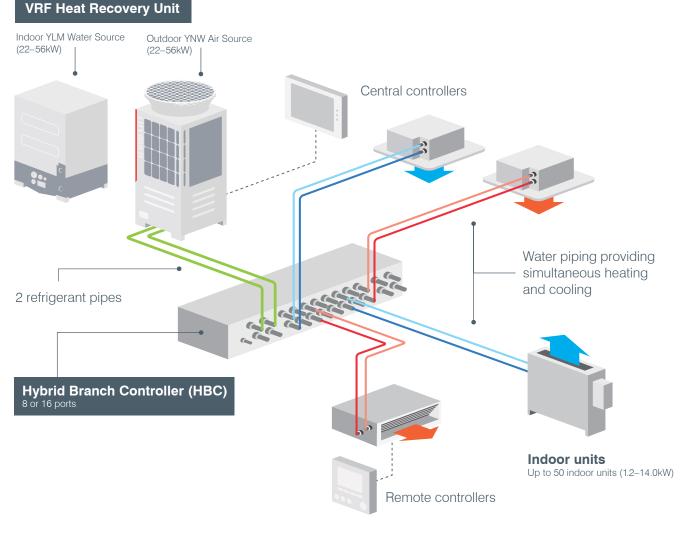




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The Hybrid VRF Advantage

Hybrid VRF minimises the need for leak detection, reducing the total cost of the system and on-going maintenance of the leak detection system itself.



Where Can Hybrid VRF be Applied?







Hybrid VRF is the Complete Solution for Today's Modern Buildings

City Multi Hybrid VRF Systems allow for a flexible layout, making installation simple. With the use of Centralised Control, HVRF can be utilised in a wide variety of applications that require individual space comfort settings such as hotels, offices, hospitals, nursing homes and schools.

Furthermore, HVRF minimises the potential hazards to people, property and the environment that could result from leakages of traditional refrigerant systems in confined occupied spaces.

Mixed-Use Buildings

As we look for ways to balance population growth in crowded city centres, more mixed-use properties are being developed; often combining retail, office, leisure and living spaces in the same building. Hybrid VRF provides a fully adaptable solution benefiting from air or water source options, using an extensive range of controls to ensure optimum performance.

Offices

Modern offices and commercial buildings need air conditioning systems that provide the highest levels of comfort, freshness and energy efficiency.

Hotels

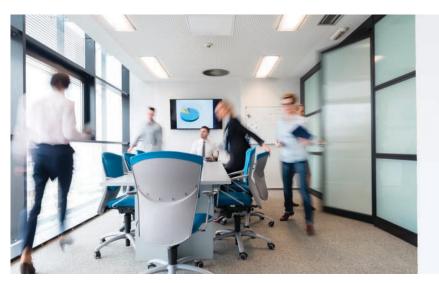
Customer comfort is paramount with legislation focusing attention on energy use and seeking to limit the use of refrigerant in occupied spaces. Hybrid VRF minimises the need for leak detection in the occupied space, thereby reducing the total cost of the system and ongoing maintenance of the leak detection system itself.

Hospitals and Medical Centres

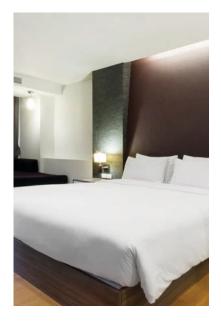
With regards to patient health and safety, this system has no refrigerant in the indoor units and can deliver mild off-coil temperatures through the Water-Based Hybrid VRF indoor units. HVRF mitigates the need for leak detectors in consulting rooms and provides a solution to critical refrigerant limits outlined in AS/NZS 5149. (1-4) 2016.

Education

Providing comfort through temperature stability, removal of refrigerant from the occupied space and reduced noise – Hybrid VRF provides a truly integrated solution. Hybrid VRF delivers comfortable and stable air temperature control with no refrigerant in occupied spaces, minimising the need for leak detection.



The Hybrid VRF Advantage



VRF Performance with Hydronic Levels of Comfort

Building owners, facility managers and the construction industry have been looking for HVAC systems that deliver high operational efficiency whilst minimising the global warming potential of the refrigerants used within these systems.

Water is at the Heart of the Indoor Units

Water, rather than traditional refrigerant, is at the heart of the indoor units. This means there is no risk of refrigerant leaking into small confined occupied spaces. Hybrid VRF minimises the need for leak detection, reducing the total cost of the system and ongoing maintenance of the leak detection system itself.

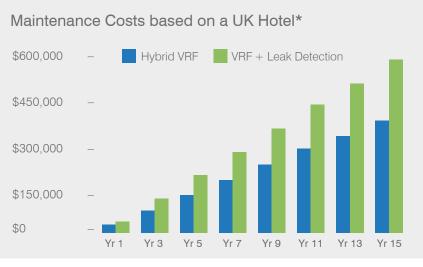
Minimise the Need for Leak Detection Systems

In commercial buildings, additional leak detection systems specific to air conditioning are often installed to safeguard occupants due to increasing safety regulations. This affects hotels in particular, where air conditioners are installed in the room space and occupant safety is critical.

A leak detection system is designed to trigger an alarm if refrigerant was to leak into the room and initiate an evacuation of the space to try and prevent harm to the occupants. These systems can be expensive and add to the cost of design, build and maintenance.

Realise Significant Maintenance Cost Reductions

Throughout a system's lifetime, annual testing and the recalibration of leak detection sensors adds significant cost to a VRF system. Using Hybrid VRF instead, removes this need and could provide as much as 30% in maintenance savings over 15 years.



* Based on a real project using costs from a Mitsubishi Electric Business Solutions Partner in the United Kingdom.

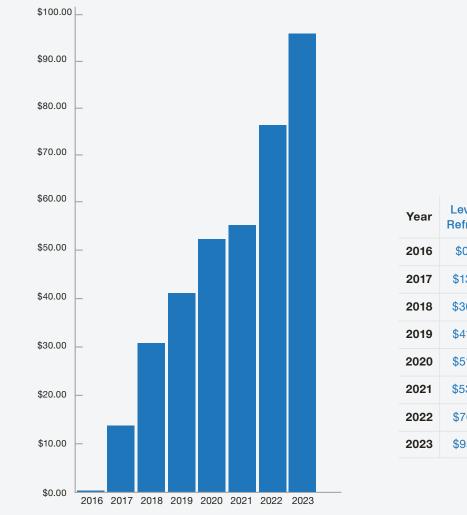
ETS – Emissions Trading Scheme

In New Zealand specifically, the ETS has put a price on greenhouse gas emissions and provides an incentive to reduce emissions and promote strategies to absorb carbon dioxide.

This is known as the SGG (Synthetic Greenhouse Gas) Levy.

Due to the increasing cost of refrigerant associated with the ETS Synthetic Greenhouse Gas Levy (NZ), building capital and maintenance costs will continue to climb using traditonal heating and cooling systems that utilise higher GWP refrigerants such as R410A.

HVRF reduces costs as it uses less refrigerant in the total system.



R410A SGG Levy Rates

Year	Levy Rate – per kg Refrigerant (R410A)					
2016	\$0.31	Actual				
2017	\$13.72	Actual				
2018	\$30.78	Actual				
2019	\$41.55	Actual				
2020	\$51.29	Actual				
2021	\$53.50	Actual				
2022	\$76.26	Actual				
2023	\$95.36	Prediction				





Hybrid VRF Key Features and Benefits

Provides Simultaneous Heating and Cooling with Full Heat Recovery

Hybrid VRF is an advanced simultaneous heating and cooling system with full heat recovery and delivers a proven alternative solution to traditional R410A VRF systems.

Energy Saving

Save more energy by Heat Recovery Operation if heating and cooling operations are required at the same time.

The more frequently heating and cooling simultaneous operation occurs, the higher the energy saving effect becomes.

Even higher efficiency operation is now possible by utilising the Centralised Control and scheduled operation.

Use Less Material and Equipment

Mitsubishi Electric's unique 2-Pipe Heat Recovery System requires less piping than a 4-Pipe Chiller System.

The system does not require an external pump, valves, sensors, actuators, or other ancilliary controls associated with conventional 4-Pipe Chiller Systems.

Flexible Design and Modularity Allow for a Manageable Phased Installation

The small footprint and modular design means building owners can now take advantage of a manageable phased installation.

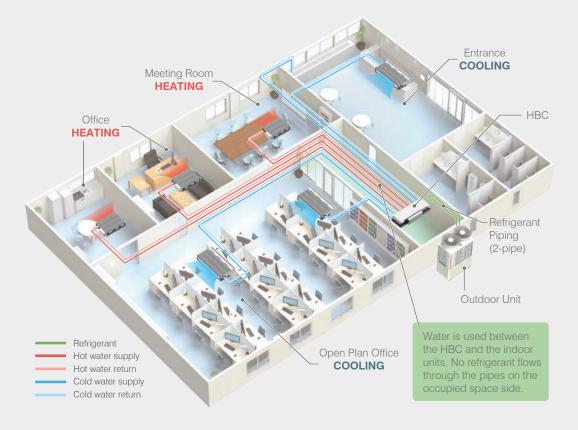


Image for representation only

The HVRF plant room may need leak detection based on AS/NZS 5149. (1-4) 2016.

Water Instead of Refrigerant is at the Heart of the Indoor Units

HVRF is based on a 2-Pipe Heat Recovery VRF System but uses water as a heat exchange medium between the Hybrid Branch Controller and the indoor units.

As such, the system combines the comfort of a traditional hydronic system with the efficiency and ease of modern VRF air conditioning – giving you the best of both worlds.

Reduce Maintenance Costs and Maximise Safety by Minimising the Need for Leak Detection

Legislation is now demanding that leak detection equipment is installed alongside VRF air conditioning when it is used in small occupied spaces in accordance with AS/NZS 5149. (1-4) 2016.

The Hybrid VRF architecture minimises the need for leak detection in these confined areas. This is because water instead of refrigerant is piped between the branch box and the indoor units mounted in each room. As a result there is no risk of refrigerant escaping into the room space.

In addition to maximising occupant safety, significant up front equipment and on-going maintenance cost savings are able to be realised because expensive leak detection systems are not required to be installed and maintained within occupied rooms.

Quiet Operation Through Water Based Fan Coils

Because water instead of refrigerant is circulated through the terminal fan coils, quiet operation and silent off cycle operation is assured.

High Sensible Cooling and Stable Room Temperatures

Occupant comfort is paramount. Hybrid VRF Systems deliver milder off coil temperatures and are specifically designed to provide a gradual rate of change of temperature within the air conditioned space delivering a comfortable and stable environment.

Furthermore, Hybrid VRF offers on average a 10% increase in sensible cooling at terminal compared to traditional VRF systems.

Intuitive Load Adjusting

The latest YNW VRF refrigerant control plus water side optimisation, flow control valves, inverter-driven pumps, and heat recovery provides only the capacity needed while improving efficiency and comfort.

Heat Recovery Defrost Method

Typical defrost times of 5 minutes with immediate return to heating. Improving comfort throughout the heating season, ideal for office applications. No defrost on Water Source VRF Models.





Hybrid VRF Case Studies

Rototuna Junior High School – NZ's First Hybrid VRF System

Rototuna Junior High School was one of 23 new schools to open since January 2016. As with most schools, it had an extensive list of requirements which restricted how the building could be heated and cooled. Rototuna needed an HVAC solution suitable for the wide variety of offices, classrooms, and music rooms in the Junior High School building. Plus, the music practice rooms in particular were small and were required to be air-conditioned and had to meet strict acoustic performance requirements.



Mitsubishi Electric 22.4kW Hybrid VRF

The client required a mechanical system to resolve these unique requirements, which they did by utilising a Mitsubishi Electric Hybrid VRF System. This system was the first of its kind in New Zealand!

A Mitsubishi Electric Hybrid VRF 22.4kW System was installed to serve several music practice rooms, where noise control was the determining factor. As water is used instead of refrigerant throughout the indoor units, not only are they quiet operating, the Mitsubishi Electric Hybrid VRF indoor units enabled the music rooms to be fully sealed and soundproofed, without the client needing to install costly refrigerant leak detection systems.

A Mitsubishi Electric VRF Heat Recovery System and an AHU System were also installed to serve the heating, air conditioning, and ventilation requirements of the other areas of the building. All equipment selected was then wired to a BAC-HD150 to enable highlevel control of all AC equipment via the BMS System.





Auckland University of Technology

The NorthMed Clinic is a new building situated at Auckland University of Technology's (AUT) North Shore Campus. This innovative facility which opened in July 2017, is comprised of modern medical offices and teaching spaces for Physiotherapy, Psychotherapy, Podiatry, Oral Health, and Student Health Services.

The Challenge

The use of such small quarters for medical examination rooms meant that high refrigerant concentration levels in these spaces became a primary concern. This coupled with patient/ doctor privacy being of utmost importance meant that door grilles could not be used for this project. Therefore a traditional VRF System (without refrigerant monitoring) would not suit this particular application.

The Solution

Three Mitsubishi Electric HVRF Systems were selected by the mechanical consultant to serve the smaller medical consulting rooms, along with one other standard Mitsubishi Electric VRF System to serve the common meeting and office areas.

The unique architecture of Mitsubishi Electric HVRF Systems use water in the primary loop between the branch controller and indoor units, enabling the client's refrigerant concentration concerns to be completely mitigated. This allowed total privacy in consultation rooms to be maintained, without the need to install door grilles as refrigerant piping did not run anywhere near the confined spaces.



Rotorua Te Aka Mauri

The vision was to upgrade the existing Rotorua Library building into a new state of the art, centrally located, shared community facility comprised of the Rotorua Library, Children's Health Clinic and DHB offices.



The Challenge

The key challenge for this building was to cater for two tenants with very different layouts on each of the four floors.

Adding to this initial challenge was the desire to provide an efficient and comfortable HVAC solution that best fit within the scope of the pre-existing building structure.

The Solution

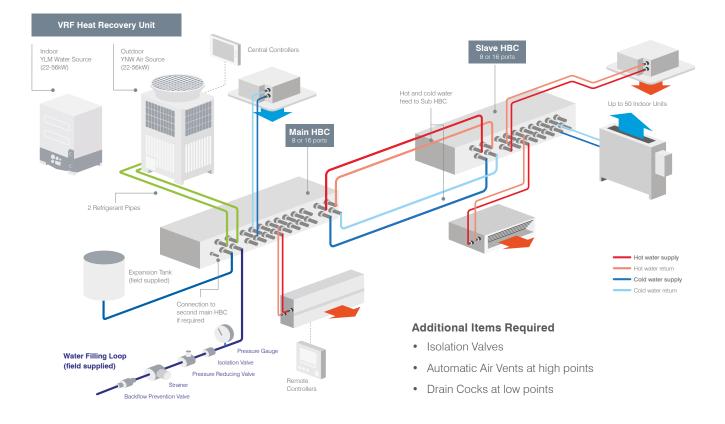
The best solution to meet the challenges was to select HVRF systems that provide heating and cooling to many of the mixed-use library and health hub areas. The HVRF Systems were selected by the consultant for the principle reason of having less extreme air-off temperatures, and slower temperature change responses across the fan coil units. This was particularly important in areas of the building with lower than usual internal ceilings.

With a wide variety of small capacity indoor model options available in the HVRF Range, specific indoor types were selected to suit each of the individual spaces. For example the external wall was extended out onto what was previously a balcony area. Several PFFY-WP50VLRMM-E floor concealed models were then selected to best suit this long, newly created open plan area, to be easily boxed out once the external wall had been constructed.

Hybrid VRF Technical System Overview

Hybrid VRF is based on a 2-Pipe Heat Recovery VRF system but uses water as a heat exchange medium between the Hybrid Branch Controller and the indoor units.

As such, the system combines the comfort of a traditional hydronic system with the efficiency and ease of modern VRF air conditioning – giving you the best of both worlds.



Model Lineup

Heat Recovery Unit PURY-YNW/PQRY-YLM	1st Main HBC	1st Slave HBC	2nd Main HBC	2nd Slave HBC
P200	Required	Optional	-	-
P250	Required	Optional	-	-
P300	Required	Optional	Optional	Optional
P350	Required	Optional	Optional	Optional
*P400	Required	Optional	Required	Optional
*P450	Required	Optional	Required	Optional
*P500	Required	Optional	Required	Optional

*P400, P450 and P500 must use a 2nd Main HBC

Image for representation only

Hybrid Branch Circuit (HBC) Controller

A - Plate Heat Exchangers

This is the point where the refrigerant circuit transfers its energy to the sealed water system.

There are two sets of Plate Heat Exchangers, both placed at opposite ends in the HBC.

Both sets provide hot water in heating mode or cold water in cooling mode.

During mixed mode, one set provides hot water while the other provides cold water to its respective flow header.

B - Pumps

Each set of Plate Heat Exchangers has a DC Inverter Driven Water Pump.

This circulates the closed loop water system between the HBC and indoor units.

The discharge flow rate from the pump is controlled by the Valve Block.

C - Valve Block

A Valve Block is connected between each flow and return port of the HBC.

This Valve Block has two features;

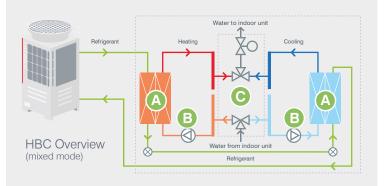
Firstly, it has the choice of selecting between the two flow headers.

Secondly, it controls the flow of the water sent to the indoor unit, defining the capacity.

Connection to slave HBC

Water flow/return to indoor units 8 or 16 port options available

Refrigerant pipes to outdoor unit, expansion tank (field supplied) and water filling loop (field supplied), and balancing line to 2nd main HBC.

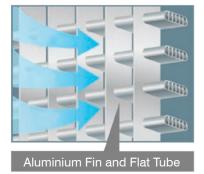


HVRF Air Source Outdoor Unit

Utilising the City Multi PURY-EP-YNW High COP Outdoor Unit Range increases seasonal efficiency of the system. It benefits from heat recovery and an energy efficient inverterdriven compressor, providing simultaneous heating and cooling. The ultimate in heat exchange efficiency with aluminium flat tube heat exchanger technology!







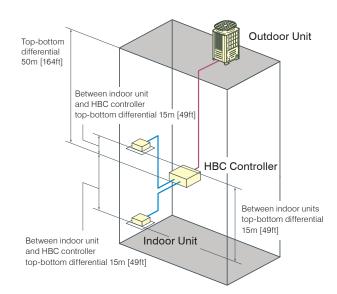
Inverter Compressor

Available on EP High COP Models Only

Model Lineup

Horsepower	8HP	10HP	12HP	14HP	16HP	18HP	20HP
Cooling Capacity	22.4kW	28.0kW	33.5kW	40.0kW	45.0kW	50.0kW	56.0W

Piping Length



R	🚯 Refrigerant Pipe 😡 Water Pipe									
Rei	irigerant Piping Lengths	Maximum meters [Feet]								
R	Distance between heat source and HBC	110 [360]								
W	Farthest indoor unit from HBC controller	60 [196]								
Vei	tical Differentials Between Units	Maximum meters [Feet]								
R	Heat source/HBC controller	50 [164]								
R R	Heat source/HBC controller HBC/heat source (heat source unit above HBC)	50 [164] 50 [164]								
	,									
ß	HBC/heat source (heat source unit above HBC)	50 [164]								
R R	HBC/heat source (heat source unit above HBC) HBC/heat source (heat source unit below HBC)	50 [164] 40 [131]								

*1. Values in () are applied when indoor total capacity exceeds 130% of outdoor unit capacity.

HVRF Water Source Unit

Water Source Units utilise water instead of air as the energy transfer medium, with all of the benefits of Mitsubishi Electric patented 2-Pipe Heat Recovery Technology, excellent efficiency and the flexibility of air source VRF systems. This system offers a viable solution where Air Source outdoor units are not feasible due to space or weight constraints in the outside plant area by using a condenser water loop for the means of heat injection and rejection, or where further efficiencies are able to be sought by the use of natural means such as rivers, lakes and closed loop ground bores.

A Sustainable and Flexible Solution for Tall or Unique Buildings:

- Apply and network the energy through a water loop, within the building and between buildings optimising efficiency.
- Utilisation of geothermal sources, rivers or lakes, landlord loops, rejected heat from hydronic server cooling or other processes.
- City Multi Water Source Units offer double heat recovery through the conventional floor-wide heat recovery and floor to floor heat recovery via the water loop, this system also offers a solution where no defrost cycle is required in Heating Mode.
- Units are located indoors on each floor or a dedicated internal plant room ensuring design flexibility with pipework. These units are compact and do not require ventilation due to a refrigerant cooled inverter which leads to maximising tenant floor area.

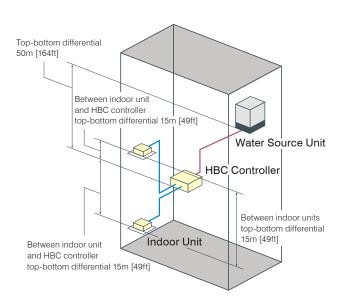




Model Lineup

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R	Heat source/HBC controller	50 [164]						
R	HBC/heat source (heat source unit abobe HBC)	50 [164]						
R	HBC/heat source (heat source unit below HBC)	40 [131]						
W	Indoor/HBC controller	15 (10) [49 (32)]*1						
W	Indoor/indoor	15 (10) [49 (32)]*1						
R	HBC/HBC controller	15 (10) [49 (32)]* ¹						

*1. Values in () are applied when indoor total capacity exceeds 130% of outdoor unit capacity.

Hybrid Branch Circuit (HBC) Controller

The HBC is used for the connection of the outdoor unit and the indoor units. The heat exchange for refrigerant and water is performed simultaneously using the industry's first and patented Hybrid VRF Technology.

Туре	Main	-HBC	Sub-HBC		
Model	CMB-WM108V-AA	CMB-WM1016V-AA	CMB-WM108V-AB	CMB-WM1016V-AB	
Total Branches	8	16	8	16	

Indoor Models

The following indoor units are exclusively for use with Hybrid City Multi.

Туре	Name	Model	10	15	20	25	32	40	50	63	71	80	100	125
Ceiling Concealed Low Static Pressure	PEFY-WP VMS1-E		•	•	•	•	•	•	•					
Ceiling Concealed Medium Static Pressure	PEFY-WP VMA-E				•	•	•	•	•	•	•	•	•	•
Ceiling Concealed High Static Pressure	PEFY-WL VMHS-A							•	•	•	•	•	•	•
4-Way Airflow Cassette	PLFY-WL VEM-E	- martin			•	•	•	•	•	•		•	•	•
Compact Cassette	PLFY-WL VFM-E		•	•	•	•	•	•						
Wall Mounted	PKFY-WL VLM-E		•	•	•	•	•	•						
wan wounted	PKFY-WL VKM-E								•	•		•		
Floor Standing Concealed	PFFY-WP VLRMM-E				•	•	•	•	•					

Controller Range

Remote Controllers



28.8-1 1



- Energy saving
- Backlit LCD screen

Dual set point option

- Error information
- Temperature range setting

Operation lock

Weekly schedule

Advanced M-NET Controller PAR-U02MEDA

• Dual set point option

Occupancy sensor

- - •
- Brightness sensor
- Energy saving
- Touch panel and backlit LCD
- LED indicator
- Temperature and humidity sensor
 - Weekly schedule
 - Error information

Simplified Controller PAC-YT52CRA

- On-off
- Temperature control
- Fan speed
- Mode

Centralised Controllers and BMS Interface

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AE-200E

- 10.4 inch LCD touchscreen display
- Web access - central control available via web browser
- 365-day time scheduler
- Energy consumption monitoring •
- Programmable floor plan •
- BACnet BMS Interface compatible



MelcoBEMS Mini BMS Interface

- MODBUS
- BACnet MS/TP

AT-50B

- Stand-alone centralised control
- Backlit LCD touchscreen
- Weekly and daily schedule



BAC-HD150 BMS Interface

- BACnet
- Connects directly to M-NET

MA Touch Remote PAR-CT01MAA-SB PAR-CT01MAA-PB



3.5" Touch Panel

Featuring a 3.5" HVGA Full Colour LCD Touchscreen.

Bluetooth Functionality

The controller can communicate with a smart phone or tablet device via Bluetooth. Operation and Setting App is available on the App Store.

Hotel Setting

A simple operation panel is available to display only ON/ OFF, set temperature and fan speed - ideal for hotels.

Logo Customisation

Your company logo or image can be displayed on the screen.

Customisable Colour Options

180 different colour patterns can be selected for control parameters or background. Available in White and Premium Black.



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Patented Hybrid VRF Technology

True flexibility is achieved as the system is modular for a manageable phased installation.





Model				PURY-P200YNW-A1 (-BS)	PURY-P250YNW-A1 (-BS)
Power source	9			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
			kW	22.4	28.0
	Capacity (Nomin	al) *1	BTU / h	76.400	95.500
	Power input		kW	6.54	9.92
Cooling	Current input		A	11.0-10.4-10.1	16.7-15.9-15.3
	EER		kW / kW	3.42	2.82
		Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Temp. Range *3	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
			kW	25.0	31.5
	Capacity (Nomin	al) *2	BTU / h	85,300	107,500
	Power input		kW	6.49	10.06
Heating	Current input		A	10.9-10.4-10.0	16.9-16.1-15.5
	COP		kW / kW	3.85	3.13
		Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Temp. range *3	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
		Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
Indoor unit c	onnectable	Model / Quantity		⁺ W(P)10~125, WL10~50/1~30	W(P)10~125, WL10~50/1~37
Sound press	ure level (measured	in anechoic room)*4	dB <a>	59.0/59.0	60.5/61.0
	r level (measured in		dB <a>	76.0/78.0	78.0/80.0
	,	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
Refrigerant p	iping diameter	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Type x Quantity	Low prosourc		Propeller fan x 1	Propeller fan x 1
	Type x quantity		m3/min	170	185
	Air flow rate	Air flow rate		2.833	3.083
Fan	All HOW Falls			6.003	6,532
i all	Control, Driving	machanism	cfm	Inverter-control, direct-driven by motor	Inverter-control, direct-driven by motor
	Motor output	liculaliali	kW	0.92 x 1	0.92 x 1
	External static pr	000 *5	IN V V	0.92 X 1 0 Pa (0 mmH20)	0.92 X 1 0 Pa (0 mmH20)
	Type	633. J		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method			Inverter	Inverter
Compressor	Motor output		kW	3.7	5.5
	Case heater		kW	- (- V)	- (- V)
External finis			K VV	- (- v) Pre-coated galvanised steel sheets (+powder coating	. ,
	011		mm	1.858 (1.798 without	
External dim	ension HxWxD		in.	73-3/16 (70-13/16 without	· · ·
	High pressure pr	otaction		High pressure sensor, High pressu	
Protection	Inverter circuit (C			Over-heat protection, Ov	
devices	Compressor	JOINI ./ LAN		over-near protection, ov	
001000	Fan motor			-	-
	Type/GWP			- R410A / 2088	- R410A / 2088
		Weight	kg	5.2	5.2
	Factory charged	CO2 equivalent *6		5.2	5.2 10.86
Refrigerant	Maxadditional	Weight	kg	31.8	37.8
noniyeranı	erant Max additional charge	CO2 equivalent *6		66.40	78.93
	onargo	Weight	kg	37.0	43.0
	Total charge	CO2 equivalent *6		77.26	43.0 89.78
Notwoight		002 equivalent 0			
Net weight	201		kg (lbs)	219 (483)	228 (503)
Heat exchang				Salt-resistant cross f	
Defrosting m	IETITAN			Auto-Defrost Mode (Reversed	renigerani cycle, Hol gas)

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

- Notes:
 1. Nominal cooling conditions (subject to JIS B8615-2) Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B. Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 2. Nominal heating conditions (subject to JIS B8615-2) 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.)
 3. -5°CD.B. (23°FD.B.), -6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

4. Cooling Mode/Heating Mode

- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH20). Consult your dealer about the specification when setting External static pressure option.
 This table is based on Regulation (EU) No517/2014.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and
 other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.



Model Number of HBC controller				PURY-P3001	(NW-A1 (-BS)	PURY-P350	YNW-A1 (-BS)	
				Single HBC	Double HBC	Single HBC	Single HBC Double HBC	
Power source	e			•	3-phase 4-wire 380-400-415 V 50/60 Hz		-400-415 V 50/60 Hz	
	Opposite Alex 1	al) *4	kW		3.5	40.0		
	Capacity (Nomina	al) ^1	BTU / h	114.300		136,500		
	Power input		kW	13.13	11.12	16.26	13.24	
Cooling	Current input		A	22.1-21.0-20.2 18.7-17.8-17.1		27.4-26.0-25.1	22.3-21.2-20.4	
0	EER		kW / kW	2.55	3.01	2.46	3.02	
Temp. Range *3		Indoor	W.B.		15.0~24.0°C (59~75°F)		C (59~75°F)	
		Outdoor	D.B.	-5.0~52.0°C	1 1		C (23~126°F)	
			kW	37	· · · ·		5.0	
	Capacity (Nomina	al) *2	BTU / h		000		.500	
	Power input		kW	12.71	11.94	13.88	12.85	
Heating	Current input		A	21.4-20.3-19.6	20.1-19.1-18.4	23.4-22.2-21.4	21.6-20.6-19.8	
.suring	COP		kW / kW	2.95	3.14	3.24	3.50	
		Indoor	D.B.	2.35 15.0~27.0°(5.50 C (59~81°F)	
	Temp. range *3	Outdoor	W.B.	-20.0~15.5°	()		°C (-4~60°F)	
		Total capacity	H.U.	-20.0~13.3 50~150% of outo	()		door unit capacity	
ndoor unit c	onnectable	Model / Quantity			/L10~50/2~45		NL10~50/2~50	
Sound proces	ura laval (manaurad	in anechoic room)*4	dB < A >	w(P)10~123, W			i/64.0	
	1	1	dB <a>					
Refrigerant nining diameter High pressure mr		mm (in.)	80.0/86.0 19.05 (3/4) Brazed		81.0/83.0 19.05 (3/4) Brazed			
		• 1	mm (in.)					
Type x Quantity		IIIIII (III.)	22.2 (7/8) Brazed Propeller fan x 1		28.58 (1-1/8) Brazed Propeller fan x 2			
	Type x quantity		m3/min				50	
	Air flow rate	Air flow rate		240 4.000			167	
	All now rate			1		,		
an	Control, Driving r	nachaniam	cfm	8,4			828	
		nechanisin	kW	Inverter-control, dir	,	Inverter-control, direct-driven by motor		
	Motor output	**	KW	0.92 x 1 0 Pa (0 mmH20)		0.46 x 2		
	External static pr	ess. o		,	/	0 Pa (0 mmH20)		
	Type Otention mothered			Inverter scroll her		Inverter scroll hermetic compressor		
Compressor	Starting method		1.147	Inve		Inverter		
	Motor output		kW		3	8.7		
Talaan 177 t	Case heater		kW	- (-	1	- (- V)		
External finis	SN				v ()	ing for -BS type) <munsell 1.1="" 3y="" 7.8="" o<="" td=""><td></td></munsell>		
External dim	ension HxWxD		mm .	1,858 (1,798 witho	• /		ut legs) x 1,240 x 740	
	1Pak at		in.	/3-3/16 (70-13/16 withou	it 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		
	High pressure pro					sure switch at 4.15 MPa (601 psi)		
Protection	Inverter circuit (C	ump./fan)			Over-heat protection,	Over-current protection		
devices	Compressor				-			
	Fan motor				•		-	
	Type/GWP	147 * 1 *	1	R410A			/ 2088	
	Factory charged	Weight	kg		2		1.0	
	, , ,	CO2 equivalent *6		10			5.70	
Refrigerant	Max additional	Weight	kg	37			1.3	
	charge	CO2 equivalent *6		78			5.23	
	Total charge	Weight	kg		3.0		9.3	
	iotai onurgo	CO2 equivalent *6		89		102.94		
Vet weight	et weight kg (lbs)			232			(611)	
Heat exchanç	ger				Salt-resistant cros	ss fin & copper tube		
Defrosting m	ethod				Auto-Defrost Mode (Revers	ed refrigerant cycle, Hot gas)		

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

Notes:
1. Nominal cooling conditions (subject to JIS B8615-2) Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
2. Nominal heating conditions (subject to JIS B8615-2) 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.)
3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

Cooling Mode/Heating Mode
 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH20). Consult your dealer about the specification when setting External static pressure option.

6. This table is based on Regulation (EU) No517/2014.
Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

• Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-P400YNW-A1 (-BS)	PURY-P450YNW-A1 (-BS)	PURY-P500YNW-A1 (-BS)	
ower source					3-phase 4-wire 380-400-415 V 50/60 Hz		
			kW	45.0	50.0	56.0	
	Capacity (Nomina	al) *1	BTU / h	153,500	170.600	191.100	
	Power input		kW	16.65	17.92	24.03	
ooling	Current input		A	28.1-26.7-25.7	30.2-28.7-27.7	40.5-38.5-37.1	
5	EER		kW / kW	2.70	2.79	2.33	
		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)	
	Temp. Range *3	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)	
			kW	50.0	56.0	63.0	
	Capacity (Nomina	al) *2	BTU / h	170,600	191,100	215.000	
	Power input		kW	14.88	17.39	19.09	
leating	Current input		A	25.1-23.8-23.0	29.3-27.8-26.8	32.2-30.6-29.5	
louting	COP		kW / kW	3.36	3.22	3.30	
	001	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)	
	Temp. range *3	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)	
		Total capacity	11.D.	50~150% of outdoor unit capacity	$50 \sim 150\%$ of outdoor unit capacity	50~150% of outdoor unit capacity	
ndoor unit cor	nnectable	Model / Quantity		W(P)10~125, WL10~50/1~40	W(P)10~125, WL10~50/1~45	W(P)10~125, WL10~50/1~50	
ound proceur	a loval (massurad	in anechoic room)*4	dD < A >	65.0/69.0	65.5/70.0	63.5/64.5	
	1	,		1	,	,	
sound power i	evel (measured m	anechoic room) *4	dB < A >	83.0/88.0	83.0/89.0	82.0/84.0	
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	
Type x Quantity			0/ 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	
		m3/min		315	315	295	
	Air flow rate		L/s	5,250	5,250	4,917	
an			cfm	11,123	11,123	10,416	
	Control, Driving r	nechanism		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	0.92 x 2	
	External static pr	ess. *5		0 Pa (0 mmH20)	0 Pa (0 mmH20)	0 Pa (0 mmH20)	
	Туре			Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	
Compressor	Starting method			Inverter	Inverter	Inverter	
, outburger	Motor output		kW	11.7	12.4	14.2	
	Case heater		kW	- (- V)	- (- V)	- (- V)	
xternal finish				Pre-coated galvanised	steel sheets (+powder coating for -BS type) $<$ MUNSELI	L 3Y 7.8/1.1 or similar>	
			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 1,750 x 740	
xternal dimer	nsion HxWxD		in.	73-3/16 (70-13/16 without legs) x	73-3/16 (70-13/16 without legs) x	73-3/16 (70-13/16 without legs) x	
	Hab assesses	-testion		48-7/8 x 29-3/16	48-7/8 x 29-3/16	68-15/16 x 29-3/16	
	High pressure pro			High	pressure sensor, High pressure switch at 4.15 MPa (601	i psi)	
rotection levices	Inverter circuit (C	UMP./FAN)			Over-heat protection, Over-current protection		
EAIPE2	Compressor			-	-	-	
	Fan motor			-	-	-	
	Type/GWP			R410A / 2088	R410A / 2088	R410A / 2088	
	Factory charged	Weight	kg	8.0	10.8	10.8	
	, , ,	CO2 equivalent *6		16.70	22.5	22.55	
efrigerant	Max additional	Weight	kg	47.3	44.5	45.2	
	charge	CO2 equivalent *6		98.76	92.92	94.38	
	Total charge Weight		kg	55.3	55.3	56.0	
	. star onurgo	CO2 equivalent *6		115.47	115.47	116.93	
Net weight kg (lbs)		277 (611)	296 (653)	340 (750)			
leat exchanger			Salt-resistant cross fin & copper tube				
)efrosting me	thod				Auto-Defrost Mode (Reversed refrigerant cycle)		

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

- Notes:
 Nominal cooling conditions (subject to JIS B8615-2) Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B. Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 Nominal heating conditions (subject to JIS B8615-2) 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.)
 -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

- Cooling Mode/Heating Mode
 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH20). Consult your dealer about the specification when setting External static pressure option.
 This table is based on Regulation (EU) No517/2014.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and
 other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-EP200YNW-A1 (-BS)	PURY-EP250YNW-A1 (-BS)
Power sourc	e			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
			kW	22.4	28.0
	Capacity (Nomin	al) *1	BTU / h	76.400	95,500
	Power input	Power input		5.84	8.77
Cooling	Current input			9.9-9.3-9.0	14.8-14.0-13.5
0	EER		kW / kW	3.83	3.19
	T D to Indoor		W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Temp. Range *3	Outdoor	D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
	Our stille (Normin	-1) *0	kW	25.0	31.5
	Capacity (Nomin	al) Z	BTU / h	85,300	107,500
	Power input		kW	6.49	9.84
Heating	Current input		A	10.9-10.4-10.0	16.6-15.7-15.2
	COP		kW / kW	3.85	3.20
	Tomp roppo *0	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Temp. range *3	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit c	onnectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	UIIIIEGLADIE	Model / Quantity		W(P)10~125, WL10~50/1~30	W(P)10~125, WL10~50/1~37
Sound press	ure level (measured	in anechoic room)*4	dB <a>	59.0/59.0	60.5/61.0
Sound powe	r level (measured in	anechoic room) *4	dB <a>	76.0/78.0	78.0/80.0
Rofrigorant r	piping diameter	High pressure	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
neniyeranı p	nping ulameter	Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Type x Quantity			Propeller fan x 1	Propeller fan x 1
			m3/min	170	185
	Air flow rate		L/s	2,833	3,083
Fan				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
	External static pr	ess. *5		0 Pa (0 mmH20)	0 Pa (0 mmH20)
	Туре			Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
Compressor	Starting method			Inverter	Inverter
001110100001	Motor output		kW	3.6	5.5
	Case heater		kW	- (- V)	- (- V)
External finis	sh			Pre-coated galvanised steel sheets (+powder coa	•
External dim	ension HxWxD		mm		ut legs) x 920 x 740
Extornar ann			in.		ıt legs) x 36-1/4 x 29-3/16
	High pressure pr				sure switch at 4.15 MPa (601 psi)
Protection	Inverter circuit (C	COMP./FAN)		Over-heat protection, (Over-current protection
devices	Compressor			-	
	Fan motor			-	•
	Type/GWP			R410A / 2088	R410A / 2088
	Factory charged	Weight	kg	5.2	5.2
		CO2 equivalent *6		10.86	10.86
Refrigerant	Max additional	Weight	kg	28.3	34.3
	charge	CO2 equivalent *6		59.09	71.62
	Total charge	Weight	kg	33.5	39.5
		CO2 equivalent *6		69.95	82.48
Net weight kg (lbs)		kg (lbs)	219 (483)	228 (503)	
Heat exchan	•				fin & aluminium tube
Defrosting m	nethod			Auto-Defrost Mode (Reverse	ed refrigerant cycle, Hot gas)

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

- 1. Nominal cooling conditions (subject to JIS B8615-2) 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. Nominal heating conditions (subject to JIS B8615-2) 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.)
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

4. Cooling Mode/Heating Mode

- 5. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2mmH20). Consult your dealer about the specification when setting External static pressure option.
- 6. This table is based on Regulation (EU) No517/2014. * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

 $^{\ast}\,$ Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-EP300	YNW-A1 (-BS)	PURY-EP350	YNW-A1 (-BS)	
Number of H	BC controller			Single HBC	Double HBC	Single HBC	Double HBC	
Power source	e			3-phase 4-wire 380-	400-415 V 50/60 Hz	3-phase 4-wire 380-	-400-415 V 50/60 Hz	
	0		kW	. 33	.5	. 40).0	
	Capacity (Nomin	al) *1	BTU / h	114.		136	.500	
	Power input		kW	12.05	10.24	14.76 12.01		
Cooling	Current input		A	20.3-19.3-18.6	17.2-16.4-15.8	24.9-23.6-22.8	20.2-19.2-18.5	
	EER		kW / kW	2.78	3.27	2.71 3.33		
		Indoor	W.B.	15.0~24.0°C		15.0~24.0°C (59~75°F)		
	Temp. Range *3	Outdoor	D.B.	-5.0~52.0°C		-5.0~52.0°C (23~126°F)		
			kW.	37	· · · · · ·		5.0	
	Capacity (Nomin	al) *2	BTU / h				,500	
	Power input	Power innut		128,000		13.88	12.85	
Heating	Current input		kW A	19.7-18.7-18.1	18.7-17.8-17.1	23.4-22.2-21.4	21.6-20.6-19.8	
aung	COP		kW / kW	3.20	3.37	3.24	3.50	
		Indoor	D.B.					
	Temp. range *3	Outdoor	W.B.	15.0~27.0°C (59~81°F) 15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F) -20.0~15.5°C (-4~60°F)				
		Total capacity	11.0.	-20.0~13.3 50~150% of outc	()		door unit capacity	
Indoor unit connectable Model / Quantity				W(P)10~125, W		W(P)10~125, V		
Sound pressure level (measured in anechoic room)*4 dB <a>			dB < A >	W(F)10~123, W 61.0/				
			dB <a>	80.0/		62.5/64.0 81.0/83.0		
		mm (in.)	19.05 (3/-		19.05 (3/4) Brazed			
Retrigerant piping diameter			22.2 (7/8			/8) Brazed		
Low pressure mm (in.)			111111 (111.)	Propelle	1		er fan x 2	
	Type x quantity		m3/min	24		2		
	Air flow rate		L/s	4.0			167	
an			cfm	4,0			328	
dII	Control, Driving mechanism		UIII	0,4 Inverter-control, dir			ect-driven by motor	
		licollallisili	kW	0.92			δ x 2	
	Motor output External static press. *5		K.VV					
	Type	633. J		0 Pa (0 mmH20)		0 Pa (0 mmH20) Inverter scroll hermetic compressor		
	Starting method			Inverter scroll hermetic compressor				
Compressor	Motor output		kW	Inverter 7.3		Inverter 8.7		
	Case heater		kW					
xternal finis			KVV	- (- Dra anal		- (- V) ating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""></munsell>		
EXTERNAL HILLS	511		mm		• • • •			
External dim	ension HxWxD		mm in.	1,858 (1,798 withou		1,858 (1,798 withou	01.	
	High pressure pr	atastian	111.	73-3/10 (70-13/10 Withou	it legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 withou	il ieys) x 40-7/0 x 29-3/ 10	
	Inverter circuit (C					sure switch at 4.15 MPa (601 psi)		
Protection devices		OWF./TAN)			over-neat protection,	Over-current protection		
10 11003	Compressor Fan motor			-	•		-	
	Type/GWP	Weight	ka	R410A 5.		R410A	/ 2088 .0	
	Factory charged	0	kg					
Onfrigorant	Marcal Inc. 1	CO2 equivalent *6		10.			.70	
Refrigerant	Max additional charge	Weight	kg .	34			9.0	
	ullarye	CO2 equivalent *6		71.			.43	
	Total charge	Weight	kg	39		47.0		
ترا - ا میں امرا		CO2 equivalent *6		82.			.14	
Vet weight			kg (lbs)	230 (275	(607)	
Heat exchanç	5					fin & aluminium tube		
Defrosting m	ietnod				Auto-Detrost Mode (Revers	ed refrigerant cycle, Hot gas)		

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

- 1. Nominal cooling conditions (subject to JIS B8615-2) 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. Nominal heating conditions (subject to JIS B8615-2) 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.)
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

4. Cooling Mode/Heating Mode

5. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2mmH20). Consult your dealer about the specification when setting External static pressure option.

6. This table is based on Regulation (EU) No517/2014.

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

 $^{\star}\,$ Due to continuing improvement, above specifications may be subject to change without notice.



Power source	Model				PURY-EP400YNW-A1 (-BS)	PURY-EP450YNW-A1 (-BS)	PURY-EP500YNW-A1 (-BS)	
Image: Processing of the state of	Power source					3-phase 4-wire 380-400-415 V 50/60 Hz		
Image: Part of the state of the s				kW	45.0		56.0	
Centre Centre No. Processing No. Processing Science Sc		Capacity (Nomina	al) *1	BTU / h	153.500	170.600	191.100	
Centre Centre No. Processing No. Processing Science Sc		Power input		kW	,	,	,	
EER Wirk 0.315 2.87 2.83 Innp. Fag.** Modor Wirk 15.8-2.40° (9.9-75°) 15.0-2.40° (9.9-75°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.0-2.20° (2.9-726°) 5.000 6.00	Coolina							
Image by two set of the set of	5							
Index of the state of			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)	
Registry line Vite 500 560 960 960 Poer ingut W 0.1010 191.00 215.000 Current ingut W 0.1412 16.86 19.4 Current ingut W 0.233.2315.005 33.3315.005 33.3315.005 Mode Data 0.500 0.284.270.200 33.3315.005 33.3315.005 Mode Outower W 0.34 3.32 3.33315.005 3.3315.005 3.3315.005 3.3315.005.2707.005.9-81(F) -20.0-15.57.0(4-60'F) -		Temp. Range *3	Outdoor	D.B.		· · · · ·	· · · · · · · · · · · · · · · · · · ·	
Big is a second product of the second prod				kW	. ,	. ,	. ,	
Presidu Field Interface Interface Interface Interface W/W 6.34 6.24.70.65 3.33.63.63 Interface W/W 6.34 3.2 3.33.63.63 Interface W/W 6.34 3.2 3.33.63.63 Interface W/W 6.34 3.2 3.33.63.05 Interface M/W 6.35.0 7.00		Capacity (Nomina	al) *2	BTU / h				
OCP W/ M 3.54 3.32 3.19 Tem, rage *3 Indoir O.B. 1150–27.0°C (59–81°F) 150–27.0°C (59–81°F) 150–27.0°C (59–81°F) 200–155 °C (4–60°F) Indoir Total capacity South Society (4–60°F) 30–150 % doubtor unit capacity 50–150 % doubtor unit capacity 50–250 % 52.50 % 52.50 % 52.50 % 52.50 % 52.50 % 52.50 % 52.50 % 52.50		Power input		kW		16.86		
OP W/W 3.54 3.32 3.19 Tom, range 73 Indoor 0.8 150-270°C (59-61°F) 150-270°C (59-61°F) 300-10°C (50-61°F)	Heating	Current input		A	23.8-22.6-21.8	28.4-27.0-26.0	33.3-31.6-30.5	
$ \begin{aligned} \begin{tabular}{ $	5							
infinition of the integral of			Indoor					
Interm Total capacity S0-150% of outdoor unit capacity S0-150% of outdoor unit capacity M0 = 0.50% of outdoor unit capacity Sound pressure Intermation M0 = 0.50% of outdoor unit capacity W(P)10-12% W10-507-40 W(P)10-12% W10-507-40 W(P)10-12% W10-507-40 Sound pressure Intermation M0 = 0.50% of outdoor unit capacity M0 = 0.50% of outdoor unit capacity M0 = 0.50% of outdoor unit capacity Sound pressure Implement High pressure mm (in) 22.2 (7)8 Brazed 22.8 (5) (1-10) Brazed 28.5 (1-10) Brazed		Temp. range *3	Outdoor	W.B.	. ,	. ,		
Index unit connectableModel / QuantityImage: Sub construction of the state					· · · ·	. ,	1 /	
Sound pressure level (measure lin metholic room) ⁴ dB <a> 665.0/69.0 655.7/0.0 683.5/64.5 Sound pressure level (measure lin metholic room)⁴ dB <a> 83.0/80.0 83.0/89.0 82.0/24.0 Refrigerant JPU dramtel Impressure min min 22.2 (7/8) Brazed 22.2 (7/8) Brazed 22.2 (7/8) Brazed Refrigerant JPU dramtel Impressure min min 22.2 (7/8) Brazed 22.8 (1-1/8) Brazed 28.5 (1-1/8) Brazed	Indoor unit co	onnectable	1 2		1 /			
Sound power level (massured in sur-choic room) ⁴⁴ dB <a> Sound 80 B 30,980 B 20,984.0 Refrigerant JU-Vice Impressure mm (m) 222 (7/8) Brazed 225 (81-1/8) Brazed 225 (7/8) Brazed 225 (7/8) Brazed 225 (7/8) Brazed 226 (7/8) Brazed <	Sound pressu	ire level (measured		dB <a>				
Refrigerant Product High pressure Low pressure min, Min 22.2 (7/8) Brazed 22.2 (7/8) Brazed 22.2 (7/8) Brazed Refrigerant Product Low pressure min, Min 28.38 (1-1/8) Brazed 28.58 (1-1/8) Brazed 28.58 (1-1/8) Brazed Refrigerant Product Propelleranx 2 Propelleranx 2 Propelleranx 2 Propelleranx 2 Name Min 315 355 295 Air flow rate Min 10.45 20.550 4.917 Control, Driving Vertanism Inverter-control, direct-driven by motor Inverter-control, direct-driven by motor Inverter-control, direct-driven by motor More output: NM 0.46 x 2 0.46 x 2 0.46 x 2 0.92 x 2 Control, Driving Verture Inverter-control, direct-driven by motor Inverter-control, direct-			,					
Heringenet Image	1		,		,		,	
Fan Image:	Refrigerant pi	ping diameter				. ,		
$ \begin{split} \mbox{A} A$		Type x Quantity			N 1 7			
Air flow rate $iso 5250 5250 4497 Fan Air flow rate image: 11,23 11,123 11,123 10,416 Control, Diving = trains and trand trand trand trains and trains and trand trains and trains a$				m3/min				
Fan image: market in the second								
$ \begin{array}{ c c c } \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c } \hline \be$	Fan							
					,		1	
External static press. *50 Pa (0 mmH20)0 Pa (0 mmH20)0 Pa (0 mmH20)CompressorTypeInverter scroll hermetic compressorInverter scroll hermetic compressorInverter scroll hermetic compressorStarting methodKW10.811.713.8Case heaterKW-(-V)-(-V)-(-V)External finistrFre-coated galvaniced static		, ,		kW				
$ \begin{array}{ c c c } \hline \begin{tabular}{ c c } \hline \begi$			ess *5					
$\begin{split} \begin{tabular}{ c $					(/	. ,		
$ \begin{tabular}{ c c c c c } \hline Compressor & Verse &$						· · · · · · · · · · · · · · · · · · ·		
case heaterkW(-(-V)(-(-V)External diris/-Free-coated galvanise test lenests (+powder coating for -BS type) <kuuselts 1="" 8="" or="" similar="">External diris/-mm1,858 (1,798 without legs) x 1,240 x 7401,858 (1,798 without legs) x 1,240 x 7401,858 (1,798 without legs) x 1,750 x 740External diris/-mm1,858 (1,798 without legs) x 1,240 x 7401,858 (1,798 without legs) x 1,750 x 7401,858 (1,798 without legs) x 1,750 x 740External diris/-mm1,858 (1,798 without legs) x 1,240 x 7401,858 (1,798 without legs) x 1,750 x 74073-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16External diris/-mm73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/1673-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16ProtectionInverter circuit////////////////////////////////////</kuuselts>	Compressor	0		kW				
Protection devices Mergeneration of the second gavanised steel sheets (+powder coating for -BS type) <munsell 1="" 8="" or="" similar="" sy=""> Protection in. nm 1,250 x 740 1,858 (1,798 without legs) x 1,240 x 740 1,858 (1,798 without legs) x 1,240 x 740 Protection in. Note the second state sheets (+powder coating for -BS type) <munsell 1="" 8="" or="" similar="" sy=""> Protection in. Note the second state sheets (+powder coating for -BS type) <munsell 1="" 8="" or="" similar="" sy=""> Protection in. Note the second state sheets (+powder coating for -BS type) <munsell 1="" 8="" or="" similar="" sy=""> Protection in. Note transpan="2">Note transpan="2" Note transpan="2">Note transpan= transpan="2">Note transpan="2">Note transpan="2"Note t</munsell></munsell></munsell></munsell>								
Image: Figure	External finis				. ,		. ,	
External dimension HxWxD in. $73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16$ $73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16$ High pressure protection High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 ps) Inverter circuit (COMP./FAN) Compressor - - Compressor - - - Fan motor - - - Fan motor - - - Factory charge difference Kigh method Kigh 8.0 10.8 10.8 Core quivalent *6 t 16.70 22.55 22.55 22.55 Refrigerant charge Weight kg 3.9.0 44.7 45.2 Nax additional charge Weight kg 3.9.0 44.7 45.2 Tota Charge Weight kg 3.9.0 44.7 45.2 Co2 equivalent *6 t 81.43 93.33 94.38 Co2 equivalent *6 t 98.14 115.88 116.9	Entormartimo			mm	*			
III. III. </td <td>External dime</td> <td>ension HxWxD</td> <td></td> <td></td> <td></td> <td></td> <td></td>	External dime	ension HxWxD						
Protection devices Inverter circuit (COMP/FAN) Over-heat protection, Over-current protection $Compressor$ - - Fan motor - - Fan motor - - Factory charged charge Weight kg 8.0 10.8 10.8 Refrigerant Max additional charge Weight kg 39.0 44.7 45.2 Total charge Weight kg 39.0 44.7 45.2 Netweight Weight kg 39.0 44.7 45.2 Total charge Weight kg 39.0 44.7 45.2 Refrigerant Kg 39.0 44.7 45.2 Total charge Weight kg 39.0 55.5 56.0 Co2 equivalent *6 t 81.43 93.33 94.38 Net weight Kg (lbs) 276 (609) 301 (664) 346 (763)				IN.				
Advices Compressor -		0 1			High	pressure sensor, High pressure switch at 4.15 MPa (601	psi)	
Netweight Weight kg R410A/2088 R410A/2088 R410A/2088 R410A/2088 Netweight Yup/GWP R410A/2088 R410A/2088 R410A/2088 Yup/GWP Veight kg 8.0 10.8 10.8 Refrigerant Max additional charge Weight kg 39.0 44.7 45.2 Total charge Weight kg 39.0 44.7 45.2 45.2 Netweight Veight kg 39.0 55.5 56.0 56.0 Netweight Veight kg 47.0 55.5 56.0 56.0 Netweight Veight kg 98.14 115.88 116.93		Inverter circuit (C	OMP./FAN)			Over-heat protection, Over-current protection		
Image: Part of the state of the s	devices	Compressor			-	-	-	
Kerigerati Weight kg kg 8.0 10.8 Refrigerati Factory charged Veight kg 8.0 10.8 Nax additional charge Weight kg 39.0 22.55 22.55 Veight charge Veight kg 39.0 44.7 45.2 Veight charge Veight kg 81.43 93.33 94.38 Veight Co2 equivalent *6 t 81.43 95.5 56.0 Veight Co2 equivalent *6 t 98.14 115.88 116.93 Net weight :: : : : : : : : : : : : : : : : : :		Fan motor			-	-	-	
Factory charged Factory charged CO2 equivalent *6 t 16.70 22.55 22.55 Refrigerant Max additional charge Weight kg 39.0 44.7 45.2 Problem CO2 equivalent *6 t 81.43 93.33 94.38 Problem Weight kg 47.0 55.5 56.0 Net weight t 98.14 115.88 116.93		Type/GWP			,	R410A / 2088	1	
Refigerant Max additional charge Weight CO2 equivalent % if 16.70 22.55 22.55 Max additional charge Weight CO2 equivalent % if kg 39.0 44.7 45.2 Max additional charge Veight CO2 equivalent % if kg 39.0 44.7 45.2 Max additional charge Weight CO2 equivalent % if kg 39.0 44.7 45.2 Max additional charge Weight CO2 equivalent % if kg 47.0 55.5 56.0 Net weight Veight kg 98.14 115.88 116.93		Factory charged	*	•				
Andread CO2 equivalent *6 t 81.43 93.33 94.38 Total charge Weight kg 47.0 55.5 56.0 Total charge Weight kg 47.0 55.5 56.0 Net weight Ver (b) 98.14 115.88 116.93 Net weight kg (lbs) 276 (609) 301 (664) 346 (763)		i aotory onarycu						
Net weight Weight kg 47.0 55.5 56.0 Net weight Vergent*6 t 98.14 115.88 116.93 Net weight Vergent*6 kg (lbs) 276 (609) 301 (664) 346 (763)	Refrigerant		0	0	39.0			
Iotal charge CO2 equivalent *6 t 98.14 115.88 116.93 Net weight kg (lbs) 276 (609) 301 (664) 346 (763)		charge	CO2 equivalent *6	t	81.43	93.33	94.38	
Net weight CO2 equivalent % t 98.14 115.88 116.93 Net weight kg (lbs) 276 (609) 301 (664) 346 (763)		Total charge	*	•			56.0	
		iotai onaiyo	CO2 equivalent *6	t	98.14	115.88	116.93	
	Net weight			kg (Ibs)	276 (609)	301 (664)	346 (763)	
Heat exchanger Salt-resistant cross fin & copper tube	Heat exchang	er				Salt-resistant cross fin & copper tube		
Defrosting method Auto-Defrost Mode (reversed refrigerant cycle, hot gas)	Defrosting me	ethod				Auto-Defrost Mode (reversed refrigerant cycle, hot gas)		

 $\label{eq:unit} \text{Unit Coverter: } BTU/h=kW\times 3,412, \ \text{cfm}=m^3/\text{min}\times 35.31 \ \text{and} \ \text{lbs}=kg/0.4536 \ (\text{Please note these figures are subject to rounding variation})$

Notes:

- 1. Nominal cooling conditions (subject to JIS B8615-2) 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. Nominal heating conditions (subject to JIS B8615-2) 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.)
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

4. Cooling Mode/Heating Mode

- 5. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2mmH20). Consult your dealer about the specification when setting External static pressure option.
- 6. This table is based on Regulation (EU) No517/2014.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- $^{*}\,$ Due to continuing improvement, above specifications may be subject to change without notice.

Water Source Unit



Capacity (Nomina Power input Current input EER iemp. Range * 3 Capacity (Nomina Power input Current input COP iemp. range * 3	Indoor Outdoor I) *2	kW BTU / h kW A kW / kW D.B. kW BTU / h kW	3-phase 4-wire 380-400-415 V 50/60 Hz 22.4 76,400 3.97 6.7-6.3-6.1 5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300 4.04	3-phase 4-wire 380-400-415 V 50/60 Hz 28.0 95,500 5.44 9.1-8.7-8.4 5.14 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 31.5 107,500	
Power input Current input EER Capacity (Nomina Power input Current input COP	Indoor Outdoor I) *2	BTU / h kW A kW / kW W.B. D.B. kW BTU / h kW	76,400 3.97 6.7-6.3-6.1 5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300	95,500 5.44 9.1-8.7-8.4 5.14 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 31.5	
Power input Current input EER Capacity (Nomina Power input Current input COP	Indoor Outdoor I) *2	kW A kW/kW W.B. D.B. kW BTU/h kW	3.97 6.7-6.3-6.1 5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300	5.44 9.1-8.7-8.4 5.14 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 31.5	
Current input EER Capacity (Nomina Power input Current input COP	Outdoor I) *2	A A kW / kW W.B. D.B. kW BTU / h kW	6.7-6.3-6.1 5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300	9.1-8.7-8.4 5.14 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 31.5	
ER emp. Range *3 Capacity (Nomina Power input Current input COP	Outdoor I) *2	kW / kW W.B. D.B. kW BTU / h kW	5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300	5.14 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 31.5	
ER emp. Range *3 Capacity (Nomina Power input Current input COP	Outdoor I) *2	W.B. D.B. kW BTU / h kW	5.64 15.0~24.0°C (59~75°F) 10.0~45.0°C (50~113°F) 25.0 85,300	15.0∼24.0°C (59~75°F) 10.0∼45.0°C (50~113°F) 31.5	
Capacity (Nomina Power input Current input COP	Outdoor I) *2	D.B. kW BTU/h kW	10.0~45.0°C (50~113°F) 25.0 85,300	10.0~45.0°C (50~113°F) 31.5	
Capacity (Nomina Power input Current input COP	Outdoor I) *2	kW BTU/h kW	10.0~45.0°C (50~113°F) 25.0 85,300	10.0~45.0°C (50~113°F) 31.5	
Power input Current input COP	,	BTU / h kW	25.0 85,300	31.5	
Power input Current input COP	,	kW	85,300		
Current input				,	
Current input				5.41	
COP			6.8-6.4-6.2	9.1-8.6-8.3	
		kW / kW	6.18	5.82	
emp. range *3	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	
Temp. range *3				10.0~45.0°C (50~113°F)	
nectable			· · · ·	50~150% of heat source unit capacity	
ectable				W(P)10~125, WL10~50/1~37	
level (measured		dB <a>		48.0	
High pressure				19.05 (3/4) Brazed	
g diameter	0 1		· /	22.2 (7/8) Brazed	
Lon proceeds		1 /		5.76	
Water flow rate				96	
				3.4	
Pressure Dron				24	
				3.0 ~ 7.2	
1 0	nungo	1110/11		Inverter scroll hermetic compressor	
21				Inverter	
		kW.		6.2	
			4.0	0.2	
/436 1164161		I. V V	Calvaniand steel sheets	Galvanised steel sheets	
		mm		1.100 x 880 x 550	
ion HxWxD				43-5/16 x 34-11/16 x 21-11/16	
linh nrassura nra	tection	111.		High pressure sensor, high pressure switch at 4.15 MPa (601 psi)	
0 1 1				Over-heat protection, over-current protection	
	um .j			Over-heat protection	
	arne			R410A/2088	
31	ui yo	ka		5.0	
, ,	nal charne			30.0	
	nai onaiyo			35.0	
otai ollaiye				170 (375)	
Vne		ny (ino)			
3 1	lata	1	1 11	plate type 5.0	
				2.0	
	ectable evel (measured i g diameter /ater flow rate ressure Drop perating Volume ype tarting method fotor output ase heater on HxWxD ligh pressure pro twerter circuit (C compressor ype x Original Ct actory charged faximum additioi otal charge ype /ater volume in p	emp. range *3 Outdoor Total capacity Model / Quantity evel (measured in anechoic room) g diameter High pressure Low pressure Low pressure Vater flow rate ressure Drop perating Volume Range ype tarting method totor output ase heater on HxWxD ligh pressure protection nverter circuit (COMP.) compressor ype x Original Charge actory charged Maximum additional charge otal charge	emp. range "3OutdoorW.B.PactableTotal capacityImage: Second Seco	emp. range *3 OutdoorOutdoorW.B.10.0-45.0°C (50~113°F)ectableTotal capacity50~150% of heat source unit capacitywell (measured in anechoic room)dB <a>46.0g diameterHigh pressuremm (in.)15.88 (5/8) BrazedLow pressuremm (in.)19.05 (3/4) BrazedLow pressuremm (in.)19.05 (3/4) BrazedVater flow rate$\frac{m3/min}{cfm}$5.76L/min96fdmcfm3.4ressure DropkPa24perating Volume Rangem3/h3.0 ~ 7.2ypeInverter scroll hermetic compressortarting methodInverterfotor outputkW4.8ase heaterkW-fotor outputkW43-5/16 x 34-11/16 x 21-11/16igh pressure protectionmm1,100 x 880 x 550on HxWxDmm1,100 x 880 x 550ow pressorVer-heat protection, Over-current protectionverter circuit (COMP.)Over-heat protection, Over-heat protectionverter circuit (COMP.)Kg5.0otardial chargekg33.0tarting methods.028.0tarting methodkg3.0igh pressure protectionkg3.0igh pressure protectionkg3.0igh pressure protectionkg3.0igh pressure protectionkg3.0igh pressure protectionkg3.0verter circuit (COMP)kg3.0igh pressure prote	

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

1. Nominal cooling conditions (subject to JIS B8615-2). Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Water temperature: 30°C (86°F). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions (subject to JIS B8615-2). Indoor: 20°CD.B. (68°FD.B.), Water temperature: 20°C (68°FD.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

 $^{*}\,$ Due to continuing improvement, above specifications may be subject to change without notice.

Water Source Unit





Model				PQRY-P30	0YLM-A1	PQRY-P350YLM-A1		
Number of HI	BC Controller			Single HBC	Double HBC	Single HBC	Double HBC	
Power source	e			3-phase 4-wire 380-4	00-415 V 50/60 Hz	3-phase 4-wire 380-	-400-415 V 50/60 Hz	
	0	15 44	kW	33.5		40.0		
	Capacity (Nomin	al) ^1	BTU / h	114,30	00	136	.500	
	Power input		kW	7.55	6.71	9.98	8.72	
Cooling	Current input		A	12.7-12.1-11.6 11.3-10.7-10.3		16.8-16.0-15.4	14.7-13.9-13.4	
	EER		kW / kW	4.43	4.99	4.00 4.58		
		Indoor	W.B.	15.0~24.0°C ((59~75°F)	15.0~24.0°	C (59~75°F)	
	Temp. Range *3	Outdoor	D.B.	10.0~45.0°C (, ,	10.0~45.0°C (50~113°F)		
			kW	37.5	. ,		5.0	
	Capacity (Nomin	al) *2	BTU / h	128,0			.500	
	Power input		kW	7.13	6.79	8.87	8.25	
Heating	Current input		A	12.0-11.4-11.0	11.4-10.8-10.4	14.9-14.2-13.7	13.9-13.2-12.7	
5	COP		kW/kW	5.25	5.52	5.07	5.45	
		Indoor	D.B.	15.0~27.0°C (15.0~27.0°		
	Temp. range *3	Outdoor	W.B.	10.0~45.0°C (10.0~45.0°C		
		Total capacity		50~150% of heat sou			source unit capacity	
Indoor unit connectable Model / Quantity			W(P)10~125, WL		W(P)10~125, WL10~50/2~50			
Sound pressure level (measured in anechoic room) dB <a>		54.0		52.0				
Refrigerant piping diameter High pressure mm (in.)			19.05 (3/4)			B) Brazed		
		mm (in.)	22.2 (7/8)			/8) Brazed		
			m3/min	5.76			20	
	Water flow rate	Water flow rate		96			20	
Circulating			cfm	3.4			.2	
Water	Pressure Drop		kPa	24		44		
	Operating Volum	e Rance	m3/h	3.0 ~ 7.2		4.5 ~ 11.6		
	Туре	5		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method			Invert		Inverter		
Compressor	Motor output		kW	7.7		9.5		
	Case heater		kW	_				
External finis				Galvanised st	eel sheets	Galvanised steel sheets		
			mm	1.100 x 880			380 x 550	
External dim	ension HxWxD		in.	43-5/16 x 34-11/		1	6 x 21-11/16-11/16	
	High pressure pr	otection		High pressure sensor, High pressu			sure switch at 4.15 MPa (601 psi)	
Protection	Inverter circuit (C			Over-heat protection, Ov			over-current protection	
devices	Compressor	,		Over-heat pr			protection	
	Type x Original C	harge		R410A/2			/2088	
	Factory charged	v	kg	5.0			.0	
Refrigerant	Maximum additio	onal charge	kg	31.0			5.0	
	Total charge	v	kg	36.0			2.0	
Vet weight			kg (lbs)	170 (3)			(472)	
0	Туре		3 /	plate t	,		e type	
Heat	Water volume in	plate	L	5.0	,,		.0	
exchanger	Water pressure n		MPa	2.0			.0	

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

1. Nominal cooling conditions (subject to JIS B8615-2). Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Water temperature: 30°C (86°F). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions (subject to JIS B8615-2). Indoor: 20°CD.B. (68°FD.B.), Water temperature: 20°C (68°FD.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

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

Water Source Unit



Model				PQRY-P400YLM-A1	PQRY-P450YLM-A1	PQRY-P500YLM-A1
Power source	e			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
	Oracity (Newsia)	11. **	kW	45.0	50.0	56.0
	Capacity (Nomina	u) ~ 1	BTU / h	153,500	170,600	191,100
	Power input		kW	10.05	12.05	14.58
Cooling	Current input		A	16.9-16.1-15.5	20.3-19.3-18.6	24.6-23.3-22.5
	EER		kW / kW	4.47	4.14	3.84
	T D	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)
	Temp. Range *3	Outdoor	D.B.	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
	Oracity (Newsia	1) *0	kW	50.0	56.0	63.0
	Capacity (Nomina	Capacity (Nominal) *2		170,600 191,100		215,000
	Power input	Power input kV		9.45 11.11		13.07
Heating	Current input		A	15.9-15.1-14.6	18.7-17.8-17.1	22.0-20.9-20.2
	COP		kW / kW	5.29	5.04	4.82
	T *0	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)
	Temp. range *3	Outdoor	W.B.	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)	10.0~45.0°C (50~113°F)
		Total capacity		50~150% of heat source unit capacity	50~150% of heat source unit capacity	50~150% of heat source unit capacity
Indoor unit c	connectable	Model / Quantity		W(P)10~125, WL10~50/1~40	W(P)10~125, WL10~50/1~45	W(P)10~125, WL10~50/1~50
Sound press	ure level (measured	in anechoic room)	dB <a>	52.0	54.0	54.0
		High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Retrigerant p	piping diameter	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Water flow rate		m3/min	7.20	7.20	7.20
			L/min	120	120	120
Circulating			cfm	4.2	4.2	4.2
Water	Pressure Drop		kPa	44	44	44
	Operating Volume Range		m3/h	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6
	Туре			Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method			Inverter	Inverter	Inverter
Compressor	Motor output		kW	10.7	11.6	13.0
	Case heater		kW	_	_	_
External finis				Galvanised steel sheets	Galvanised steel sheets	Galvanised steel sheets
			mm	1.450 x 880 x 550	1.450 x 880 x 550	1.450 x 880 x 550
External dim	iension HxWxD		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	High pressure pro	tection		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)
devices	Inverter circuit (C	OMP.)		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
	Type x Original Cl	narge		R410A/2088	R410A/2088	R410A/2088
D. ()	Factory charged		kg	6.0	6.0	6.0
Refrigerant	Maximum additio	nal charge	kg	47.0	47.0	48.0
	Total charge	÷	kg	53.0	53.0	54.0
Net weight	5		kg (lbs)	214 (472)	214 (472)	214 (472)
0	Туре		5 ()	plate type	plate type	plate type
Heat	Water volume in p	olate	L	5.0	5.0	5.0
exchanger	Water pressure m		MPa	2.0	2.0	2.0

Unit Coverter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes :

1. Nominal cooling conditions (subject to JIS B8615-2). Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Water temperature: 30°C (86°F). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions (subject to JIS B8615-2). Indoor: 20°CD.B. (68°FD.B.), Water temperature: 20°C (68°FD.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

 $^{*}\,$ Due to continuing improvement, above specifications may be subject to change without notice.

HBC Controller



Main-HBC

Model					CI	MB-WM108V-	AA			CN	1B-WM1016V	-AA	
Number of Brand	ch					8			16				
D 0					1-p	nase 220-230-2	40 V		1-phase 220-230-240 V				
Power Source				50 Hz			60	Hz	50 Hz		60 Hz		
Power Input		Cooling	kW	0.45/0.46/0.47		0.45/0	46/0.47	0.45/0.46/0.47			0.45/0	.46/0.47	
(220/230/240) Heating		Heating	kW	0.45/0.46/0.47		0.45/0	46/0.47		0.45/0.46/0.47		0.45/0	.46/0.47	
Current Input	Current Input Cooling A		A		2.89/2.83/2.79		2.89/2	83/2.79		2.89/2.83/2.79		2.89/2	.83/2.79
(220/230/240) Heating		A		2.89/2.83/2.79		2.89/2	83/2.79		2.89/2.83/2.79		2.89/2	.83/2.79	
Sound pressure	level (measured in	anechoic room)	dBA			41.0					41.0		
Applicable Temp	perature Range of I	nstallation Site	°C (D.B.)			0~32					0~32		
External Finish	External Finish						1 (0	ized sheets + p	0/		
	Connectable Outdoor/Heat Source Unit						,	<i>p</i> .	,	3S)-PQRY-P200-			
Indoor Unit Capa	acity Connectable t	o 1 Branch						nt pipe combinir	ng 2 branches wl	hen the total unit		,	
External Dimens	External Dimension H x W x D					800 x 1,520 x 63					300 x 1,800 x 63		
Entornal Brittonio			in.		11-13/	16 x 59-7/8 x 24	,			,	'16 x 70-7/8 x 24	-13/16	
							Conne	ctable outdoor/h	eat source unit c	apacity			
	To Outdoor Unit / heat source unit			To P200	To P250/300	To P350	To P400	To P450/500	To P200	To P250/300	To P350	To P400	To P450/500
Refrigerant Piping Diameter		High Press. Pipe (0.D.)	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) 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	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
		Low Press. Pipe (O.D.)	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.5 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.5 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
		To Main HBC	mm (in.)		1	5.88 (5/8) Braze	d		15.88 (5/8) Brazed				
					W/WP/WL10-50		W/WP/V	/L63-125		W/WP/WL10-50		W/WP/V	WL63-125
Water Piping	Connection Size	Inlet Pipe (I.D.)	mm (in.)		22		2	2	22		2	22	
Diameter (To Indoor	CONNECTION SIZE	Outlet Pipe (I.D.)	mm (in.)		22		2	2	22		2	22	
Unit)	Field pipe size	Inlet Pipe (I.D.)	mm (in.)	20		3	0	20		3	30		
Outlet Pipe (I.D.) mm (in.)		20		÷	0	20 30		30					
Field Drain Pipe	Size		mm (in.)			0.D. 32 (1-1/4)			0.D. 32 (1-1/4)				
Net Weight			kg (lbs)		86 (19	0) [96 (212) with	i water]		98 (217) [111 (245) with water]				
	ment Accessory			Dra	in Connection pi	pe (with flexible	hose and insula	ion)	Drain Connection pipe (with flexible hose and insulation)				
Optional Parts						-					-		

Notes:

*Works not included: Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.

*The equipment is for R410A refrigerant.

*Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbours. (For use in quiet environments with low background noise, position the HBC CONTROLLER at least 5m away from any indoor units).

*Please install the HBC controller in a place where noise will not be an issue.

*Please attach an expansion vessel (field supply).

*Please use copper or plastic pipes for the water circuit. Do not use steel or stainless steel pipework. Furthermore, when using copper pipework, use a non-oxidative brazing method. Oxidation of the pipework will reduce the pump life.

*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.

*Please install an air purge valve where air will gather in the water circuit.

*Please install a pressure reducing valve and a strainer on the water supply to the HBC controller.

*Please refer to the Databook or the Installation Manual for the specified water quality.

*This unit is not designed for outside installations.

*Please always make water circulate or pull out the circulation water completely when not using it. (Please do not use it as a drinking water).

*Please do not use ground water and well water.

*When installing the HBC unit in an environment which may drop below 0 °C, please add antifreeze to the circulating water. (Refer to the Databook and the Installation Manual).

*R32 is flammable, and certain restrictions apply to the installation of units. When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed. For detail, refer to the section in the Databook on installation restrictions.

HBC Controller



Sub-HBC

Model				CMB-WM	/108V-AB	CMB-WM1016V-AB		
Number of Bra	anch			{	}	16		
Power Source				1-phase 220)-230-240 V	1-phase 220-230-240 V		
				50 Hz 60 Hz		50 Hz	60 Hz	
Power Input		Cooling	kW	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	
(220/230/240	D)	Heating	kW	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	
Current Input		Cooling	A	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	
(220/230/240	D)	Heating	A	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	
Sound pressu	ire level (measured	d in anechoic room)	dBA		-	-		
Applicable Te	Applicable Temperature Range of Installation Site C (D.B.)			0~	-32	0~32		
External Finis	h			Galva	nised steel plate (Lower part drain pan: p	re-coated galvanised sheets + powder co	ating)	
Connectable	Outdoor Unit					-		
Indoor Unit C	apacity Connectab	le to 1 Branch		Model P80 or smaller (Use optional joi total unit capaci	nt pipe combining 2 branches when the ty exceeds P81)	Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81)		
External Dime	ension H x W x D		mm	300 x 1,5	20 x 630	300 x 1,520 x 630		
			in.	11-13/16 x 59-	7/8 x 24-13/16	11-13/16 x 59-7/8 x 24-13/16		
	To Main HBC	Inlet Pipe (I.D.)	mm (in.)	20 (3/4)	20 (3/4)		
Water Piping		Outlet Pipe (I.D.)	mm (in.)	20 (3/4)	20 (3/4)		
Diameter	To Indoor Unit	Inlet Pipe (I.D.)	mm (in.)	20 (3/4)	20 (3/4)	
Outlet Pipe (I.D.) mm		mm (in.)	20 (3/4)	20 (3/4)			
Field Drain Pi	Field Drain Pipe Size mm (in.)			0.D. 32	(1-1/4)	0.D. 32 (1-1/4)		
Net Weight			kg (lbs)	44 (98) [49 (1	09) with water]	53 (117) [62 (137) with water]		
Standard Atta	ichment Accesso	ory		Drain Connection pipe (with	flexible hose and insulation)	Drain Connection pipe (with flexible hose and insulation)		
Optional Parts	S					-		

Notes:

*Works not included: Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.

*The equipment is for water.

*Install this product in a location where noise emitted by the unit will not disturb the neighbours. (For use in quiet environments with low background noise, position the Sub HBC CONTROLLER at least 5m away from any indoor units).

*Please install the Sub HBC controller in a place where noise will not be an issue.

*Please attach an expansion vessel (field supply).

*Please use copper or plastic pipes for the water circuit. Do not use steel or stainless steel pipework. Furthermore, when using copper pipework, use a non-oxidative brazing method. Oxidation of the pipework will reduce the pump life.

*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.

 $^{\star}\mbox{Please}$ install an air purge valve where air will gather in the water circuit.

*Please refer to the Databook or the Installation Manual for the specified water quality.

 $^{\ast}\mbox{This}$ unit is not designed for outside installations.

*Please always make water circulate or pull out the circulation water completely when not using it. (Please do not use it as a drinking water).

*Please do not use ground water and well water.

*When installing the Sub HBC unit in an environment which may drop below 0 °C, please add antifreeze to the circulating water. (Refer to the Databook and the Installation Manual).

*Main HBC Controller is necessary with sub HBC.

Slim Ceiling Concealed



Model				PEFY-WP10VMS1-E	PEFY-WP15VMS1-E	
Power sou	rce			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	
	Conseiler (Normin	1) *4	kW	1.2	1.7	
Cooling	Capacity (Nomina	11) 1	BTU/h	4,100	5,800	
Cooling	Power input *2		kW	0.03	0.05	
	Current input*2		A	0.21	0.44	
	Canacity (Namin	1) *0	kW	1.4	1.9	
Hasting	Capacity (Nomina	11) 3	BTU/h	4,800	6,500	
Heating	Power input *2		kW	0.03	0.03	
	Current input *2		A	0.21	0.33	
External fi	nish			Galvanised steel plate	Galvanised steel plate	
For a second second	External dimension HxWxD in.		mm	200x790x700	200x790x700	
External di			in.	7-7/8 x 31-1/8 x 27-9/16	7-7/8 x 31-1/8 x 27-9/16	
Net Weight			kg (lbs)	19 (42)	19 (42)	
Type		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Exchanger		Water Volume	L	0.4	0.7	
	Type × Quantity			Sirocco fan x 2	Sirocco fan x 2	
	5	External Static Pressure *4		<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	
	External Static Pr			<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	
	Motor Type			DC Motor	DC Motor	
Fan	Motor Output		kW	0.096	0.096	
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	
			m3/min	4.0 - 4.5 - 5.0	5.0 - 6.0 - 7.0	
	Airflow Rate	(Low Mid High)	L/s	67 - 75 - 83	83 - 100 - 117	
			cf/m	141 - 159 - 177	177 - 212 - 247	
Sound pre- in anechoi	ssure level (measured c room)*2	(Low Mid High)	dB <a>	20-23-25	22-24-28	
Insulation	Material			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	
Protection Device			Fuse	Fuse		
Connectable Outdoor Unit/HBC Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB		
Wator Dini	a Diamator *E *C	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	
water mipi	ng Diameter *5 *6	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	
Field Drair	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
Standard A	ttachment Accessor	у		Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band	
Optional p	art Control Box Repla	ice Kit		PAC-KE70HS-E	PAC-KE70HS-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

2. The value 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: Om (0ft).

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

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

Slim Ceiling Concealed



Model				PEFY-WP20VMS1-E	PEFY-WP25VMS1-E	
Power sou	rce			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	
	Our stille (Normin	-1) *4	kW	2.2	2.8	
Cooling	Capacity (Nomin	ai) " i	BTU/h	7,500	9,600	
Cooling	Power input *2		kW	0.051	0.06	
	Current input*2		A	0.49	0.51	
	Canasily (Namin	al) *0	kW	2.5	3.2	
Heating	Capacity (Nomin	ai) 3	BTU/h	8,500	10,900	
Heating	Power input *2		kW	0.031	0.04	
	Current input *2		A	0.38	0.4	
External fi	nish			Galvanised steel plate	Galvanised steel plate	
External dimension HxWxD mm in.		mm	200x790x700	200x790x700		
		in.	7-7/8 x 31-1/8 x 27-9/16	7-7/8 x 31-1/8 x 27-9/16		
Net Weigh	Vet Weight		kg (lbs)	20 (45)	20 (45)	
Туре			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)		
Heat Exchanger		Water Volume	L	0.9	0.9	
	Type × Quantity			Sirocco fan x 2	Sirocco fan x 2	
	Eutomal Ctatia D	External Static Pressure *4		<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	
	External Static Pi			<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	
	Motor Type	Motor Type		DC Motor	DC Motor	
Fan	Motor Output		kW	0.096	0.096	
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	
			m3/min	5.5 - 6.5 - 8.0	5.5 - 7.0 - 9.0	
	Airflow Rate	(Low Mid High)	L/s	92 - 108 - 133	92 - 117 - 150	
			cf/m	194 - 230 - 282	194 - 247 - 318	
	ssure level (measured c room)*2	(Low Mid High)	dB <a>	23-25-29	23-26-30	
Insulation	Material			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	
Protection Device			Fuse	Fuse		
Connectable Outdoor Unit/HBC Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB		
Watar Dia	ng Diameter *5 *6	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	
water Pipi	ilg Diametel D D	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	
Field Drai	n Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
Standard .	Attachment Accesso	ry		Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band	
Optional p	art Control Box Repl	ace Kit		PAC-KE70HS-E	PAC-KE70HS-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. The value 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: 0m (0ft).

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

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

Slim Ceiling Concealed



Model				PEFY-WP32VMS1-E	PEFY-WP40VMS1-E	PEFY-WP50VMS1-E
Power sour	ce			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
	Or a stiller (Newsian	11. *4	kW	3.6	4.5	5.6
Casling	Capacity (Nomina	(1) ~ 1	BTU/h	12,300	15,400	19,100
Cooling	Power input *2		kW	0.071	0.090	0.090
	Current input*2		A	0.61	0.73	0.77
	Canasity (Namina	1) *0	kW	4.0	5.0	6.3
Heating	Capacity (Nomina	BTL		13,600	17,100	21,500
Heating	Power input *2		kW	0.051	0.070	0.070
	Current input *2		A	0.50	0.62	0.66
External fin	ish			Galvanised steel plate	Galvanised steel plate	Galvanised steel plate
Enterna Lata			mm	200x990x700	200x990x700	200x1,190x700
External dir	nension HxWxD		in.	7-7/8 x 39 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			kg (lbs)	25 (56)	25 (56)	27 (60)
Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)		
Heat Excha	iger	Water Volume	L	1.0	1.0	1.7
	Type $ imes$ Quantity			Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 4
	Eutomal Chatia Dr.	External Static Pressure *4 Pa mmH ₂ 0		<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>	<5> - 15 - <35> - <50>
	External Static Pr			<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>	<0.5> - 1.5 - <3.6> - <5.1>
	Motor Type			DC Motor	DC Motor	DC Motor
Fan	Motor Output	utput kW		0.096	0.096	0.096
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
			m3/min	8.0 - 9.0 - 11.0	9.5 - 11.0 - 13.0	12.0 - 14.0 - 16.5
	Airflow Rate	(Low Mid High)	L/s	133 - 150 - 183	158 - 183 - 217	200 - 233 - 275
			cf/m	282 - 318 - 388	335 - 388 - 459	424 - 494 - 583
Sound pres in anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	28-30-33	30-32-35	30-33-36
Insulation N	laterial			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	PP Honeycomb fabric
Protection Device				Fuse	Fuse	Fuse
Connectable Outdoor Unit/HBC Controller				Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Water Piping Diameter *5 *6		in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw	
water ripin	y Diameter 5 6	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
Field Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
Standard A	tachment Accessor	y		Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band
Optional pa	rt Control Box Repla	ce Kit		PAC-KE70HS-E	PAC-KE70HS-E	PAC-KE70HS-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

 The value are measured at the factory setting of external static pressure.
 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: Om (0ft).
 The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate. 5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.



Model				PEFY-WP20VMA-E	PEFY-WP25VMA-E	
Power sou	rce			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	
	Our stille (Norsia	-1) *4	kW	2.2	2.8	
Cooling	Capacity (Nomina	al) " l	BTU/h	7,500	9,600	
Cooling	Power input *2		kW	0.07	0.09	
	Current input*2		A	0.55	0.64	
	Conscibu (Marrin	1) *0	kW	2.5	3.2	
laatina	Capacity (Nomina	al) "3	BTU/h	8,500	10,900	
leating	Power input *2	Power input *2		0.05	0.07	
	Current input *2		A	0.44	0.53	
xternal fi	nish			Galvanised steel plate	Galvanised steel plate	
External dimension HxWxD in.		mm	250x700x732	250x900x732		
			in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	
Vet Weight		kg (lbs)	21 (47)	26 (58)		
Туре			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)		
Heat Exchanger		Water Volume	L	0.7	1.0	
	Type $ imes$ Quantity			Sirocco fan x 1	Sirocco fan x 1	
	Eutomal Chatia Dr	External Static Pressure *4		<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	
	External Static Pr			<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	
	Motor Type	Motor Type		DC Motor	DC Motor	
an	Motor Output		kW	0.085	0.085	
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	
			m3/min	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	
	Airflow Rate	(Low Mid High)	L/s	125 - 150 - 175	167 - 200 - 233	
			cf/m	265 - 318 - 371	353 - 242 - 494	
	ssure level (measured c room)*2	(Low Mid High)	dB <a>	23-26-29	23-27-30	
nsulation	Material			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	
ir Filter				PP Honeycomb fabric	PP Honeycomb fabric	
rotection	Device			Fuse	Fuse	
Connectable Outdoor Unit/HBC Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB		
latar Dia	na Diamatar *5 *6	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	
rater Mpi	ng Diameter *5 *6	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	
ield Drai	n Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
tandard /	Attachment Accessor	у		Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band	
)ptional p	art Control Box Repla	ace Kit		PAC-KE91TB-E	PAC-KE92TB-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. The value 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: 0m (0ft).

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

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.



Model				PEFY-WP32VMA-E	PEFY-WP40VMA-E	PEFY-WP50VMA-E	
Power sou	rce			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	
	Capacity (Nomina	1) *4	kW	3.6	4.5	5.6	
Cooling	Capacity (Nomina	II) I	BTU/h	12,300	15,400	19,100	
Cooling	Power input *2		kW	0.11	0.14	0.14	
	Current input*2		A	0.74	1.15	1.15	
	Oracity (Newsian	1) *0	kW	4.0	5.0	6.3	
Hasting	Capacity (Nomina	11) "3	BTU/h	13,600	17,100	21,500	
Heating	Power input *2		kW	0.09	0.12	0.12	
	Current input *2		А	0.63	1.04	1.04	
External fi	nish			Galvanised steel plate	Galvanised steel plate	Galvanised steel plate	
European I al			mm	250x900x732	250x1,100x732	250x1,100x732	
External di	mension HxWxD		in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 42-5/16 x 28-7/8	9-7/8 x 42-5/16 x 28-7/8	
Net Weigh	t		kg (lbs)	26 (58)	31 (69)	31 (69)	
Type		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)			
Heat Excha	anger	Water Volume	L	1.0	1.8	1.8	
	Type \times Quantity			Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	
	5	*1	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	
	External Static Pro	External Static Pressure *4 mmH ₂ /		<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	
	Motor Type			DC Motor	DC Motor	DC Motor	
Fan	Motor Output			0.085	0.121	0.121	
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	
			m3/min	12.0 - 14.5 - 17.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	
	Airflow Rate	(Low Mid High)	L/s	200 - 242 - 283	242 - 300 - 350	242 - 300 - 350	
			cf/m	424 - 512 - 600	512 - 636 - 742	512 - 636 - 742	
Sound pre in anechoi	ssure level (measured c room)*2	(Low Mid High)	dB <a>	25-29-32	26-29-34	26-29-34	
Insulation	Material			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	PP Honeycomb fabric	
Protection	Device			Fuse	Fuse	Fuse	
Connectable Outdoor Unit/HBC Controller				Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	
Inlet in.		Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw			
water Pipi	ng Diameter *5 *6	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw	
Field Drair	ı Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
Standard A	ttachment Accessor	ļ			Insulation pipe for water pipe, Washer, Drain hose, Tie Band		
Optional p	art Control Box Repla	ce Kit		PAC-KE92TB-E	PAC-KE93TB-E	PAC-KE93TB-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

 The value are measured at the factory setting of external static pressure.
 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: Om (0ft).
 The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate. 5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.



Model				PEFY-WP63VMA-E	PEFY-WP71VMA-E	PEFY-WP80VMA-E
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	Canacity (Nominal) *1		kW	7.1	8.0	9.0
			BTU/h	24,200	27,300	30,700
	Power input *2 k		kW	0.14	0.24	0.24
	Current input*2		A	1.15	1.47	1.47
Unating	Canacity (Nominal) *3		kW	8.0	9.0	10.0
			BTU/h	27,300	30,700	34,100
Heating	Power input *2		kW	0.12	0.22	0.22
	Current input *2		A	1.04	1.36	1.36
External finish				Galvanised steel plate	Galvanised steel plate	Galvanised steel plate
mm			mm	250x1,100x732	250x1,400x732	250x1,400x732
External dimension HxWxD		in.	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	
Net Weight kg (Ibs)			kg (lbs)	31 (69)	40 (89)	40 (89)
		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Exchang	ger Water Volume		L	2.0	2.6	2.6
	Type $ imes$ Quantity			Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	External Static Pressure *4 Pa mmH ₂ C		Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
			mmH ₂ 0	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>
	Motor Type			DC Motor	DC Motor	DC Motor
Fan	Motor Output	utput kW		0.121	0.244	0.244
	Driving Mechanism			Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Airflow Rate	(Low Mid High)	m3/min	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	23.0 - 28.0 - 33.0
			L/s	242 - 300 - 350	383 - 467 - 550	383 - 467 - 550
			cf/m	512 - 636 - 742	812 - 989 - 1,165	812 - 989 - 1,165
Sound pressure level (measured (Low Mid High) in anechoic room)*2		dB <a>	26-29-34	28-33-37	28-33-37	
Insulation Material				EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	PP Honeycomb fabric
Protection Device				Fuse	Fuse	Fuse
Connectable Outdoor Unit/HBC Controller				Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Water Piping Diameter *5 *6		Inlet	in.	Rc 1-1/4 screw	Rc 1-1/4 screw	Rc 1-1/4 screw
		Outlet	in.	Rc 1-1/4 screw	Rc 1-1/4 screw	Rc 1-1/4 screw
Field Drain Pipe Size mm (in.)			mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
Standard Attachment Accessory				Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band
Optional part	Optional part Control Box Replace Kit			PAC-KE93TB-E	PAC-KE94TB-E	PAC-KE94TB-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

The value are measured at the factory setting of external static pressure.
 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: Om (0ft).
 The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.



Model				PEFY-WP100VMA-E	PEFY-WP125VMA-E
Power source				1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz
	0	Capacity (Nominal) *1		11.2	14.0
Cooling	Capacity (Nomina			38,200	47,800
	Power input *2	Power input *2		0.24	0.36
	Current input*2		A	1.47	2.21
Heating	Oracity (Newsier	Capacity (Nominal) *3		12.5	16.0
	Capacity (Nomina			42,700	54,600
	Power input *2		kW	0.22	0.34
	Current input *2	Current input *2		1.36	2.10
External finish				Galvanised steel plate	Galvanised steel plate
External dimension HxWxD		mm	250x1,400x732	250x1,600x732	
		in.	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8	
Net Weight kg (lbs)			kg (lbs)	40 (89)	42 (93)
	Type			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Exch	inger	Water Volume L		2.6	3.0
	Type $ imes$ Quantity			Sirocco fan x 2	Sirocco fan x 2
	Estand Chatta Da	*1	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>
	External Static Pressure *4		mmH ₂ 0	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>	<3.6> - 5.1 - <7.1> - <10.2> - <15.3>
	Motor Type			DC Motor	DC Motor
Fan	Motor Output		kW	0.244	0.244
	Driving Mechanism			Direct-driven by motor	Direct-driven by motor
		(Low Mid High)	m3/min	23.0 - 28.0 - 33.0	29.5 - 35.5 - 42.0
	Airflow Rate		L/s	383 - 467 - 550	492 - 592 - 700
			cf/m	812 - 989 - 1,165	1,042 - 1,254 - 1,483
Sound pre in anechoi	ssure level (measured c room)*2	(Low Mid High)	dB <a>	28-33-37	32-36-40
Insulation Material				EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric
Protection Device				Fuse	Fuse
Connectable Outdoor Unit/HBC Controller				Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Water Piping Diameter *5 *6		in.	Rc 1-1/4 screw	Rc 1-1/4 screw	
		Outlet	in.	Rc 1-1/4 screw	Rc 1-1/4 screw
Field Drain Pipe Size mm (in.)			mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
Standard Attachment Accessory				Insulation pipe for water pipe, Washer, Drain hose, Tie Band	Insulation pipe for water pipe, Washer, Drain hose, Tie Band
Optional p	Optional part Control Box Replace Kit			PAC-KE94TB-E	PAC-KE95TB-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

2. The value are measured at the factory setting of extend 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: 0m (0ft).

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

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

Ceiling Concealed



Model				PEFY-WL40VMHS-A	PEFY-WL50VMHS-A	PEFY-WL63VMHS-A	PEFY-WL71VMHS-A
Power source	9			1-phase 220-230-240 V 50/60 Hz			
	Our stille (Marsing	1) *4	kW	4.5	5.6	7.1	8.0
0	Capacity (Nomina	Capacity (Norminal)		15,400	19,100	24,200	27,300
Cooling	Power input *2	Power input *2 kW		0.055	0.077	0.095	0.075
	Current input*2		A	0.41-0.39-0.38	0.58-0.55-0.52	0.70-0.67-0.64	0.54-0.52-0.50
	Our stille (Marsing	1) *0	kW	5.0	6.3	8.0	9.0
	Capacity (Nomina	1) "3	BTU/h	17,100	21,500	27,300	30,700
Heating	Power input *2		kW	0.055	0.077	0.095	0.075
	Current input *2		A	0.41-0.39-0.38	0.58-0.55-0.52	0.70-0.67-0.64	0.54-0.52-0.50
External finis	h			Galvanised steel plate	Galvanised steel plate	Galvanised steel plate	Galvanised steel plate
			mm	380 x 745 x 900	380 x 745 x 900	380 x 745 x 900	380 x 1,030 x 900
External dimi	ension HxWxD		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
Net Weight			kg (lbs)	35 (78)	35 (78)	36 (80)	45 (100)
Heat Exchance	ger	Туре		Cross fin (Aluminium fin and copper tube)			
		Water Volume	L	1.4	1.4	1.8	1.8
	Type $ imes$ Quantity	Type × Quantity		Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2
	Esternal Otation Day	External Static Pressure *4		50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>
	External Static Pressure 4 mmH ₂ 0		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	DC Motor	DC Motor	DC Motor	
Fan	Motor Output kV		kW	0.121	0.121	0.121	0.244
	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	
			m3/min	10.0 - 12.0 - 14.0	13.0 - 15.0 - 18.0	13.5 - 16.0 - 19.0	15.5 - 18.0 - 22.0
	Airflow Rate	(Low Mid High)	L/s	167 - 200 - 233	217 - 250 - 300	225 - 267 - 317	258 - 300 - 367
			cf/m	353 - 424 - 494	459 - 530 - 636	477 - 565 - 671	547 - 636 - 777
Sound press in anechoic r	ure level (measured oom)*2	(Low Mid High)	dB <a>	22.0-25.0-29.0	24.0-27.0-32.0	25.5-28.5-32.5	24.0-27.0-31.0
Insulation Ma	aterial			Polystyrene foam, Polyethylene foam, Urethane foam			
Air Filter				Option: Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.	Option: Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.
Protection De	evice			Fuse	Fuse	Fuse	Fuse
Connectable	Outdoor Unit/HBC C	ontroller		HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB
Water Pining	Diameter *5 *6	Inlet	mm ID	20	20	30	30
1 0		Outlet	mm ID	20	20	30	30
Field Drain P	1		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
Standard Atta	achment Accessory	1		Washer, Drain hose, Tie band			
	Drain pump kit			PAC-DRP10DP-E2	PAC-DRP10DP-E2	PAC-DRP10DP-E2	PAC-DRP10DP-E2
Optional part	Long life filter			PAC-KE86LAF	PAC-KE86LAF	PAC-KE86LAF	PAC-KE88LAF
ομιισιται μαι ι	Filter box			PAC-KE63TB-F	PAC-KE63TB-F	PAC-KE63TB-F	PAC-KE99TB-F
	Valve kit*7			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

2. The value 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: Om (Oft).

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

5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

7. Certain restrictions apply to indoor unit combinations.

Refer to the section on the valve kit in the chapter "OPTIONAL PARTS" in the DATA BOOK for the restrictions.

When the valve kit is installed farther away from the HBC than the distance between the HBC and the WLmodel

indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.

The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

Ceiling Concealed



Model				PEFY-WL80VMHS-A	PEFY-WL100VMHS-A	PEFY-WL125VMHS-A
Power sour	ce			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
	Our state (Normalia	.1\ *4	kW	9.0	11.2	14.0
0	Capacity (Nomina	11) "1	BTU/h	30,700	38,200	47,800
Cooling	Power input *2	Power input *2		0.090	0.160	0.175
	Current input*2		A	0.63-0.61-0.58	1.05-1.01-0.96	1.17-1.13-1.09
	Canasily (Namin	1) *0	kW	10.0	12.5	16.0
Hasting	Capacity (Nomina	11) 3	BTU/h	34,100	42,700	54,600
Heating	Power input *2		kW	0.090	0.160	0.175
	Current input *2		A	0.63-0.61-0.58	1.05-1.01-0.96	1.17-1.13-1.09
External fin	ish			Galvanised steel plate	Galvanised steel plate	Galvanised steel plate
Estandal da			mm	380 x 1,030 x 900	380 x 1,195 x 900	380 x 1,195 x 900
External dir	nension HxWxD		in.	15 x 40-9/16 x 35-7/16	15 x 47-1/16 x 35-7/16	15 x 47-1/16 x 35-7/16
Net Weight			kg (lbs)	45 (100)	51 (113)	53 (117)
Heat Evelo		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Excha	iger	Water Volume	L	1.8	2.3	2.9
	Type $ imes$ Quantity			Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	Pa		Pa	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>	50 - <100> - <150> - <200>
	External Static Pr	External Static Pressure *4 mmH ₂		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	Motor Type		DC Motor	DC Motor	DC Motor
Fan	Motor Output	Motor Output		0.244	0.375	0.375
	Driving Mechanis	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
			m3/min	18.0 - 21.5 - 25.0	26.5 - 32.0 - 38.0	26.5 - 32.0 - 38.0
	Airflow Rate	(Low Mid High)	L/s	300 - 358 - 417	442 - 533 - 633	442 - 533 - 633
			cf/m	636 - 759 - 883	936 - 1,130 - 1,342	936 - 1,130 - 1,342
Sound pres in anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	26-29-32	28-32-36	28-32-36
Insulation N	laterial			EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam	EPS, Polyethylene foam, Urethane foam
Air Filter				Option:Synthetic fiber unwoven cloth filter (long life filter) and fil-ter box are recommended.	Option:Synthetic fiber unwoven cloth filter (long life filter) and fil-ter box are recommended.	Option:Synthetic fiber unwoven cloth filter (long life filter) and fil-ter box are recommended.
Protection [Device			Fuse	Fuse	Fuse
Connectabl	e Outdoor Unit/HBC (ontroller		HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB	HYBRID CITY MULTI/CMB-WM-V-AA, CMB-WM-V-AB
Wator Dinin	g Diameter *5 *6	Inlet	mm ID	30	30	30
water ripin	y Dialitetet 5 0	Outlet	mm ID	30	30	30
Field Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
Standard Af	tachment Accessor	у		Washer, Drain hose, Tie band	Washer, Drain hose, Tie band	Washer, Drain hose, Tie band
	Drain pump kit			PAC-DRP10DP-E2	PAC-DRP10DP-E2	PAC-DRP10DP-E2
Ontional as	Long life filter			PAC-KE88LAF	PAC-KE89LAF	PAC-KE89LAF
Optional pa	Filter box			PAC-KE99TB-F	PAC-KE140TB-F	PAC-KE140TB-F
	Valve kit*7			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

 The value are measured at the factory setting of external static pressure.
 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: Om (Oft).
 The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate. 5. Be sure to install a valve on the water outlet.

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

7. Certain restrictions apply to indoor unit combinations

Refer to the section on the valve kit in the chapter "OPTIONAL PARTS" in the DATA BOOK for the restrictions. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WLmodel

indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.

The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

Ceiling Cassette



Model				PLFY-WL20VEM-E	PLFY-WL25VEM-E	PLFY-WL32VEM-E
Power source	e			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz
	Our state (Marrie	-11 *4	kW	2.2	2.8	3.6
0	Capacity (Nomin	al) " I	BTU/h	7.500 9.600		12,300
Cooling	Power input		kW	0.03	0.03	0.03
	Current input		A	0.26	0.29	0.33
	0 11 (1)	11 *0	kW	2.5	3.2	4.0
Heathan	Capacity (Nomin	al) "2	BTU/h	8,500	10,900	13,600
Heating	Power input		kW	0.03	0.03	0.03
	Current input		A	0.20	0.23	0.27
External fin	sh			Galvanised steel sheet	Galvanised steel sheet	Galvanised steel sheet
Enternal data			mm	258 x 840 x 840	258 x 840 x 840	258 x 840 x 840
External din	nension HxWxD		in.	10-3/16 x 33-1/16 x 33-1/16	10-3/16 x 33-1/16 x 33-1/16	10-3/16 x 33-1/16 x 33-1/16
Net Weight			kg (lbs)	18 (40)	18 (40)	20 (44)
		Model		PLP-6EA	PLP-6EA	PLP-6EA
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)
Decoration	Panel	Dimensions	mm	40 x 950 x 950	40 x 950 x 950	40 x 950 x 950
		Dimensions	in.	1-9/16 x 37-13/32 x 37-13/32	1-9/16 x 37-1/16 x 37-1/16	1-9/16 x 37-13/32 x 37-13/32
		Net Weight	kg (lbs)	5 (11)	5 (11)	5 (11)
	Туре			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Exchar	iger	Water Volume	L	1.0	1.0	1.8
	Type $ imes$ Quantity			Turbo Fan x 1	Turbo Fan x 1	Turbo Fan x 1
	External Static Pressure Pa		Pa	0	0	0
	Motor Type	Motor Type		DC Motor	DC Motor	DC Motor
Fee	Motor Output		kW	0.05	0.05	0.05
Fan	Driving Mechani	sm		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
			m3/min	12 - 13 - 14 - 15	12 - 13 - 15 - 17	14 - 15 - 16 - 17
	Airflow Rate (Lov	v-Mid1-Mid2-High)	L/s	200 - 217 - 233 - 250	200 - 217 - 250 - 283	233 - 250 - 267 - 283
			cf/m	424 - 459 - 494 - 530	424 - 459 - 530 - 600	494 - 530 - 565 - 600
Sound pres	sure level (Low-Mid1	-Mid2-High)	dB <a>	24 - 26 - 27 - 28	24 - 26 - 28 - 30	26 - 27 - 29 - 30
Insulation N	laterial			PS	PS	PS
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb
Protection [)evice			Fuse	Fuse	Fuse
Refrigerant	Control Device			-	-	-
Connectabl	e Outdoor Unit/HBC	Controller		Hybrid City Multi CMB-W	M-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Watar Diain	g Diameter *3 *4	Inlet	mm ID	20	20	20
water mipili	y Diallielei 3 4	Outlet	mm ID	20	20	20
Field Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
	Decoration Pane	*5		PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE
Optional	i-See Sensor Co	ntrol Panel		PAC-SE1ME-E	PAC-SE1ME-E	PAC-SE1ME-E
parts	Wirelss Signal R	eceiver		PAR-SE9FA-E	PAR-SE9FA-E	PAR-SE9FA-E
	Valve kit *6			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

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.)

- 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.)
- 3. Be sure to install a valve on the water outlet. 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VEM-E should be used together with Decoration panel.
- 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- $^{\star}\,$ Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Ceiling Cassette



Model				PLFY-WL40VEM-E	PLFY-WL50VEM-E	PLFY-WL63VEM-E	
Power sourc	ce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	
	Consoity (Nomi	nol) *1	kW	4.5	5.6	7.1	
Cooling	Capacity (Nomi	nar) i r	BTU/h	15,400	19,100	24,200	
Cooling	Power input	Power input		0.03	0.04	0.04	
	Current input		A	0.35	0.40	0.40	
	Our state (Normal	1) *0	kW	5.0	6.3	8.0	
lasting	Capacity (Nomi	nar) z	BTU/h	17,100	21,500	27,300	
leating	Power input		kW	0.03	0.04	0.04	
	Current input		A	0.29	0.34	0.34	
xternal fini	ish			Galvanised steel sheet	Galvanised steel sheet	Galvanised steel sheet	
			mm	258 x 840 x 840	258 x 840 x 840	298 x 840 x 840	
External din	nension HxWxD		in.	10-3/16 x 33-1/16 x 33-1/16	10-3/16 x 33-1/16 x 33-1/16	11-3/4 x 33-1/16 x 33-1/16	
Net Weight			kg (lbs)	20 (44)	20 (44)	23 (51)	
		Model		PLP-6EA	PLP-6EA	PLP-6EA	
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	
Decoration	Panel		mm	40 x 950 x 950	40 x 950 x 950	40 x 950 x 950	
		Dimensions	in.	1-9/16 x 37-1/16 x 37-1/16	1-9/16 x 37-1/16 x 37-1/16	1-9/16 x 37-13/32 x 37-13/32	
		Net Weight	kg (lbs)	5 (11)	5 (11)	5 (11)	
		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Exchar	nger	Water Volume	L	1.8	1.8	2.1	
	Type \times Quantity			Turbo Fan x 1	Turbo Fan x 1	Turbo Fan x 1	
	External Static Pressure		Ра	0	0	0	
	Motor Type			DC Motor	DC Motor	DC Motor	
_	Motor Output		kW	0.05	0.05	0.12	
Fan	Driving Mechan	ism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	
			m3/min	14 - 15 - 16 - 17	14 - 16 - 18 - 20	15 - 17 - 19 - 21	
	Airflow Rate (Lo	w-Mid1-Mid2-High)	L/s	233 - 250 - 267 - 283	233 - 267 - 300 - 333	250 - 283 - 317 - 350	
			cf/m	494 - 530 - 565 - 600	494 - 565 - 636 - 706	530 - 600 - 671 - 742	
Sound pres	sure level (Low-Mid	1-Mid2-High)	dB <a>	26 - 28 - 29 - 31	27 - 29 - 31 - 33	27 - 29 - 31 - 33	
nsulation N	laterial			PS	PS	PS	
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb	
Protection D	Device			Fuse	Fuse	Fuse	
Refrigerant	Control Device			-	-	-	
Connectabl	e Outdoor Unit/HBC	Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB		
		Inlet	mm ID	20	20	30	
water Pipin	g Diameter *3 *4	Outlet	mm ID	20	20	30	
Field Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
	Decoration Pane	el *5	/	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	
Optional	i-See Sensor Co			PAC-SE1ME-E	PAC-SE1ME-E	PAC-SE1ME-E	
parts	Wirelss Signal F			PAR-SE9FA-E	PAR-SE9FA-E	PAR-SE9FA-E	
	Valve kit *6			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

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.)
- Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 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.)
 Be sure to install a valve on the water outlet.

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

5. PLFY-WL-VEM-E should be used together with Decoration panel.

- 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units.
 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units.
 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.
 The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
 Please group units that operate on 1 branch.

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

Ceiling Cassette



Model				PLFY-WL80VEM-E	PLFY-WL100VEM-E	PLFY-WL125VEM-E
Power source	e			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz
	Our state (Marris	-11 *4	kW	9.0	11.2	14.0
0	Capacity (Nomin	al) " I	BTU/h	30,700 38,200		47,800
Cooling	Power input	Power input		0.05	0.08	0.11
	Current input		A	0.46	0.66	1.05
	Orace the Olevela	-1) *0	kW	10.0	12.5	16.0
Heating	Capacity (Nomin	al) "2	BTU/h	34,100	42,700	54,600
Heating	Power input		kW	0.05	0.08	0.11
	Current input		A	0.40	0.60	0.99
External fin	sh			Galvanised steel sheet	Galvanised steel sheet	Galvanised steel sheet
Eutornal dia	annainn HuWuD		mm	298 x 840 x 840	298 x 840 x 840	298 x 840 x 840
External dir	nension HxWxD		in.	11-3/4 x 33-1/16 x 33-1/16	11-3/4 x 33-1/16 x 33-1/16	11-3/4 x 33-1/16 x 33-1/16
Net Weight			kg (lbs)	23 (51)	23 (51)	25 (55)
		Model		PLP-6EA	PLP-6EA	PLP-6EA
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)
Decoration	Panel	Dimension	mm	40 x 950 x 950	40 x 950 x 950	40 x 950 x 950
		Dimensions	in.	1-9/16 x 37-13/32 x 37-13/32	1-9/16 x 37-13/32 x 37-13/32	1-9/16 x 37-13/32 x 37-13/32
		Net Weight	kg (lbs)	5 (11)	5 (11)	5 (11)
Туре			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Exchar	iger	Water Volume	L	2.1	2.2	3.1
	Type $ imes$ Quantity			Turbo Fan x 1	Turbo Fan x 1	Turbo Fan x 1
	External Static Pressure		Pa	0	0	0
	Motor Type	Motor Type		DC Motor	DC Motor	DC Motor
Fan	Motor Output		kW	0.12	0.12	0.12
-an	Driving Mechani	sm		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	11.11 D.1.11		m3/min	15 - 18 - 21 - 23	19 - 23 - 26 - 30	20 - 25 - 30 - 35
	Airflow Rate (Lov	v-Mid1-Mid2-High)	L/s	250 - 300 - 350 - 383	317 - 383 - 433 - 500	333 - 417 - 500 - 583
			cf/m	530 - 636 - 742 - 812	671 - 812 - 918 - 1059	706 - 883 - 1059 - 1236
Sound pres	sure level (Low-Mid1	-Mid2-High)	dB <a>	27 - 30 - 33 - 35	31 - 35 - 37 - 40	33 - 37 - 40 - 46
Insulation N	laterial			PS	PS	PS
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb
Protection [)evice			Fuse	Fuse	Fuse
Refrigerant	Control Device			-	-	-
Connectabl	e Outdoor Unit/HBC	Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	
Water Dinin	g Diameter *3 *4	Inlet	mm ID	30	30	30
water Pipin	y Diameter 3 4	Outlet	mm ID	30	30	30
ield Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)
	Decoration Pane	*5		PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE	PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE
Optional	i-See Sensor Co	ntrol Panel		PAC-SE1ME-E	PAC-SE1ME-E	PAC-SE1ME-E
parts	Wirelss Signal R	eceiver		PAR-SE9FA-E	PAR-SE9FA-E	PAR-SE9FA-E
	Valve kit *6	·		PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

- 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.)

- Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 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.)
 Be sure to install a valve on the water outlet.
- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VEM-E should be used together with Decoration panel.
- 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units.
 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units.
 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.
 7. Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Compact Ceiling Cassette



Model				PLFY-WL10VFM-E	PLFY-WL15VFM-E	
Power sou	rce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	
	Our stiller (News)	- 1) *4	kW	1.2	1.7	
0 1	Capacity (Nomi	Capacity (Nominal) *1		4,100	5,800	
Cooling	Power input	Power input		0.02	0.02	
	Current input		A	0.23	0.24	
	0 1 01 1	0		1.4	1.9	
Hereitere	Capacity (Nomin	nal) ^2	BTU/h	4,800	6,500	
Heating	Power input		kW	0.02	0.02	
	Current input		A	0.17	0.18	
External fir	nish			Galvanised steel sheet	Galvanised steel sheet	
E			mm	208 x 570 x 570	208 x 570 x 570	
External di	imension HxWxD		in.	8-1/4x22-1/2x22-1/2	8-1/4x22-1/2x22-1/2	
Net Weight	t		kg (lbs)	13 (29)	13 (29)	
0		Model	0(1)	SLP-2FA(L)(E)	SLP-2FA(L)(E)	
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	
Decoration	n Panel		mm	10 x 625 x 625	10 x 625 x 625	
		Dimensions	in.	3/8 x 24-5/8 x 24-5/8	3/8 x 24-5/8 x 24-5/8	
		Net Weight	kg (lbs)	3 (7)	3 (7)	
		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Excha	anger	Water Volume	L	0.5	0.5	
	Type × Quantity	Type \times Quantity		Turbo Fan x 1	Turbo Fan x 1	
	External Static F	Pressure	Pa	0	0	
	Motor Type			DC Motor	DC Motor	
Fee	Motor Output		kW	0.05	0.05	
Fan	Driving Mechan	ism		Direct-driven by motor	Direct-driven by motor	
			m3/min	6.0 - 6.5 - 7.0	6.0 - 7.0 - 8.0	
	Airflow Rate (Lo	w-Mid-High)	L/s	100 - 108 - 117	100 - 117 - 133	
			cf/m	212 - 230 - 247	212 - 247 - 282	
Sound pres	ssure level (Low-Mid	-High)	dB <a>	25 - 26 - 27	25 - 26 - 29	
Insulation	Material			PS	PS	
Air Filter				PP Honeycomb	PP Honeycomb	
Protection	Device			Fuse	Fuse	
Connectab	le Outdoor Unit/HBC	Controller		Hybrid City Multi CMB-WN	I-V-AA, CMB-WM-V-AB	
Mala - D!	na Diamaka *0 */	Inlet	mm ID	20	20	
water Pipi	ng Diameter *3 *4	Outlet	mm ID	20	20	
Field Drain	n Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
	Decoration Pane	el *5		SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	
Optional	i-See Sensor co	rner panel		PAC-SF1ME-E	PAC-SF1ME-E	
parts	Wireless Signal			PAR-SF9FA-E	PAR-SF9FA-E	
	Valve kit *6			PAC-SK35VK-E	PAC-SK35VK-E	

 $\label{eq:converter} Unit \ Converter. \ BTU/h=kW\times 3,412, \ cfm=m^3/min\times 35.31 \ and \ Ibs=kg/0.4536 \ (Please note these figures are subject to rounding variation)$

Notes:

- 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.)

Pipe length: 7.5 m (24-9) to 1(.), Level americal of m (only)
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.)
Be sure to install a valve on the water outlet.
Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

5. PLFY-WL-VFM-E should be used together with Decoration panel.

6. When using the W-Type and the WL-Type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

 $^{\ast}~$ Please group units that operate on 1 branch.

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

Compact Ceiling Cassette



Model				PLFY-WL20VFM-E	PLFY-WL25VFM-E	
Power sour	rce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	
	Canacity (Nami		kW	2.2	2.8	
0	Capacity (Noriii	Capacity (Nominal) *1		7,500	9,600	
Cooling	Power input	Power input		0.02	0.03	
	Current input		A	0.26	0.29	
	0 11 01	1) *0	kW	2.5	3.2	
	Capacity (Nomin	ial) ^2	BTU/h	8,500	10,900	
Heating	Power input		kW	0.02	0.03	
	Current input		A	0.20	0.23	
External fir	nish			Galvanised steel sheet	Galvanised steel sheet	
			mm	208 x 570 x 570	208 x 570 x 570	
External di	mension HxWxD		in.	8-1/4x22-1/2x22-1/2	8-1/4x22-1/2x22-1/2	
Net Weight	t		kg (lbs)	14 (31)	14 (31)	
		Model		SLP-2FA(L)(E)	SLP-2FA(L)(E)	
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	
Decoration	I Panel		mm	10 x 625 x 625	10 x 625 x 625	
		Dimensions	in.	3/8 x 24-5/8 x 24-5/8	3/8 x 24-5/8 x 24-5/8	
		Net Weight	kg (lbs)	3 (7)	3 (7)	
		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Excha	inger	Water Volume	L	0.9	0.9	
	Type \times Quantity			Turbo Fan x 1	Turbo Fan x 1	
	External Static F	External Static Pressure Pa		0	0	
	Motor Type			DC Motor	DC Motor	
-	Motor Output		kW	0.05	0.05	
Fan	Driving Mechani	sm		Direct-driven by motor	Direct-driven by motor	
			m3/min	6.5 - 7.0 - 8.0	6.5 - 7.5 - 9.0	
	Airflow Rate (Lo	w-Mid-High)	L/s	108 - 117 - 133	108 - 125 - 150	
			cf/m	230 - 247 - 282	230 - 265 - 318	
Sound pres	ssure level (Low-Mid	-High)	dB <a>	27 - 29 - 31	27 - 30 - 34	
Insulation	Material			PS	PS	
Air Filter				PP Honeycomb	PP Honeycomb	
Protection	Device			Fuse	Fuse	
Connectab	le Outdoor Unit/HBC	Controller		Hybrid City Multi CMB-W	M-V-AA, CMB-WM-V-AB	
Weber D'	Diamata *0 *1	Inlet	mm ID	20	20	
water Pipir	ng Diameter *3 *4	Outlet	mm ID	20	20	
Field Drain	Pipe Size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
	Decoration Pane	1 *5		SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	
Optional	i-See Sensor co			PAC-SF1ME-E	PAC-SF1ME-E	
parts	Wireless Signal			PAR-SF9FA-E	PAR-SF9FA-E	
	Valve kit *6	÷		PAC-SK35VK-E	PAC-SK35VK-E	

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

- 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.)
 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.)
 Be sure to ischal a value on the water outlet
- 3. Be sure to install a valve on the water outlet.
- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VFM-E should be used together with Decoration panel.
- 6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- $^{\ast}~$ Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Compact Ceiling Cassette



Model				PLFY-WL32VFM-E	PLFY-WL40VFM-E	
Power sour	ce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	
	Canaaitu (Mami	val) *4	kW	3.6	4.5	
0	Capacity (Nomin	1al) " I	BTU/h	12,300	15,400	
Cooling	Power input	Power input		0.04	0.05	
	Current input		A	0.38	0.46	
			kW	4.0	5.0	
	Capacity (Nomin	ial) *2	BTU/h	13.600	17.100	
Heating	Power input		kW	0.04	0.05	
	Current input		A	0.32	0.40	
External fir	nish			Galvanised steel sheet	Galvanised steel sheet	
			mm	208 x 570 x 570	208 x 570 x 570	
External di	mension HxWxD		in.	8-1/4x22-1/2x22-1/2	8-1/4x22-1/2x22-1/2	
Net Weight			kg (lbs)	14 (31)	14 (31)	
0		Model	017	SLP-2FA(L)(E)	SLP-2FA(L)(E)	
		External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	
Decoration	Panel		mm	10 x 625 x 625	10 x 625 x 625	
		Dimensions	in.	3/8 x 24-5/8 x 24-5/8	3/8 x 24-5/8 x 24-5/8	
		Net Weight	kg (lbs)	3 (7)	3 (7)	
		Туре	3()	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	
Heat Excha	inger	Water Volume	L	0.9	0.9	
	Type \times Quantity			Turbo Fan x 1	Turbo Fan x 1	
	External Static F		Pa	0	0	
	Motor Type			DC Motor	DC Motor	
_	Motor Output		kW	0.05	0.05	
Fan	Driving Mechani	sm		Direct-driven by motor	Direct-driven by motor	
			m3/min	6.5 - 9.0 - 12.0	6.5 - 11.5 - 13.0	
	Airflow Rate (Lo	w-Mid-High)	L/s	108 - 150 - 200	108 - 192 - 217	
			cf/m	230 - 318 - 424	230 - 406 - 4259	
Sound pres	ssure level (Low-Mid	-High)	dB <a>	27 - 33 - 41	27 - 40 - 43	
Insulation I		0,		PS	PS	
Air Filter				PP Honeycomb	PP Honeycomb	
Protection	Device			Fuse	Fuse	
	le Outdoor Unit/HBC	Controller		Hybrid City Multi CMB-W		
		Inlet	mm ID	20	20	
Water Pipir	ng Diameter *3 *4	Outlet	mm ID	20	20	
Field Drain	Pipe Size	1	mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	
	Decoration Pane	1 *5	· ···/	SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE	
Optional	i-See Sensor co			PAC-SF1ME-E	PAC-SF1ME-E	
parts	Wireless Signal			PAR-SF9FA-E	PAR-SF9FA-E	
				PAC-SK35VK-E	PAC-SK35VK-E	

 $\label{eq:linear} \text{Unit Converter: BTU/h} = kW \times 3,412, \ \text{cfm} = m^3/\text{min} \times 35.31 \ \text{and } \text{Ibs} = \text{kg/}0.4536 \ (\text{Please note these figures are subject to rounding variation})$

Notes:

- 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.)
- 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.)
- 3. Be sure to install a valve on the water outlet.
- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VFM-E should be used together with Decoration panel.

6. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Wall Mounted



Model				PKFY-WL10VLM-E	PKFY-WL15VLM-E	PKFY-WL20VLM-E
Power sour	ce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz
	Consoity (Nomi	nol) *1	kW	1.2	1.7	2.2
Cooling	Capacity (Nominal) *1		BTU/h	4,100	5,800	7,500
Cooling	Power input		kW	0.02	0.02	0.03
	Current input		A	0.20	0.20	0.25
	Canasily (Nami	nal\ *0	kW	1.4	1.9	2.5
Upoting	Capacity (Nomi	nal) Z	BTU/h	4,800	6,500	8,500
Heating	Power input		kW	0.01	0.01	0.02
	Current input		A	0.15	0.15	0.20
External fin	ish			Plastic (0.7PB 9.2/0.4)	Plastic (0.7PB 9.2/0.4)	Plastic (0.7PB 9.2/0.4)
Evtornal di	mension HxWxD		mm	299 x 773 x 237	299 x 773 x 237	299 x 773 x 237
External un	ITENSION HXWXD		in.	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 30-7/16 x 9-11/32
Net Weight			kg (lbs)	11 (25)	11 (25)	11 (25)
Туре		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
ieal excila	eat Exchanger Water Volume		L	0.6	0.6	0.7
	Type × Quantity	/		Line Flow Fan x 1	Line Flow Fan x 1	Line Flow Fan x 1
	External Static F	External Static Pressure		0	0	0
	Motor Type			DC Motor	DC Motor	DC Motor
an	Motor Output		kW	0.03	0.03	0.03
dll	Driving Mechan	Driving Mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
			m3/min	3.3 - 3.8 - 4.1 - 4.5	3.3 - 3.8 - 4.3 - 4.9	4.0 - 5.0 - 6.0 - 7.0
	Airflow Rate (Lo	w-Mid2-Mid1-High)	L/s	55 - 63 - 68 - 75	55 - 63 - 72 - 82	67 - 83 - 100 - 117
			cf/m	117 - 134 - 145 - 159	117 - 134 - 152 - 173	141 - 177 - 212 - 247
Sound pres	sure level (Low-Mid	2-Mid1-High)	dB <a>	22 - 26 - 28 - 30	22 - 26 - 29 - 32	22 - 28 - 33 - 36
Insulation 1	Vaterial			Polyethylene Sheet	Polyethylene Sheet	Polyethylene Sheet
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb
Protection	Device			Fuse	Fuse	Fuse
Connectab	le Outdoor Unit/HBC	Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	
Votor Dinir	iq Diameter *3 *4	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
valer mipir	iy Diameter 13 14	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
ield Drain	Pipe Size		mm (in.)	I.D.16 (5/8)	I.D.16 (5/8)	I.D.16 (5/8)
Optional	Drain Pump Kit			PAC-SK01DM-E	PAC-SK01DM-E	PAC-SK01DM-E
Parts	Valve Kit *5	t*5 F		PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. 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: 0m (0ft). 3. Be sure to install a valve on the water outlet,

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

5. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

Please group units that operate on 1 branch.
 Please group units that operate on 1 branch.
 Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Wall Mounted



Model				PKFY-WL25VLM-E	PKFY-WL32VLM-E	PKFY-WL40VLM-E
Power sour	rce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz
	Capacity (Nomi		kW	2.8	3.6	4.5
Cooling	Capacity (Norm	iai) i	BTU/h	9,600	12,300	15,400
Cooling	Power input		kW	0.04	0.04	0.05
	Current input		A	0.35	0.35	0.45
	Canacity (Nami	N *0	kW	3.2	4.0	5.0
Unating	Capacity (Nomin	iai) Z	BTU/h	10,900	13,600	17,100
Heating	Power input		kW	0.03	0.03	0.04
	Current input		A	0.30	0.30	0.40
External fir	nish			Plastic (0.7PB 9.2/0.4)	Plastic (0.7PB 9.2/0.4)	Plastic (0.7PB 9.2/0.4)
Eutomol di	mension HulluD		mm	299 x 773 x 237	299 x 898 x 237	299 x 898 x 237
External di	External dimension HxWxD		in.	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 35-3/8 x 9-11/32	11-25/32 x 35-3/8 x 9-11/32
Net Weight	Vet Weight kg (lbs)		11 (25)	13 (29)	13 (29)	
Heat Exchanger		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Excita	uiger	Water Volume		0.7	1.0	1.1
	Type $ imes$ Quantity	Type $ imes$ Quantity		Line Flow Fan x 1	Line Flow Fan x 1	Line Flow Fan x 1
	External Static F	External Static Pressure		0 0		0
	Motor Type	Motor Type		DC Motor	DC Motor	DC Motor
Fan	Motor Output		kW	0.03	0.03	0.03
FdII	Driving Mechan	sm		Direct-Drive by motor	Direct-Drive by motor	Direct-Drive by motor
	Al-flow Data (La	. MELLINA	m3/min	4.0 - 5.4 - 7.0 - 8.4	6.3 - 7.6 - 9.0 - 10.4	6.4 - 8.2 - 10.0 - 11.9
	Airflow Rate (Lo	w-wid-Hign)	L/s	67 - 90 - 117 - 140	105 - 127 - 150 - 173	107 - 137 - 167 - 198
			cf/m	141 - 191 - 247 - 297	222 - 268 - 318 - 367	226 - 290 - 353 - 420
Sound pres	ssure level (Low-Mid	-High)	dB <a>	22 - 30 - 36 - 41	29 - 34 - 38 - 41	30 - 36 - 41 - 45
Insulation I	Material			Polyethylene Sheet	Polyethylene Sheet	Polyethylene Sheet
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb
Protection	Device			Fuse	Fuse	Fuse
Connectab	le Outdoor Unit/HBC	Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	
Water Din :-	na Diamator *2 *4	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
water ripir	ng Diameter *3 *4	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
Field Drain	I Pipe Size		mm (in.)	I.D.16 (5/8)	I.D.16 (5/8)	I.D.16 (5/8)
Optional	Drain Pump Kit			PAC-SK01DM-E	PAC-SK01DM-E	PAC-SK01DM-E
Parts	Valve Kit *5			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. 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: 0m (0ft). 3. Be sure to install a valve on the water outlet,

4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

5. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the walve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

* Please group units that operate on 1 branch.
 * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Wall Mounted



Model				PKFY-WL50VKM-E	PKFY-WL63VKM-E	PKFY-WL80VKM-E
Power sour	rce			1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz	1-phase 220-240 V 50Hz
	Capacity (Nomir	al) *1	kW	5.6	7.1	9.0
Cooling	Gapacity (NOTIII	idi) i	BTU/h	19,100	24,200	30,700
Cooling	Power input		kW	0.04	0.05	0.07
	Current input		A	0.46	0.56	0.76
	Capacity (Nomir	al) *0	kW	6.3	8.0	10.0
Heating	Gapacity (NOTIII	idi) Z	BTU/h	21,500	27,300	34,100
heating	Power input		kW	0.04	0.05	0.07
	Current input		A	0.340	0.50	0.70
External fir	nish			Plastic (1.0Y 9.2/0.2)	Plastic (1.0Y 9.2/0.2)	Plastic (1.0Y 9.2/0.2)
Evtornal di	mansion HyWyD		mm	365 x 1170 x 295	365 x 1170 x 295	365 x 1170 x 295
External dimension HxWxD in.		in.	14-3/8 x 46-1/16 x 11-5/8	14-3/8 x 46-1/16 x 11-5/8	14-3/8 x 46-1/16 x 11-5/8	
Net Weight			kg (lbs)	20 (44)	20 (44)	20 (44)
Heat Exchanger		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
ieal excila	liigei	Water Volume		2.0	2.0	2.0
	Type $ imes$ Quantity	Type $ imes$ Quantity		Line Flow Fan x 1	Line Flow Fan x 1	Line Flow Fan x 1
	External Static P	External Static Pressure Pa		0	0	0
	Motor Type	Motor Type		DC Motor	DC Motor	DC Motor
an	Motor Output		kW	0.069	0.069	0.069
dII	Driving Mechani	sm		Direct-Drive by motor	Direct-Drive by motor	Direct-Drive by motor
	Airflaus Data /Las	MGLIBAA	m3/min	18 - 20	18 - 22	18 - 26
	Airflow Rate (Lo	w-Ivila-Higli)	L/s	300 - 333	300 - 367	300 - 433
			cf/m	636 - 706	636 - 777	636 - 918
Sound pres	ssure level (Low-Mid-	-High)	dB <a>	39 - 42	39 - 45	39 - 49
nsulation I	Material			Polyethylene Sheet	Polyethylene Sheet	Polyethylene Sheet
Air Filter				PP Honeycomb	PP Honeycomb	PP Honeycomb
Protection	Device			Fuse	Fuse	Fuse
Connectab	le Outdoor Unit/HBC	Controller			Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	
Vator Dinir	ng Diameter *3 *4	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
ναισι ΓιμΠ	iy Didilleter 5 4	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
ield Drain	Pipe Size		mm (in.)	I.D.16 (5/8)	I.D.16 (5/8)	I.D.16 (5/8)
Optional	Drain Pump Kit			PAC-SK01DM-E	PAC-SK01DM-E	PAC-SK01DM-E
Parts	Valve Kit *5			PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. 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: 0m (0ft). 3. Be sure to install a valve on the water outlet,

4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

5. When using the W-type and the WL-type indoor units in the same system, install the Valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

 $^{\star}\,$ Please group units that operate on 1 branch.

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

Floor Standing Concealed



Model				PFFY-WP20VLRMM-E	PFFY-WP25VLRMM-E	PFFY-WP32VLRMM-E
Power sour	ce			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
	Capacity (Nomir	aal) *1	kW	2.2	2.8	3.6
Coolina	Capacity (NOTIT	Capacity (Noniniai)		7,500	9,600	12,300
Cooling	Power input *2		kW	0.040	0.040	0.050
	Current input *2		A	0.35	0.35	0.47
	Capacity (Nomir	vol\ *0	kW	2.5	3.2	4.0
Heating	Capacity (NOTIT	iai) o	BTU/h	8,500	10,900	13,600
пеашу	Power input *2		kW	0.040	0.040	0.050
	Current input *2		A	0.35	0.35	0.47
External fin	ish			Galvanised steel plate	Galvanised steel plate	Galvanised steel plate
External dir			mm	639 x 886 x 220	639 x 1,006 x 220	639 x 1,006 x 220
External di	nension HxWxD		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 39-5/8 x 8-11/16
Net Weight			kg (lbs)	22 (49)	25 (56)	25 (56)
Llast Evolution	Туре			Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Exchai	nger	Water Volume		0.9	1.3	1.3
	Type $ imes$ Quantity	Type $ imes$ Quantity		Sirocco Fan x 1	Sirocco Fan x 2	Sirocco Fan x 2
	External Static Pressure *4		Pa	20 - <40> - <60>	20 - <40> - <60>	20 - <40> - <60>
	External Static P	External Static Pressure 4		2.0 - <4.1> - <6.1>	2.0 - <4.1> - <6.1>	2.0 - <4.1> - <6.1>
	Motor Type	Motor Type		DC Motor	DC Motor	DC Motor
Fan	Motor Output	or Output kW		0.096	0.096	0.096
	Driving Mechani	sm		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	A. 0. D. 1. 0	MELLIN IN	m3/min	4.5 - 5.0 - 6.0	6.0 - 7.0 - 8.0	7.5 - 9.0 - 10.5
	Airflow Rate (Lo	w-Mid-Hign)	L/s	75 - 83 - 100	100 - 117 - 133	125 - 150 - 175
			cf/m	159 - 177 - 212	212 - 247 - 282	265 - 318 - 371
Sound pres in anechoic	sure level (measured room)*2	l (Low-Mid-High)	dB <a>	31 - 33 - 38	31 - 33 - 38	31 - 35 - 38
Insulation N	laterial			Polyethylene foam, Urethane foam	Polyethylene foam, Urethane foam	Polyethylene foam, Urethane foam
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric	PP Honeycomb fabric
Protection [Device			Fuse	Fuse	Fuse
Connectabl	e Outdoor Unit/HBC	Controller		Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Water Dinin	q Diameter *3 *4	Inlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
water ripili	y Diallielei 5 4	Outlet	in.	Rc 3/4 screw	Rc 3/4 screw	Rc 3/4 screw
Field Drain	Pipe Size		mm (in.)	I.D.26 (1) <accessory (1-3="" (top<br="" 0.d.27="" 32)="" hose="">end: 0.D.20 (13/16))></accessory>	I.D.26 (1) <accessory (1-3="" (top<br="" 0.d.27="" 32)="" hose="">end: 0.D.20 (13/16))></accessory>	I.D.26 (1) <accessory (1-3="" (top<br="" 0.d.27="" 32)="" hose="">end: 0.D.20 (13/16))></accessory>
Standard Af	tachment Accesso	ry		Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band	Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band	Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

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

2. The value are ineasured at the lactory 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: Om (Oft). 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate. 5. Be sure to install a valve on the water outlet, 6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

Floor Standing Concealed



Model				PFFY-WP40VLRMM-E	PFFY-WP50VLRMM-E
Power source				1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz
Cooling	Capacity (Nominal) *1		kW	4.5	5.6
			BTU/h	15,400	19,100
	Power input *2		kW	0.050	0.070
	Current input *2		A	0.47	0.65
Heating	Capacity (Nominal) *3		kW	5.0	6.3
			BTU/h	17,100	21,500
	Power input *2		kW	0.050	0.070
	Current input *2		A	0.47	0.65
External finish				Galvanised steel plate	Galvanised steel plate
External dimension HxWxD		mm	639 x 1,246 x 220	639 x 1,246 x 220	
		in.	25-3/16 x 49-1/16 x 8-11/16	25-3/16 x 49-1/16 x 8-11/16	
Net Weight kg (Ibs)			kg (lbs)	29 (64)	29 (64)
Heat Exchanger		Туре		Cross fin (Aluminium fin and copper tube)	Cross fin (Aluminium fin and copper tube)
Heat Excita	liger	Water Volume	L	1.5	1.5
Fan	Type $ imes$ Quantity			Sirocco Fan x 2	Sirocco Fan x 2
	External Static Pressure *4		Pa	20 - <40> - <60>	20 - <40> - <60>
			mmH_2O	2.0 - <4.1> - <6.1>	2.0 - <4.1> - <6.1>
	Motor Type			DC Motor	DC Motor
	Motor Output		kW	0.096	0.096
	Driving Mechanism			Direct-driven by motor	Direct-driven by motor
	Airflow Rate (Low-Mid-High)		m3/min	8.0 - 10.0 - 11.5	10.5 - 13.0 - 15.0
			L/s	133 - 167 - 192	175 - 217 - 250
			cf/m	282 - 353 - 406	371 - 459 - 530
Sound pres	sure level (measured room)*2	(Low-Mid-High)	dB <a>	34 - 37 - 40	37 - 42 - 45
Insulation Material				Polyethylene foam, Urethane foam	Polyethylene foam, Urethane foam
Air Filter				PP Honeycomb fabric	PP Honeycomb fabric
Protection Device				Fuse	Fuse
Connectable Outdoor Unit/HBC Controller				Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB	Hybrid City Multi CMB-WM-V-AA, CMB-WM-V-AB
Water Piping Diameter *3 *4 Outlet		in.	Rc 3/4 screw	Rc 3/4 screw	
		Outlet	in.	Rc 3/4 screw	Rc 3/4 screw
Field Drain Pipe Size mm (in.)			mm (in.)	I.D.26 (1) <accessory (1-3="" (13="" (top="" 0.d.20="" 0.d.27="" 16))="" 32)="" end:="" hose=""></accessory>	I.D.26 (1) <accessory (1-3="" (13="" (top="" 0.d.20="" 0.d.27="" 16))="" 32)="" end:="" hose=""></accessory>
Standard Attachment Accessory				Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band	Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band

Unit Converter: BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

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

2. The value 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: Om (0ft).
4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.
5. Be sure to install a valve on the water outlet,

6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.





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