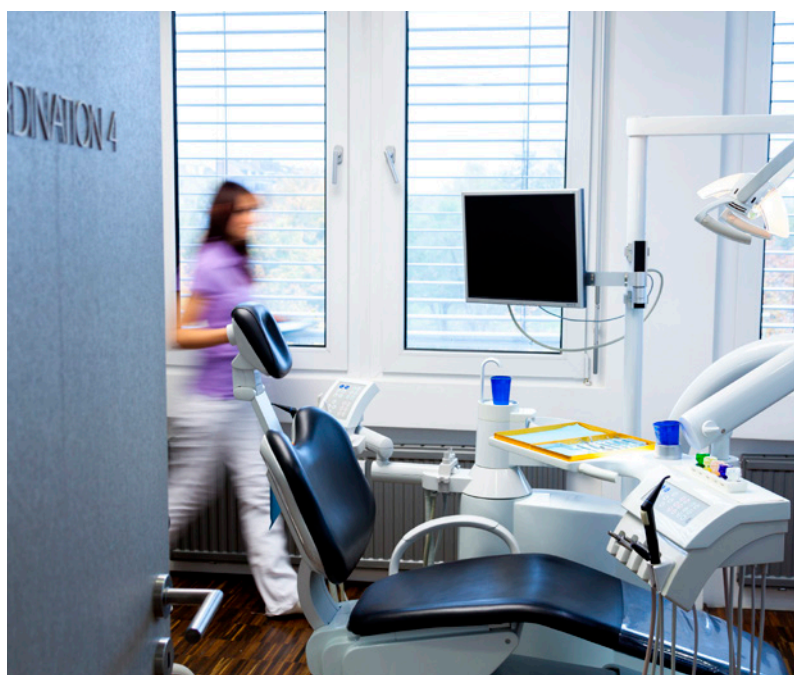
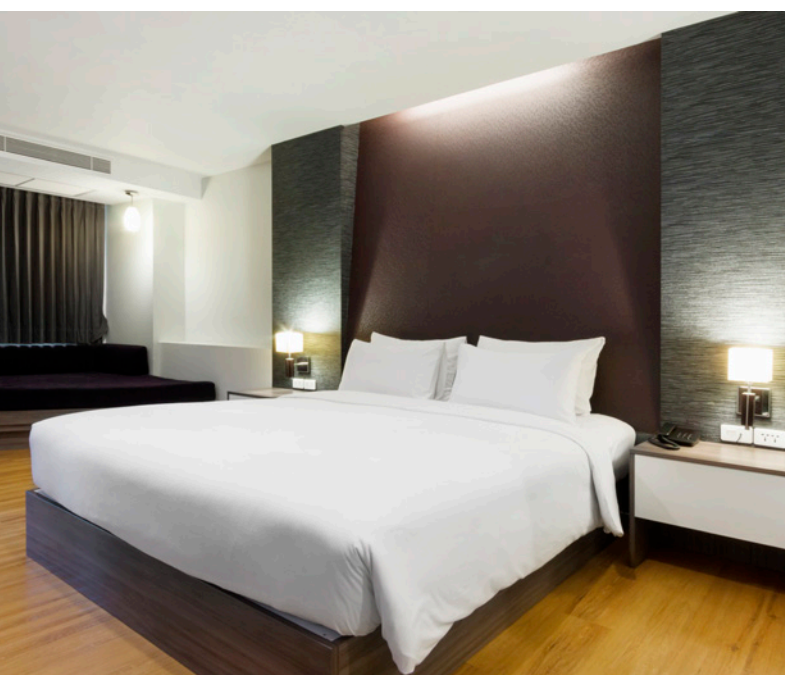


Hybrid VRF Catalogue

Next Generation 2-Pipe Heat Recovery Systems



CITY MULTI



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.

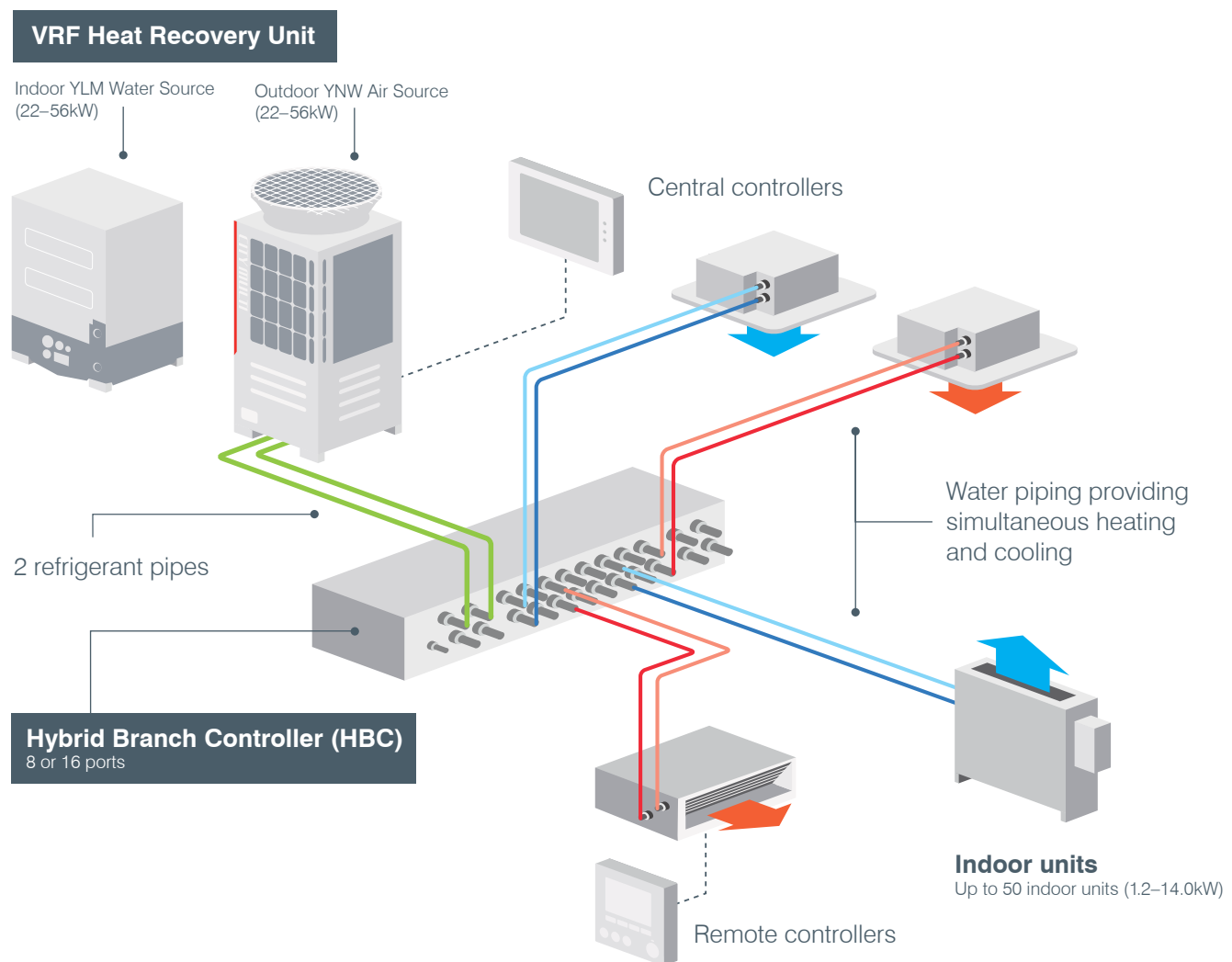
This revolutionary design minimises the need for expensive and on-going leak detection servicing and is specifically designed for occupied spaces where quiet, energy efficient, simultaneous heating and cooling is valued.

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 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

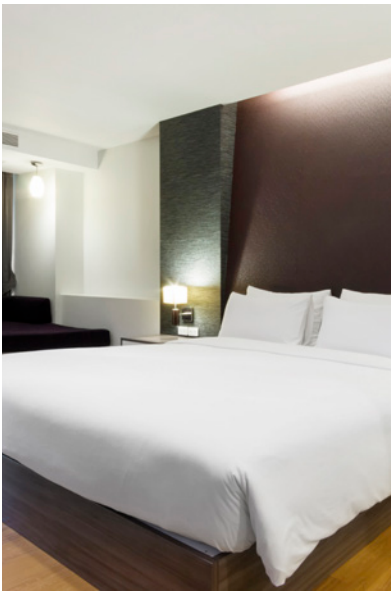
With regards to patient health and safety, this system has no refrigerant in the indoor units and can deliver mild off-coil temperatures through the Water-Based Hybrid VRF indoor units. HVRF mitigates the need for leak detectors in consulting rooms and provides a solution to critical refrigerant limits 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 on-going maintenance of the leak detection system itself.

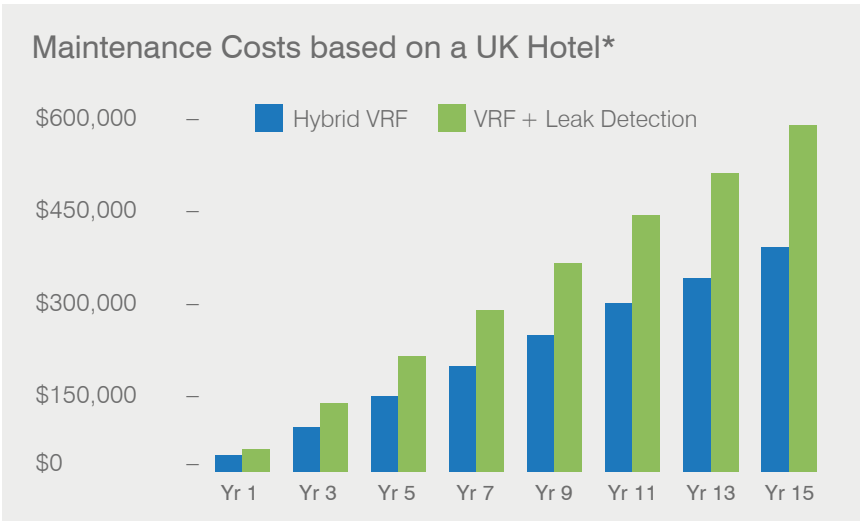
Minimise the Need for Leak Detection Systems

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 space 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.

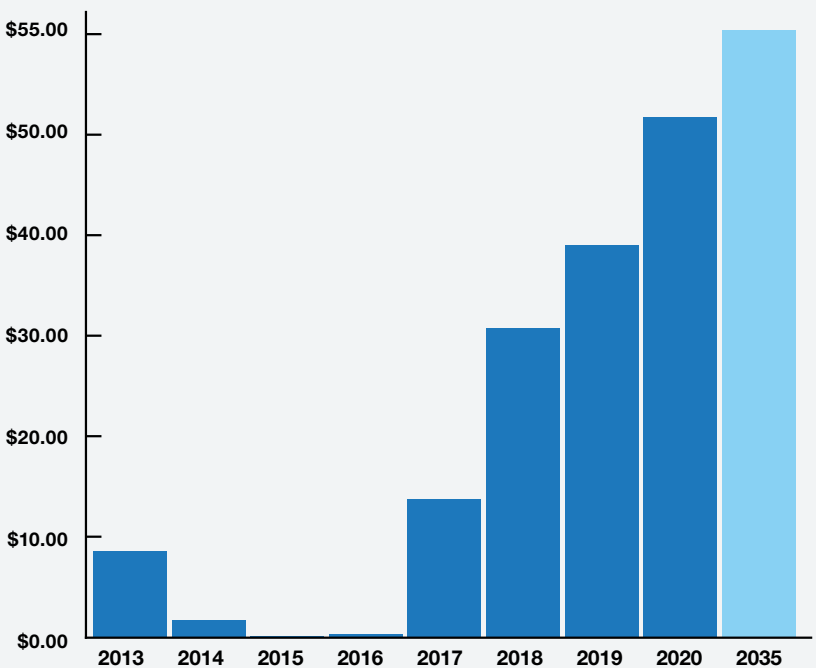
Emissions Trading Scheme

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

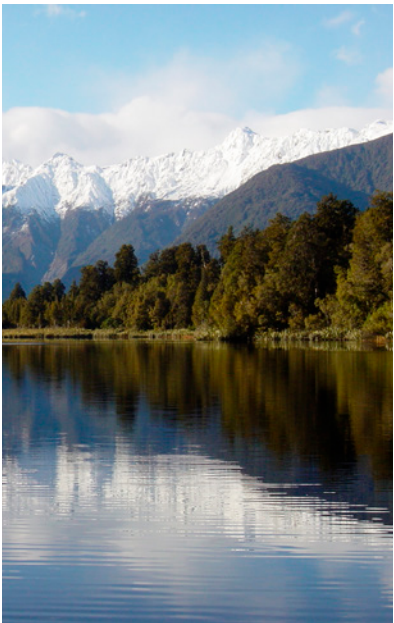
This is known as the SGG (Synthetic Greenhouse Gas) Levy.

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 traditional heating and cooling systems that utilise higher GWP refrigerants such as R410A.

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



| Year | Levy Rate – per kg Refrigerant (R410A) | |
|------|--|------------|
| 2013 | \$8.59 | Actual |
| 2014 | \$1.72 | Actual |
| 2015 | \$0.67 | Actual |
| 2016 | \$0.31 | Actual |
| 2017 | \$13.72 | Actual |
| 2018 | \$30.78 | Actual |
| 2019 | \$41.55 | Actual |
| 2020 | \$51.29 | Actual |
| 2035 | \$55.00 | 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 ancillary 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.

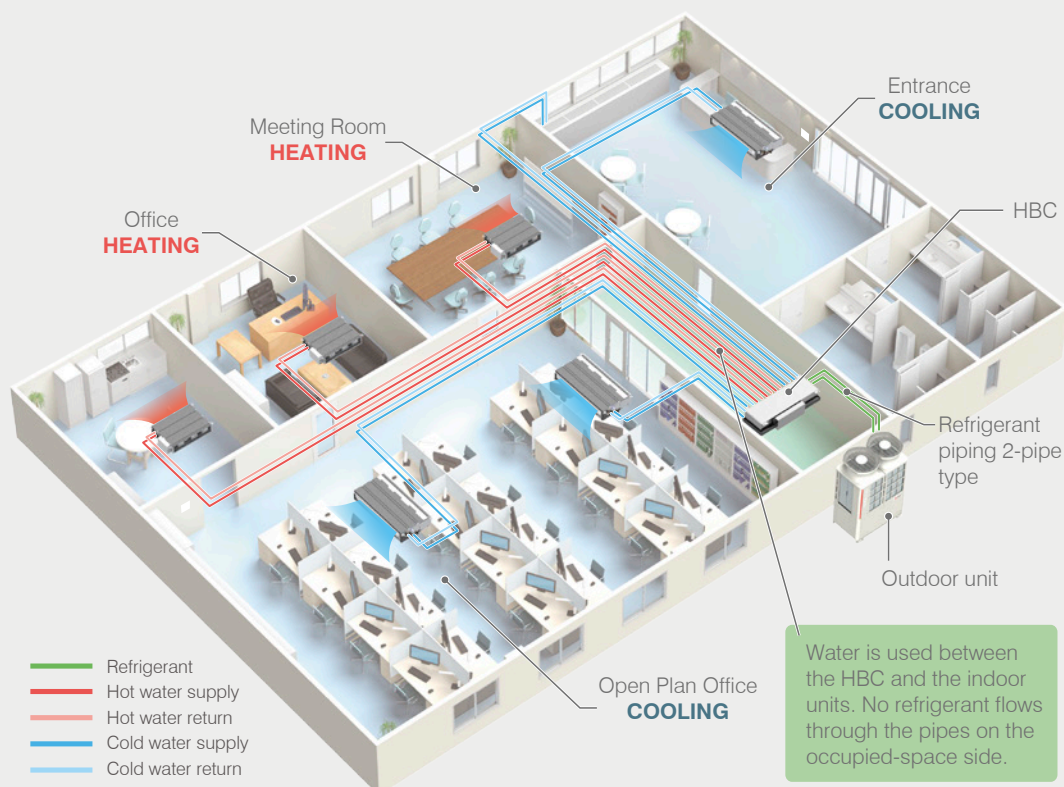


Image for representation only

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**

It 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, 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.



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Hybrid VRF Case Studies

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

Recently 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 high-level 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 to upgrade the existing Rotorua Library building into a new state of the art, centrally located, shared community facility comprising 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

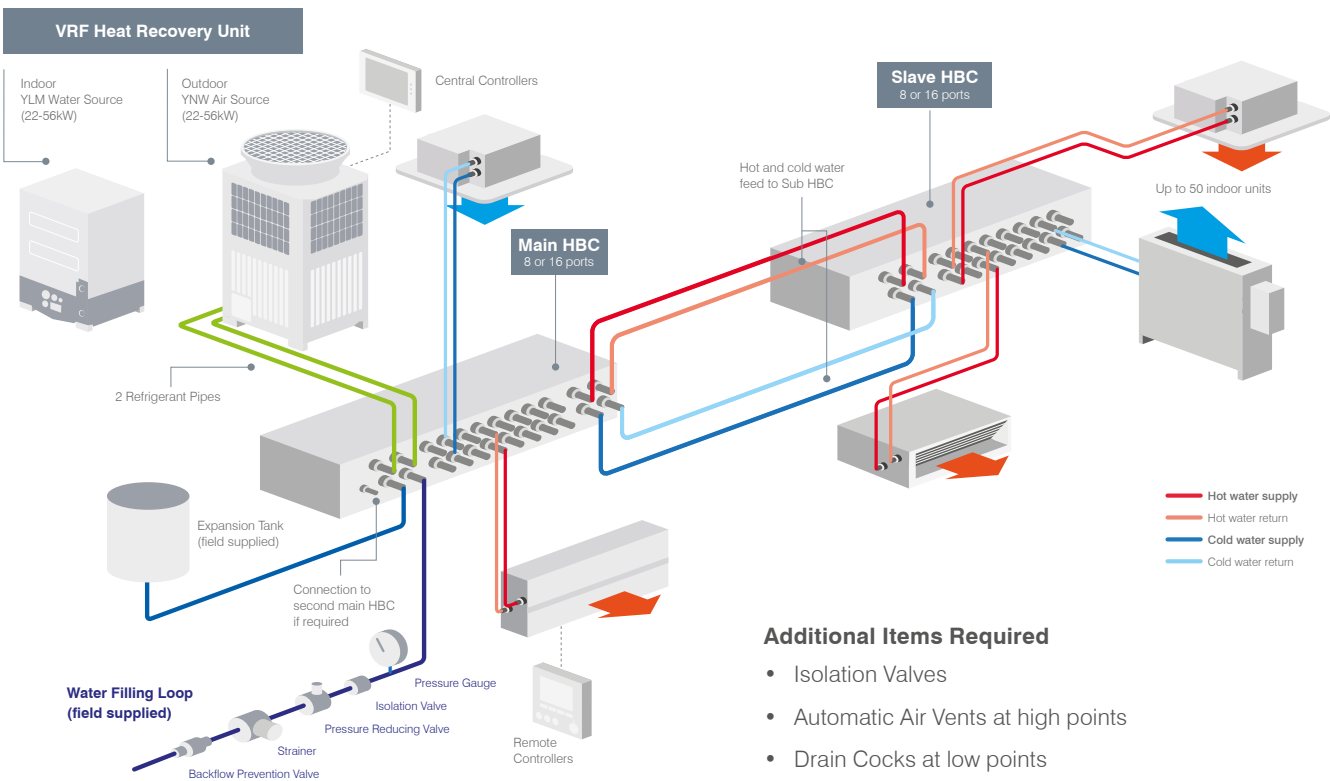
The best solution to meet the challenges was to select HVRF systems that provide heating and cooling to many of the mixed-use library and health hub areas. The HVRF Systems were selected by the consultant for the principle reason of having less extreme air-off temperatures, and slower temperature change 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 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.

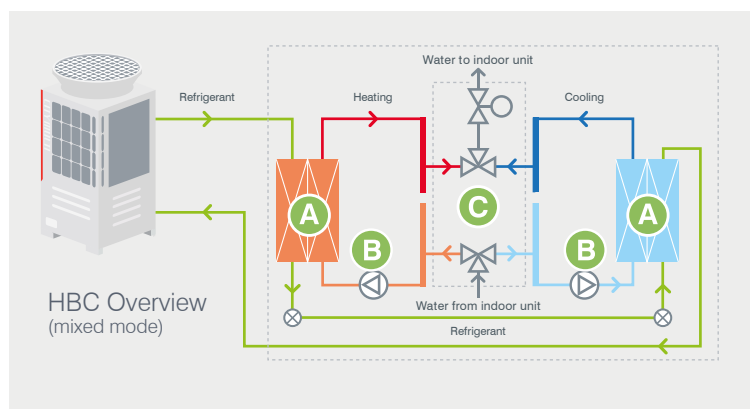
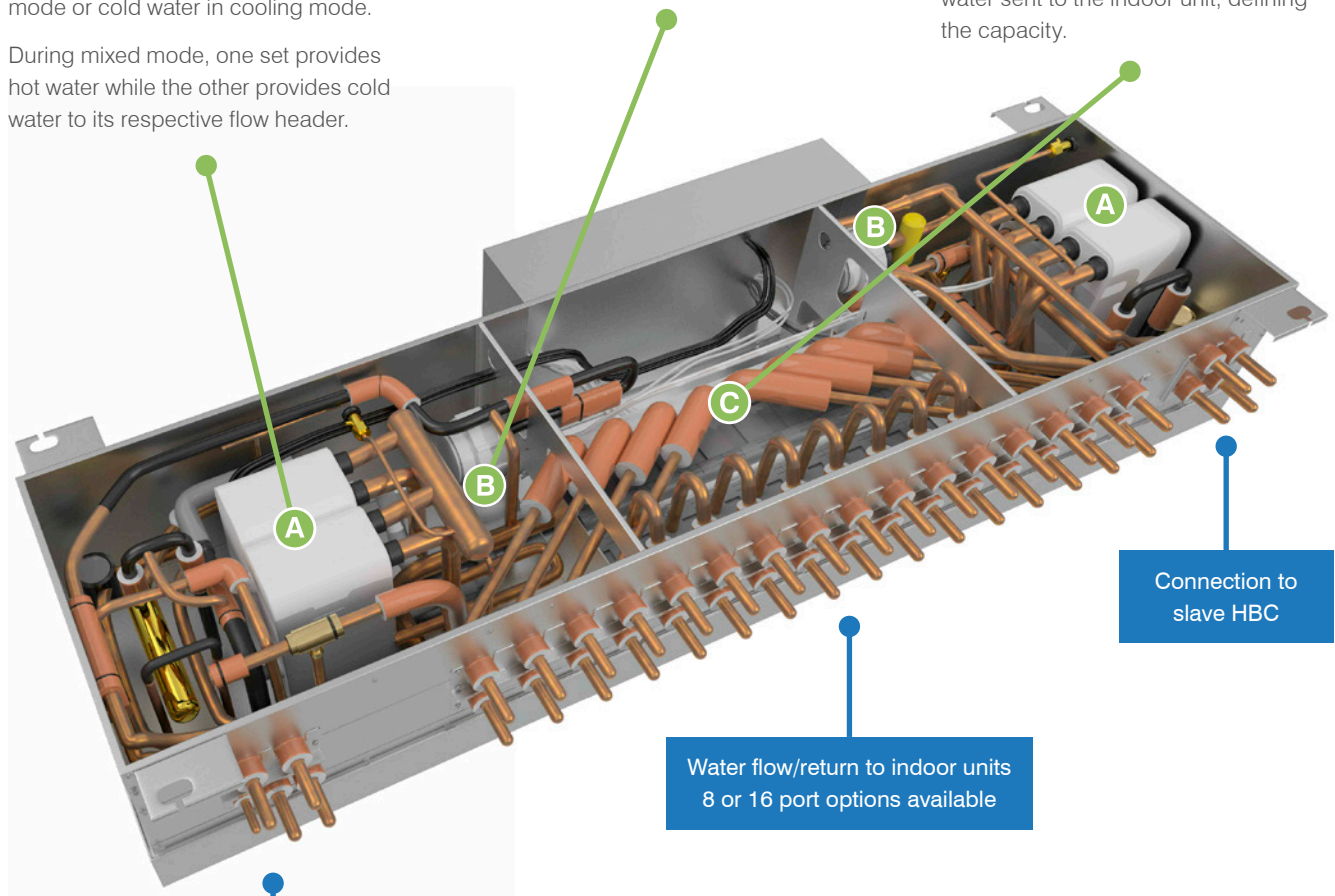
C - Valve Block

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.



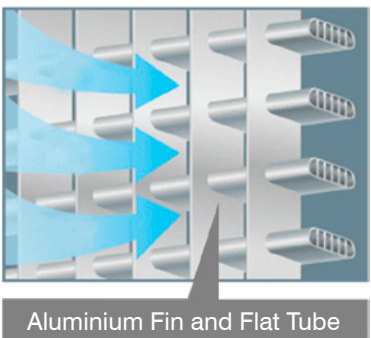
Images for representation only

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 inverter-driven 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

Refrigerant Piping Lengths

Maximum meters [Feet]

Refrigerant Pipe **Water Pipe**

R Distance between heat source and HBC 110 [360]

W Farthest indoor unit from HBC controller 60 [196]

Vertical differentials between units

Maximum meters [Feet]

R Heat source/HBC controller 50 [164]

R HBC/heat source (heat source unit above 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.

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:

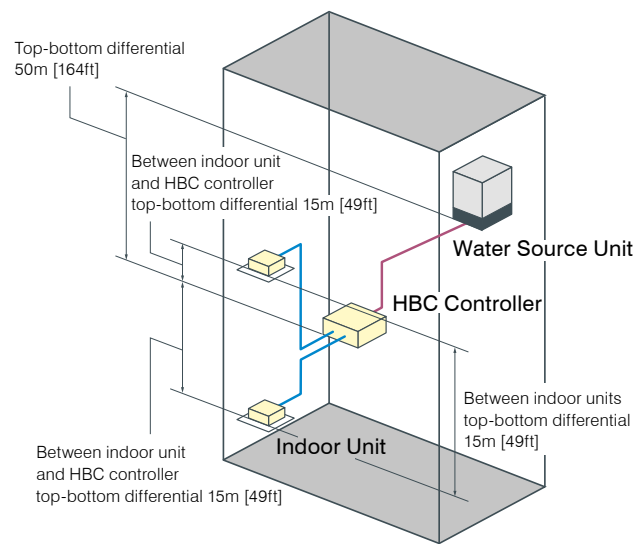
- Apply and network the energy through a water loop, within the building and between buildings – optimising efficiency.
- Utilisation of geothermal sources, rivers or lakes, landlord loops, rejected heat from hydronic server cooling or other processes.
- City Multi Water Source Units offer double heat 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

| | | | | | | | |
|------------------|--------|--------|--------|--------|--------|--------|-------|
| 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 **W** Water Pipe

| Refrigerant Piping Lengths | Maximum meters [Feet] |
|---|-----------------------|
| R Distance between heat source and HBC | 110 [360] |
| W Farthest indoor unit from HBC controller | 60 [196] |

| Vertical differentials between units | Maximum meters [Feet] |
|---|---------------------------------|
| R Heat source/HBC controller | 50 [164] |
| R HBC/heat source (heat source unit above 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 Air/Water Source 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.

| Type | 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.

| Type | 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 |  | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 4-Way Airflow Cassette | PLFY-WL VEM-E |  | | | | | ● | ● | ● | | | | | |
| Compact Cassette | PLFY-WL VFM-E |  | ● | ● | ● | ● | ● | | | | | | | |
| Floor Standing Concealed | PFFY-WP VLRMM-E |  | | | ● | ● | ● | ● | ● | | | | | |
| Wall Mounted | PKFY-WL VLM-E |  | ● | ● | ● | ● | ● | ● | | | | | | |

Controller Range

Remote Controllers



Standard Controller PAR-33MAA

- Dual set point option
- Energy saving
- Backlit LCD screen
- Error information
- Operation lock
- Weekly schedule
- Temperature range setting



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



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



AT-50B

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



MelcoBEMS Mini BMS Interface

- MODBUS
- BACnet MS/TP



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.

CITY MULTI



Patented Hybrid VRF Technology

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

A low-angle, upward-looking photograph of a modern skyscraper with a glass curtain wall. The building's facade is composed of numerous rectangular glass panels framed by dark metal. The sky is visible through the glass, showing a blue sky with scattered white clouds. The perspective creates a sense of height and architectural scale.

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Outdoor Unit – Air Source



| Model | | | | PURY-P200YNW-A (-BS) | | PURY-P250YNW-A (-BS) | |
|--|------------------------------|-------------------|------------------|--|-----------------------|--|-----------------------|
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | 3-phase 4-wire 380-400-415 V 50/60 Hz | |
| Cooling | Capacity (Nominal) *1 | | kW | 22.4 | | 28.0 | |
| | | | BTU / h | 76,400 | | 95,500 | |
| | Power input | | kW | 7.00 | | 9.92 | |
| | Current input | | A | 11.8-11.2-10.8 | | 16.7-15.9-15.3 | |
| | EER | | kW / kW | 3.20 | | 2.82 | |
| | Temp. Range *3 | | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) |
| Outdoor | | | D.B. | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | |
| Heating | Capacity (Nominal) *2 | | kW | 25.0 | | 31.5 | |
| | | | BTU / h | 85,300 | | 107,500 | |
| | Power input | | kW | 7.08 | | 10.06 | |
| | Current input | | A | 11.9-11.3-10.9 | | 16.9-16.1-15.5 | |
| | COP | | kW / kW | 3.53 | | 3.13 | |
| | Temp. range *3 | | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) |
| Outdoor | | | W.B. | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | |
| | | | Model / Quantity | WP10~WP125/1~30 | | WP10~WP125/1~37 | |
| Sound pressure level (measured in anechoic room)*4 | | | dB <A> | 59/59 | | 60.5/61 | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 76/78 | | 78.5/80 | |
| Refrigerant piping diameter | | High pressure | mm (in.) | 15.88 (5/8) Brazed | | 19.05 (3/4) Brazed | |
| | | Low pressure | mm (in.) | 19.05 (3/4) Brazed | | 22.2 (7/8) Brazed | |
| Fan | Type x Quantity | | | Propeller fan x 1 | | Propeller fan x 1 | |
| | Air flow rate | | m3/min | 170 | | 185 | |
| | | | L/s | 2,833 | | 3,083 | |
| | | | cfm | 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 press. *5 | | | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | |
| Compressor | Type | | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | |
| | Starting method | | | Inverter | | Inverter | |
| | Motor output | kW | 5.6 | | 7.0 | | |
| | Case heater | kW | - (- V) | | - (- V) | | |
| External finish | | | | Pre-coated galvanized steel sheets (+ powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 920 x 740 | | | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16 | | | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | |
| | Compressor | | | - | | - | |
| | Fan motor | | | - | | - | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | R410A / 2088 | |
| | Factory charged | Weight | kg | 5.2 | | 5.2 | |
| | | CO2 equivalent *6 | t | 10.86 | | 10.86 | |
| | Max additional charge | Weight | kg | 31.8 | | 37.8 | |
| | | CO2 equivalent *6 | t | 66.40 | | 78.93 | |
| | Total charge | Weight | kg | 37 | | 43 | |
| CO2 equivalent *6 | | t | 77.26 | | 89.78 | | |
| Net weight | | | kg (lbs) | 229 (505) | | 229 (505) | |
| Heat exchanger | | | | Salt-resistant cross fin & copper tube | | | |
| Defrosting method | | | | Auto-defrost mode (Reversed refrigerant cycle, Hot gas) | | | |

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 (subject to JIS B8615-2)
Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./24°CWB. (95°FDB./75°FWB.)
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°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°CDB. (23°FDB.)/-6°CWB. (21°FWB.) to 21°CDB. (70°FDB.)/15.5°CWB. (60°FWB.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2 mmH2O). 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.

Outdoor Unit – Air Source



| Model | | | | PURY-P300YNW-A (-BS) | | | | PURY-P350YNW-A (-BS) | | | |
|--|------------------------------|-------------------|------------------|---|-----------------------|----------------|--------|--|-----------------------|----------------|--|
| Number of HBC controller | | | | Single HBC | | Double HBC | | Single HBC | | Double HBC | |
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | |
| Cooling | Capacity (Nominal) *1 | | kW | 33.5 | | | | 40.0 | | | |
| | | | BTU / h | 114,300 | | | | 136,500 | | | |
| | Power input | | kW | 13.34 | | 11.31 | | 17.93 | | 14.59 | |
| | Current input | | A | 22.5-21.3-20.6 | | 19.0-18.1-17.4 | | 30.2-28.7-27.7 | | 24.6-23.3-22.5 | |
| | EER | | kW / kW | 2.51 | | 2.96 | | 2.23 | | 2.74 | |
| | Temp. Range *3 | | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | | | 15.0~24.0°C (59~75°F) | | |
| Outdoor | | | D.B. | -5.0~52.0°C (23~126°F) | | | | -5.0~52.0°C (23~126°F) | | | |
| Heating | Capacity (Nominal) *2 | | kW | 37.5 | | | | 45.0 | | | |
| | | | BTU / h | 128,000 | | | | 153,500 | | | |
| | Power input | | kW | 12.71 | | 11.94 | | 15.51 | | 14.35 | |
| | Current input | | A | 21.4-20.3-19.6 | | 20.1-19.1-18.4 | | 26.1-24.8-23.9 | | 24.2-23.0-22.1 | |
| | COP | | kW / kW | 2.95 | | 3.14 | | 2.90 | | 3.13 | |
| | Temp. range *3 | | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | | | 15.0~27.0°C (59~81°F) | | |
| Outdoor | | | W.B. | -20.0~15.5°C (-4~60°F) | | | | -20.0~15.5°C (-4~60°F) | | | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | | | 50~150% of outdoor unit capacity | | | |
| | | | Model / Quantity | WP10~WP125/2~45 | | | | WP10~WP125/2~50 | | | |
| Sound pressure level (measured in anechoic room)*4 | | | dB <A> | 61/67 | | | | 62.5/64 | | | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 80/86.5 | | | | 81/83 | | | |
| Refrigerant piping diameter | | High pressure | mm (in.) | 19.05 (3/4) Brazed | | | | 19.05 (3/4) Brazed | | | |
| | | Low pressure | mm (in.) | 22.2 (7/8) Brazed | | | | 28.58 (1-1/8) Brazed | | | |
| Fan | Type x Quantity | | | Propeller fan x 1 | | | | Propeller fan x 2 | | | |
| | Air flow rate | | m3/min | 240 | | | | 250 | | | |
| | | | L/s | 4,000 | | | | 4,167 | | | |
| | | | cfm | 8,474 | | | | 8,828 | | | |
| | Control, Driving mechanism | | | Inverter-control, direct-driven by motor | | | | Inverter-control, direct-driven by motor | | | |
| | Motor output | | kW | 0.92 x 1 | | | | 0.46 x 2 | | | |
| External static press. *5 | | | | 0 Pa (0 mmH2O) | | | | 0 Pa (0 mmH2O) | | | |
| Compressor | Type | | | Inverter scroll hermetic compressor | | | | Inverter scroll hermetic compressor | | | |
| | Starting method | | | Inverter | | | | Inverter | | | |
| | Motor output | | kW | 7.9 | | | | 10.2 | | | |
| | Case heater | | kW | - (- V) | | | | - (- V) | | | |
| External finish | | | | Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | | | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 920 x 740 | | | | 1,858 (1,798 without legs) x 1,240 x 740 | | | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16 | | | | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | | | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | | | | | |
| | Compressor | | | - | | | | - | | | |
| | Fan motor | | | - | | | | - | | | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | | | R410A / 2088 | | | |
| | Factory charged | Weight | kg | 5.2 | | | | 8.0 | | | |
| | | CO2 equivalent *6 | t | 10.86 | | | | 16.70 | | | |
| | Max additional charge | Weight | kg | 37.8 | | | | 41.3 | | | |
| | | CO2 equivalent *6 | t | 78.93 | | | | 86.23 | | | |
| | Total charge | Weight | kg | 43.0 | | | | 49.3 | | | |
| CO2 equivalent *6 | | t | 89.78 | | | | 102.94 | | | | |
| Net weight | | | kg (lbs) | 231 (510) | | | | 273 (602) | | | |
| Heat exchanger | | | | Salt-resistant cross fin & copper tube | | | | | | | |
| Defrosting method | | | | Auto-defrost mode (Reversed refrigerant cycle, Hot gas) | | | | | | | |

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 (subject to JIS B8615-2)
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B./24°C W.B. (95°F D.B./75°F W.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°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°C D.B. (23°F D.B.)/-6°C W.B. (21°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2 mmH2O). 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.

Outdoor Unit – Air Source



| Model | | | | PURY-P400YNW-A (-BS) | | PURY-P450YNW-A (-BS) | | PURY-P500YNW-A (-BS) | |
|--|------------------------------|-------------------|------------------|--|--------|--|--------|--|--|
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | | | |
| Cooling | Capacity (Nominal) *1 | | kW | 45.0 | | 50.0 | | 56.0 | |
| | | | BTU / h | 153,500 | | 170,600 | | 191,100 | |
| | Power input | | kW | 16.65 | | 17.92 | | 22.67 | |
| | | | A | 28.1-26.7-25.7 | | 30.2-28.7-27.7 | | 38.2-36.3-35.0 | |
| | EER | | kW / kW | 2.70 | | 2.79 | | 2.47 | |
| | | | Temp. Range *3 | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) | |
| | | Outdoor | D.B. | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | |
| Heating | Capacity (Nominal) *2 | | kW | 45.0 | | 56.0 | | 58.0 | |
| | | | BTU / h | 153,500 | | 191,100 | | 197,900 | |
| | Power input | | kW | 13.39 | | 17.39 | | 17.53 | |
| | | | A | 22.6-21.4-20.6 | | 29.3-27.8-26.8 | | 29.5-28.1-27.0 | |
| | COP | | kW / kW | 3.36 | | 3.22 | | 3.30 | |
| | | | Temp. range *3 | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) | |
| | | Outdoor | W.B. | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | |
| | | | Model / Quantity | WP10~WP125/2~50 | | WP10~125, W10~125/2~50 | | WP10~125, W10~125/2~50 | |
| Sound pressure level (measured in anechoic room)*4 | | | dB <A> | 65/69 | | 65.5/70.0 | | 63.5/64.5 | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 83/88 | | 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 | |
| Fan | Type x Quantity | | | 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 | |
| | | | cfm | 11,123 | | 11,123 | | 10,416 | |
| | Control, Driving mechanism | | | Inverter-control, direct-driven by motor | | Inverter-control, direct-driven by motor | | Inverter-control, direct-driven by motor | |
| | Motor output | | kW | 0.46 x 2 | | 0.46 x 2 | | 0.92 x 2 | |
| External static press. *5 | | | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | |
| Compressor | Type | | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | |
| | Starting method | | | Inverter | | Inverter | | Inverter | |
| | Motor output | | kW | 10.9 | | 12.4 | | 13.0 | |
| | Case heater | | kW | - (- V) | | - (- V) | | - (- V) | |
| External finish | | | | Pre-coated galvanized steel sheets (+ powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 1,240 x 740 | | 1,858 (1,798 without legs) x 1,240 x 740 | | 1,858 (1,798 without legs) x 1,750 x 740 | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | 73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16 | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | | | |
| | Compressor | | | - | | - | | - | |
| Fan motor | | | - | | - | | - | | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | R410A / 2088 | | R410A / 2088 | |
| | Factory charged | Weight | kg | 8.0 | | 10.8 | | 10.8 | |
| | | CO2 equivalent *6 | t | 16.70 | | 22.5 | | 22.55 | |
| | Max additional charge | Weight | kg | 47.3 | | 44.5 | | 45.2 | |
| | | CO2 equivalent *6 | t | 98.76 | | 92.92 | | 94.38 | |
| | Total charge | Weight | kg | 55.3 | | 55.3 | | 56.0 | |
| CO2 equivalent *6 | | t | 115.47 | | 115.47 | | 116.93 | | |
| Net weight | | | kg (lbs) | 273 (602) | | 293 (646) | | 337 (743) | |
| Heat exchanger | | | | Salt-resistant cross fin & copper tube | | | | | |
| Defrosting method | | | | Auto-defrost mode (Reversed refrigerant cycle) | | | | | |

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 (subject to JIS B8615-2)
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B./24°C W.B. (95°F D.B./75°F W.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°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°C D.B. (23°F D.B.)/-6°C W.B. (21°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2 mmH2O). 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.

Outdoor Unit – Air Source



| Model | | | | PURY-EP200YNW-A (-BS) | | PURY-EP250YNW-A (-BS) | |
|---|------------------------------|-------------------|------------------------|--|------------------------|--|--|
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | 3-phase 4-wire 380-400-415 V 50/60 Hz | |
| Cooling | Capacity (Nominal) *1 | | kW | 22.4 | | 28.0 | |
| | | | BTU / h | 76,400 | | 95,500 | |
| | Power input | | kW | 6.27 | | 8.77 | |
| | Current input | | A | 10.5-10.0-9.6 | | 14.8-14.0-13.5 | |
| | EER | | kW / kW | 3.57 | | 3.19 | |
| | Temp. Range *3 | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) | |
| Outdoor | | D.B. | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | | |
| Heating | Capacity (Nominal) *2 | | kW | 25.0 | | 31.5 | |
| | | | BTU / h | 85,300 | | 107,500 | |
| | Power input | | kW | 6.92 | | 9.84 | |
| | Current input | | A | 11.6-11.0-10.6 | | 16.6-15.7-15.2 | |
| | COP | | kW / kW | 3.61 | | 3.20 | |
| | Temp. range *3 | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) | |
| Outdoor | | W.B. | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | |
| | | | Model / Quantity | WP10~WP125/1~30 | | WP10~WP125/1~37 | |
| Sound pressure level (measured in anechoic room) *4 | | | dB <A> | 59/59 | | 60.5/61 | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 73/78 | | 78.5/80 | |
| Refrigerant piping diameter | | High pressure | mm (in.) | 15.88 (5/8) Brazed | | 19.05 (3/4) Brazed | |
| | | Low pressure | mm (in.) | 19.05 (3/4) Brazed | | 22.2 (7/8) Brazed | |
| Fan | Type x Quantity | | | Propeller fan x 1 | | Propeller fan x 1 | |
| | Air flow rate | | m3/min | 170 | | 185 | |
| | | | L/s | 2,833 | | 3,083 | |
| | | | cfm | 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 press. *5 | | | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | |
| Compressor | Type | | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | |
| | Starting method | | | Inverter | | Inverter | |
| | Motor output | kW | 5.6 | | 7.0 | | |
| | Case heater | kW | - (- V) | | - (- V) | | |
| External finish | | | | Pre-coated galvanized steel sheets (+ powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 920 x 740 | | | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16 | | | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | |
| | Compressor | | | - | | | |
| | Fan motor | | | - | | | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | R410A / 2088 | |
| | Factory charged | Weight | kg | 5.2 | | 5.2 | |
| | | CO2 equivalent *6 | t | 10.86 | | 10.86 | |
| | Max additional charge | Weight | kg | 28.3 | | 34.3 | |
| | | CO2 equivalent *6 | t | 59.09 | | 71.62 | |
| | Total charge | Weight | kg | 33.5 | | 39.5 | |
| CO2 equivalent *6 | | t | 69.95 | | 82.48 | | |
| Net weight | | | kg (lbs) | 234 (516) | | 234 (516) | |
| Heat exchanger | | | | Salt-resistant cross fin & aluminium tube | | | |
| Defrosting method | | | | Auto-defrost mode (Reversed refrigerant cycle, Hot gas) | | | |

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 (subject to JIS B8615-2)
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B. (95°F D.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°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°C D.B. (23°F D.B.)/-6°C W.B. (21°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2 mmH2O). Consult your dealer about the specification when setting External static pressure option.
- This table is based on Regulation (EU) No 517/2014.
- * 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.

Outdoor Unit – Air Source



| Model | | | | PURY-EP300YNW-A (-BS) | | | | PURY-EP350YNW-A (-BS) | | | |
|--|------------------------------|-------------------|------------------|---|-----------------------|----------------|-------|--|-----------------------|----------------|--|
| Number of HBC controller | | | | Single HBC | | Double HBC | | Single HBC | | Double HBC | |
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | |
| Cooling | Capacity (Nominal) *1 | | kW | 33.5 | | | | 40.0 | | | |
| | | | BTU / h | 114,300 | | | | 136,500 | | | |
| | Power input | | kW | 12.05 | | 10.24 | | 17.16 | | 13.98 | |
| | Current input | | A | 20.3-19.3-18.6 | | 17.2-16.4-15.8 | | 28.9-27.5-26.5 | | 23.6-22.4-21.6 | |
| | EER | | kW / kW | 2.78 | | 3.27 | | 2.33 | | 2.86 | |
| | Temp. Range *3 | | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | | | 15.0~24.0°C (59~75°F) | | |
| Outdoor | | | D.B. | -5.0~52.0°C (23~126°F) | | | | -5.0~52.0°C (23~126°F) | | | |
| Heating | Capacity (Nominal) *2 | | kW | 37.5 | | | | 45.0 | | | |
| | | | BTU / h | 128,000 | | | | 153,500 | | | |
| | Power input | | kW | 11.71 | | 11.12 | | 15.38 | | 14.28 | |
| | Current input | | A | 19.7-18.7-18.1 | | 18.7-17.8-17.1 | | 25.9-24.6-23.7 | | 24.1-22.9-22.0 | |
| | COP | | kW / kW | 3.20 | | 3.37 | | 2.92 | | 3.15 | |
| | Temp. range *3 | | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | | | 15.0~27.0°C (59~81°F) | | |
| Outdoor | | | W.B. | -20.0~15.5°C (-4~60°F) | | | | -20.0~15.5°C (-4~60°F) | | | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | | | 50~150% of outdoor unit capacity | | | |
| | | | Model / Quantity | WP10~WP125/2~45 | | | | WP10~WP125/2~50 | | | |
| Sound pressure level (measured in anechoic room)*4 | | | dB <A> | 61/67 | | | | 62.5/64 | | | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 80/86.5 | | | | 81/83 | | | |
| Refrigerant piping diameter | | High pressure | mm (in.) | 19.05 (3/4) Brazed | | | | 19.05 (3/4) Brazed | | | |
| | | Low pressure | mm (in.) | 22.2 (7/8) Brazed | | | | 28.58 (1-1/8) Brazed | | | |
| Fan | Type x Quantity | | | Propeller fan x 1 | | | | Propeller fan x 2 | | | |
| | Air flow rate | | m3/min | 240 | | | | 250 | | | |
| | | | L/s | 4,000 | | | | 4,167 | | | |
| | | | cfm | 8,474 | | | | 8,828 | | | |
| | Control, Driving mechanism | | | Inverter-control, direct-driven by motor | | | | Inverter-control, direct-driven by motor | | | |
| | Motor output | | kW | 0.92 x 1 | | | | 0.46 x 2 | | | |
| External static press. *5 | | | | 0 Pa (0 mmH2O) | | | | 0 Pa (0 mmH2O) | | | |
| Compressor | Type | | | Inverter scroll hermetic compressor | | | | Inverter scroll hermetic compressor | | | |
| | Starting method | | | Inverter | | | | Inverter | | | |
| | Motor output | | kW | 7.9 | | | | 10.2 | | | |
| | Case heater | | kW | - (- V) | | | | - (- V) | | | |
| External finish | | | | Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | | | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 920 x 740 | | | | 1,858 (1,798 without legs) x 1,240 x 740 | | | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16 | | | | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | | | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | | | | | |
| | Compressor | | | - | | | | - | | | |
| | Fan motor | | | - | | | | - | | | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | | | R410A / 2088 | | | |
| | Factory charged | Weight | kg | 5.2 | | | | 8.0 | | | |
| | | CO2 equivalent *6 | t | 10.86 | | | | 16.70 | | | |
| | Max additional charge | Weight | kg | 34.3 | | | | 39 | | | |
| | | CO2 equivalent *6 | t | 71.62 | | | | 81.43 | | | |
| | Total charge | Weight | kg | 39.5 | | | | 47.0 | | | |
| CO2 equivalent *6 | | t | 82.48 | | | | 98.14 | | | | |
| Net weight | | | kg (lbs) | 236 (521) | | | | 279 (616) | | | |
| Heat exchanger | | | | Salt-resistant cross fin & aluminium tube | | | | | | | |
| Defrosting method | | | | Auto-defrost mode (Reversed refrigerant cycle, Hot gas) | | | | | | | |

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 (subject to JIS B8615-2)
Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- Nominal heating conditions (subject to JIS B8615-2)
Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°CDB. (23°FDB.)/-6°CWB. (21°FWB.) to 21°CDB. (70°FDB.)/15.5°CWB. (60°FWB.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2mmH2O).
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.

Outdoor Unit – Air Source



| Model | | | | PURY-EP400YNW-A (-BS) | | PURY-EP450YNW-A (-BS) | | PURY-EP500YNW-A (-BS) | |
|--|------------------------------|-------------------|-------------------------------------|---|-------------------------------------|--|-------------------------------------|--|-----------------------|
| Power source | | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | | | | |
| Cooling | Capacity (Nominal) *1 | | kW | 45.0 | | 50.0 | | 56.0 | |
| | | | BTU / h | 153,500 | | 170,600 | | 191,100 | |
| | Power input | | kW | 13.88 | | 16.83 | | 21.22 | |
| | | | Current input | | A | 23.4-22.2-21.4 | | 28.4-26.9-26.0 | |
| | EER | | | | kW / kW | 3.24 | | 2.97 | |
| | Temp. Range *3 | | Indoor | W.B. | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) |
| Outdoor | | | D.B. | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | | -5.0~52.0°C (23~126°F) | |
| Heating | Capacity (Nominal) *2 | | kW | 50.0 | | 56.0 | | 63.0 | |
| | | | BTU / h | 170,600 | | 191,100 | | 215,000 | |
| | Power input | | kW | 14.12 | | 16.86 | | 21.67 | |
| | | | Current input | | A | 23.8-22.6-21.8 | | 28.4-27.0-26.0 | |
| | COP | | | | kW / kW | 3.54 | | 3.32 | |
| | Temp. range *3 | | Indoor | D.B. | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) |
| Outdoor | | | W.B. | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | | -20.0~15.5°C (-4~60°F) | |
| Indoor unit connectable | | | Total capacity | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | | 50~150% of outdoor unit capacity | |
| | | | Model / Quantity | WP10~WP125/2~50 | | WP10~WP125/2~50 | | WP10~WP125/2~50 | |
| Sound pressure level (measured in anechoic room)*4 | | | dB <A> | 65/69 | | 65.5/70 | | 63.5/64.5 | |
| Sound power level (measured in anechoic room) *4 | | | dB <A> | 83/88 | | 83/89 | | 82/84 | |
| 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 | |
| Fan | Type x Quantity | | | Propeller fan x 2 | | Propeller fan x 2 | | Propeller fan x 2 | |
| | Air flow rate | | m3/min | 315 | | 315 | | 295 | |
| | | | L/s | 5,250 | | 5,250 | | 4,917 | |
| | | | cfm | 11,123 | | 11,123 | | 10,416 | |
| | Control, Driving mechanism | | | Inverter-control, direct-driven by motor | | Inverter-control, direct-driven by motor | | Inverter-control, direct-driven by motor | |
| | Motor output | | kW | 0.46 x 2 | | 0.46 x 2 | | 0.92 x 2 | |
| External static press. *5 | | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | | 0 Pa (0 mmH2O) | | |
| Compressor | Type | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | | |
| | Starting method | | Inverter | | Inverter | | Inverter | | |
| | Motor output | | kW | 10.9 | | 12.4 | | 13.0 | |
| | Case heater | | kW | - (- V) | | - (- V) | | - (- V) | |
| External finish | | | | Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar> | | | | | |
| External dimension HxWxD | | | mm | 1,858 (1,798 without legs) x 1,240 x 740 | | 1,858 (1,798 without legs) x 1,240 x 740 | | 1,858 (1,798 without legs) x 1,750 x 740 | |
| | | | in. | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | 73-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16 | | 73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16 | |
| Protection devices | High pressure protection | | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | | | | |
| | Inverter circuit (COMP./FAN) | | | Over-heat protection, Over-current protection | | | | | |
| | Compressor | | | - | | | | - | |
| | Fan motor | | | - | | - | | - | |
| Refrigerant | Type/GWP | | | R410A / 2088 | | R410A / 2088 | | R410A / 2088 | |
| | Factory charged | Weight | kg | 8.0 | | 10.8 | | 10.8 | |
| | | CO2 equivalent *6 | t | 16.70 | | 22.55 | | 22.55 | |
| | Max additional charge | Weight | kg | 39.0 | | 44.7 | | 45.2 | |
| | | CO2 equivalent *6 | t | 81.43 | | 93.33 | | 94.38 | |
| | Total charge | Weight | kg | 47.0 | | 55.5 | | 56.0 | |
| CO2 equivalent *6 | | t | 98.14 | | 115.88 | | 116.93 | | |
| Net weight | | | kg (lbs) | 282 (622) | | 306 (675) | | 345 (761) | |
| Heat exchanger | | | | Salt-resistant cross fin & copper tube | | | | | |
| Defrosting method | | | | Auto-defrost mode (reversed refrigerant cycle, hot gas) | | | | | |

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 (subject to JIS B8615-2)
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B. (95°F D.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°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 5°C D.B. (23°F D.B.)/-6°C W.B. (21°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

- Cooling mode/Heating mode
- External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH2O, 6.1 mmH2O, 8.2 mmH2O). 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.

Water Source Unit



| Model | | | PQRY-P200YLM-A1 | PQRY-P250YLM-A1 |
|--|---------------------------|------------------------|--|--|
| Power source | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | 3-phase 4-wire 380-400-415 V 50/60 Hz |
| Cooling | Capacity (Nominal) *1 | kW | 22.4 | 28.0 |
| | | BTU / h | 76,400 | 95,500 |
| | Power input | kW | 3.97 | 5.44 |
| | Current input | A | 6.7-6.3-6.1 | 9.1-8.7-8.4 |
| | EER | kW / kW | 5.64 | 5.14 |
| | Temp. Range *3 | Indoor W.B. | 15.0~24.0°C (59~75°F) | 15.0~24.0°C (59~75°F) |
| | | | Outdoor D.B. | 10.0~45.0°C (50~113°F) |
| Heating | Capacity (Nominal) *2 | kW | 25.0 | 31.5 |
| | | BTU / h | 85,300 | 107,500 |
| | Power input | kW | 4.04 | 5.41 |
| | Current input | A | 6.8-6.4-6.2 | 9.1-8.6-8.3 |
| | COP | kW / kW | 6.18 | 5.82 |
| | Temp. range *3 | Indoor D.B. | 15.0~27.0°C (59~81°F) | 15.0~27.0°C (59~81°F) |
| | | | Outdoor W.B. | 10.0~45.0°C (50~113°F) |
| Indoor unit connectable | | Total capacity | 50~150% of heat source unit capacity | 50~150% of heat source unit capacity |
| | | Model / Quantity | WP10~WP125/1~30 | WP10~WP125/1~37 |
| Sound pressure level (measured in anechoic room) | | dB <A> | 46 | 48 |
| Refrigerant piping diameter | | High pressure mm (in.) | 15.88 (5/8) Brazed | 19.05 (3/4) Brazed |
| | | Low pressure mm (in.) | 19.05 (3/4) Brazed | 22.2 (7/8) Brazed |
| Circulating Water | Water flow rate | m3/min | 5.76 | 5.76 |
| | | L/min | 96 | 96 |
| | | cfm | 3.4 | 3.4 |
| | Pressure Drop | kPa | 24 | 24 |
| | Operating Volume Range | m3/h | 3.0 ~ 7.2 | 3.0 ~ 7.2 |
| Compressor | Type | | Inverter scroll hermetic compressor | Inverter scroll hermetic compressor |
| | Starting method | | Inverter | Inverter |
| | Motor output | kW | 4.8 | 6.2 |
| | Case heater | kW | — | — |
| External finish | | | Galvanized steel sheets | Galvanized steel sheets |
| External dimension HxWxD | | mm | 1,100 x 880 x 550 | 1,100 x 880 x 550 |
| | | in. | 43-5/16 x 34-11/16 x 21-11/16 | 43-5/16 x 34-11/16 x 21-11/16 |
| Protection devices | High pressure protection | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | High pressure sensor, high pressure switch at 4.15 MPa (601 psi) |
| | Inverter circuit (COMP.) | | Over-heat protection, Over-current protection | Over-heat protection, over-current protection |
| | Compressor | | Over-heat protection | Over-heat protection |
| Refrigerant | Type x Original Charge | | R410A/2088 | R410A/2088 |
| | Factory charged | kg | 5.0 | 5.0 |
| | Maximum additional charge | kg | 27.0 | 32.0 |
| | Total charge | kg | 32.0 | 37.0 |
| Net weight | | kg (lbs) | 170 (375) | 170 (375) |
| Heat exchanger | Type | | plate type | plate type |
| | Water volume in plate | L | 5.0 | 5.0 |
| | Water pressure max | MPa | 2.0 | 2.0 |

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 (subject to JIS B8615-2). Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), 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°CDB. (68°FDB.), Water temperature: 20°C (68°FDB.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
3. -5°CDB. (23°FDB.)/-6°CWB. (21°FWB.) to 21°CDB. (70°FDB.)/15.5°CWB. (60°FWB.) with cooling/heating mixed operation.

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

Water Source Unit



| Model | | | PQRY-P300YLM-A1 | | PQRY-P350YLM-A1 | |
|--|---------------------------|------------------|--|----------------|--|----------------|
| Number of HBC Controller | | | Single HBC | Double HBC | Single HBC | Double HBC |
| Power source | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | | 3-phase 4-wire 380-400-415 V 50/60 Hz | |
| Cooling | Capacity (Nominal) *1 | kW | 33.5 | | 40.0 | |
| | | BTU / h | 114,300 | | 136,500 | |
| | Power input | kW | 7.55 | 6.71 | 9.98 | 8.72 |
| | 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 |
| | Temp. Range *3 | Indoor | 15.0~24.0°C (59~75°F) | | 15.0~24.0°C (59~75°F) | |
| | | | 10.0~45.0°C (50~113°F) | | 10.0~45.0°C (50~113°F) | |
| Heating | Capacity (Nominal) *2 | kW | 37.5 | | 45.0 | |
| | | BTU / h | 128,000 | | 153,500 | |
| | Power input | kW | 7.13 | 6.79 | 8.87 | 8.25 |
| | 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 |
| | COP | kW / kW | 5.25 | 5.52 | 5.07 | 5.45 |
| | Temp. range *3 | Indoor | 15.0~27.0°C (59~81°F) | | 15.0~27.0°C (59~81°F) | |
| | | | 10.0~45.0°C (50~113°F) | | 10.0~45.0°C (50~113°F) | |
| Indoor unit connectable | | Total capacity | 50~150% of heat source unit capacity | | 50~150% of heat source unit capacity | |
| | | Model / Quantity | WP10~WP125/2~45 | | WP10~WP125/2~50 | |
| Sound pressure level (measured in anechoic room) | | dB <A> | 54 | | 52 | |
| Refrigerant piping diameter | High pressure | mm (in.) | 19.05 (3/4) Brazed | | 22.2 (7/8) Brazed | |
| | Low pressure | mm (in.) | 22.2 (7/8) Brazed | | 28.58 (1-1/8) Brazed | |
| Circulating Water | Water flow rate | m3/min | 5.76 | | 7.20 | |
| | | L/min | 96 | | 120 | |
| | | cfm | 3.4 | | 4.2 | |
| | Pressure Drop | kPa | 24 | | 44 | |
| | Operating Volume Range | m3/h | 3.0 ~ 7.2 | | 4.5 ~ 11.6 | |
| Compressor | Type | | Inverter scroll hermetic compressor | | Inverter scroll hermetic compressor | |
| | Starting method | | Inverter | | Inverter | |
| | Motor output | kW | 7.7 | | 9.5 | |
| | Case heater | kW | — | | — | |
| External finish | | | Galvanized steel sheets | | Galvanized steel sheets | |
| External dimension HxWxD | | mm | 1,100 x 880 x 550 | | 1,450 x 880 x 550 | |
| | | in. | 43-5/16 x 34-11/16 x 21-11/16 | | 57-1/8 x 34-11/16 x 21-11/16-11/16 | |
| Protection devices | High pressure protection | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | | High pressure sensor, high pressure switch at 4.15 MPa (601 psi) | |
| | Inverter circuit (COMP.) | | Over-heat protection, Over-current protection | | Over-heat protection, over-current protection | |
| | Compressor | | Over-heat protection | | Over-heat protection | |
| Refrigerant | Type x Original Charge | | R410A/2088 | | R410A/2088 | |
| | Factory charged | kg | 5.0 | | 6.0 | |
| | Maximum additional charge | kg | 33.0 | | 52.0 | |
| | Total charge | kg | 38.0 | | 58.0 | |
| Net weight | | kg (lbs) | 170 (375) | | 214 (472) | |
| Heat exchanger | Type | | plate type | | plate type | |
| | Water volume in plate | L | 5.0 | | 5.0 | |
| | Water pressure max | MPa | 2.0 | | 2.0 | |

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 (subject to JIS B8615-2). Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.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°C D.B. (68°F D.B.). Water temperature: 20°C (68°F D.B.). Pipe length: 7.5 m (24-9/16 ft.). Level difference: 0m (0ft).
3. -5°C D.B. (23°F D.B.)/-6°C W.B. (21°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.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 | | | 3-phase 4-wire 380-400-415 V 50/60 Hz | 3-phase 4-wire 380-400-415 V 50/60 Hz | 3-phase 4-wire 380-400-415 V 50/60 Hz |
| Cooling | Capacity (Nominal) *1 | kW | 45.0 | 50.0 | 56.0 |
| | | BTU / h | 153,500 | 170,600 | 191,100 |
| | Power input | kW | 10.05 | 12.05 | 14.58 |
| | 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 |
| | Temp. Range *3 | Indoor W.B. | 15.0~24.0°C (59~75°F) | 15.0~24.0°C (59~75°F) | 15.0~24.0°C (59~75°F) |
| | | | Outdoor D.B. | 10.0~45.0°C (50~113°F) | 10.0~45.0°C (50~113°F) |
| Heating | Capacity (Nominal) *2 | kW | 50.0 | 56.0 | 63.0 |
| | | BTU / h | 170,600 | 191,100 | 215,000 |
| | Power input | kW | 9.45 | 11.11 | 13.07 |
| | 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 |
| | Temp. range *3 | Indoor D.B. | 15.0~27.0°C (59~81°F) | 15.0~27.0°C (59~81°F) | 15.0~27.0°C (59~81°F) |
| | | | Outdoor W.B. | 10.0~45.0°C (50~113°F) | 10.0~45.0°C (50~113°F) |
| Indoor unit connectable | | Total capacity | 50~150% of heat source unit capacity | 50~150% of heat source unit capacity | 50~150% of heat source unit capacity |
| | | Model / Quantity | WP10~WP125/2~50 | WP10~WP125/1~37 | WP10~WP125/2~50 |
| Sound pressure level (measured in anechoic room) | | dB <A> | 52 | 54 | 54 |
| Refrigerant piping diameter | | High pressure mm (in.) | 22.2 (7/8) Brazed | 22.2 (7/8) Brazed | 22.2 (7/8) Brazed |
| | | Low pressure mm (in.) | 28.58 (1-1/8) Brazed | 28.58 (1-1/8) Brazed | 28.58 (1-1/8) Brazed |
| Circulating Water | Water flow rate | m3/min | 7.20 | 7.20 | 7.20 |
| | | L/min | 120 | 120 | 120 |
| | | cfm | 4.2 | 4.2 | 4.2 |
| | Pressure Drop | kPa | 44 | 44 | 44 |
| | Operating Volume Range | m3/h | 4.5 ~ 11.6 | 4.5 ~ 11.6 | 4.5 ~ 11.6 |
| Compressor | Type | | Inverter scroll hermetic compressor | Inverter scroll hermetic compressor | Inverter scroll hermetic compressor |
| | Starting method | | Inverter | Inverter | Inverter |
| | Motor output | kW | 10.7 | 11.6 | 13.0 |
| | Case heater | kW | — | — | — |
| External finish | | | Galvanized steel sheets | Galvanized steel sheets | Galvanized steel sheets |
| External dimension HxWxD | | mm | 1,450 x 880 x 550 | 1,450 x 880 x 550 | 1,450 x 880 x 550 |
| | | in. | 57-1/8 x 34-11/16 x 21-11/16 | 57-1/8 x 34-11/16 x 21-11/16 | 57-1/8 x 34-11/16 x 21-11/16 |
| Protection devices | High pressure protection | | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) | High pressure sensor, high pressure switch at 4.15 MPa (601 psi) | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) |
| | Inverter circuit (COMP.) | | Over-heat protection, Over-current protection | Over-heat protection, over-current protection | Over-heat protection, Over-current protection |
| | Compressor | | Over-heat protection | Over-heat protection | Over-heat protection |
| Refrigerant | Type x Original Charge | | R410A/2088 | R410A/2088 | R410A/2088 |
| | Factory charged | kg | 6.0 | 6.0 | 6.0 |
| | Maximum additional charge | kg | 52.0 | 53.0 | 55.0 |
| | Total charge | kg | 58.0 | 59.0 | 61.0 |
| Net weight | | kg (lbs) | 214 (472) | 214 (472) | 214 (472) |
| Heat exchanger | Type | | plate type | plate type | plate type |
| | Water volume in plate | L | 5.0 | 5.0 | 5.0 |
| | Water pressure max | MPa | 2.0 | 2.0 | 2.0 |

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

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

HBC Controller

Main-HBC



| Model | | | CMB-WM108V-AA | | CMB-WM1016V-AA | |
|---|-----------------|-------------------------|--|--------------------|--|----------------|
| Number of Branch | | | 8 | | 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 (220/230/240) | 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 |
| | 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 (220/230/240) | Cooling | 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 |
| | 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 | | 41 | |
| Applicable Temperature Range of Installation Site | | °C (D.B.) | 0~32 | | 0~32 | |
| External Finish | | | Galvanised steel plate (Lower part drain pan: pre-coated galvanised sheets + powder coating) | | Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating) | |
| Connectable Outdoor/Heat Source Unit | | | PURY-P200~500YNW-A1(-BS)/PURY-EP200~500YNW-A1(-BS)-PQRY-P200~500-YLM-A1 | | | |
| Indoor Unit Capacity Connectable to 1 Branch | | | Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81) | | Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81) | |
| External Dimension H x W x D | | mm | 300 x 1,520 x 630 | | 300 x 1,800 x 630 | |
| | | in. | 11-13/16 x 59-7/8 x 24-13/16 | | 11-13/16 x 70-7/8 x 24-13/16 | |
| Refrigerant Piping Diameter | To Outdoor Unit | High Press. Pipe (O.D.) | mm (in.) | 15.88 (5/8) Brazed | 15.88 (5/8) Brazed | |
| | | Low Press. Pipe (O.D.) | mm (in.) | 19.05 (3/4) Brazed | 19.05 (3/4) Brazed | |
| Water Piping Diameter | To Indoor Unit | HiInlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| | | Outlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| Field Drain Pipe Size | | mm (in.) | O.D. 32 (1-1/4) | | O.D. 32 (1-1/4) | |
| Net Weight | | kg (lbs) | 86 (190) [96 (212) with water] | | 98 (217) [111 (245) with water] | |
| Standard Attachment Accessory | | | Drain Connection pipe (with flexible hose and insulation) | | Drain Connection pipe (with flexible hose and insulation) | |

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 data book and the installation manual).
- * 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

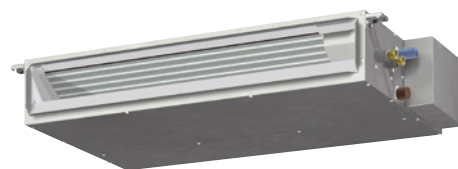


| Model | | | CMB-WM108V-AB | | CMB-WM1016V-AB | |
|---|----------------|--------------------|---|----------------|---|----------------|
| Number of Branch | | | 8 | | 16 | |
| Power Source | | | 1-phase 220-230-240 V | | 1-phase 220-230-240 V | |
| | | | 50 Hz | 60 Hz | 50 Hz | 60 Hz |
| Power Input (220/230/240) | 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 |
| | 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 (220/230/240) | 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 |
| | 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 pressure level (measured in anechoic room) | | dBA | - | | - | |
| Applicable Temperature Range of Installation Site | | °C (D.B.) | 0~32 | | 0~32 | |
| External Finish | | | Galvanised steel plate (Lower part drain pan: pre-coated galvanised sheets + powder coating) | | Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating) | |
| Connectable Outdoor Unit | | | - | | - | |
| Indoor Unit Capacity Connectable to 1 Branch | | | Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81) | | Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81) | |
| External Dimension H x W x D | | mm | 300 x 1,520 x 630 | | 300 x 1,520 x 630 | |
| | | in. | 11-13/16 x 59-7/8 x 24-13/16 | | 11-13/16 x 70-7/8 x 24-13/16 | |
| Water Piping Diameter | To Main HBC | Hinlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| | | Outlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| | To Indoor Unit | Hinlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| | | Outlet Pipe (I.D.) | mm (in.) | 20 (3/4) | 20 (3/4) | |
| Field Drain Pipe Size | | mm (in.) | O.D. 32 (1-1/4) | | O.D. 32 (1-1/4) | |
| Net Weight | | kg (lbs) | 44 (98) [49 (109) with water] | | 53 (117) [62 (137) with water] | |
| Standard Attachment Accessory | | | Drain Connection pipe (with flexible hose and insulation) | | Drain Connection pipe (with flexible hose and insulation) | |

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.
- * 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.
- * 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 data book and the installation manual).
- * Main HBC Controller is necessary with sub HBC.

Slim Ceiling Concealed



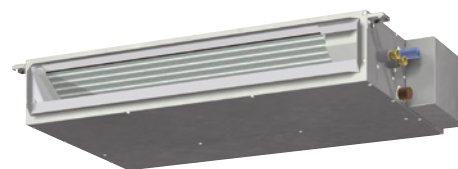
| Model | | | PEFY-WP10VMS1-E | | PEFY-WP15VMS1-E | | |
|---|-----------------------------|----------------|--|-----------------------------|--|-----------------------------|--|
| Power source | | | 1-phase 220-230-240 V 50/60 Hz | | 1-phase 220-230-240 V 50/60 Hz | | |
| Cooling | Capacity (Nominal) *1 | kW | 1.2 | | 1.7 | | |
| | | kcal/h | 1,000 | | 1,500 | | |
| | | BTU/h | 4,100 | | 5,800 | | |
| | Power input *2 | kW | 0.03 | | 0.05 | | |
| | Current input*2 | A | 0.21 | | 0.44 | | |
| Heating | Capacity (Nominal) *3 | kW | 1.4 | | 1.9 | | |
| | | kcal/h | 1,200 | | 1,600 | | |
| | | BTU/h | 4,800 | | 6,500 | | |
| | Power input *2 | kW | 0.03 | | 0.03 | | |
| | Current input *2 | A | 0.21 | | 0.33 | | |
| External finish | | | Galvanised steel plate | | Galvanised steel plate | | |
| External dimension HxWxD | | 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 Weight | | kg (lbs) | 19 (42) | | 19 (42) | | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | | Cross fin (Aluminium fin and copper tube) | | |
| | | Water Volume L | 0.4 | | 0.7 | | |
| Fan | Type × Quantity | | Sirocco fan x 2 | | Sirocco fan x 2 | | |
| | External Static Pressure *4 | | Pa | <5> - 15 - <35> - <50> | | <5> - 15 - <35> - <50> | |
| | | | mmH ₂ O | <0.5> - 1.5 - <3.6> - <5.1> | | <0.5> - 1.5 - <3.6> - <5.1> | |
| | 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 | 4.0 - 4.5 - 5.0 | | 5.0 - 6.0 - 7.0 | |
| | | | L/s | 67 - 75 - 83 | | 83 - 100 - 117 | |
| | | | cf/m | 141 - 159 - 177 | | 177 - 212 - 247 | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | 20-23-25 | | 22-24-28 | | |
| Insulation Material | | | EPS, Polythene foam, Urethane foam | | EPS, Polythene foam, Urethane foam | | |
| Air Filter | | | PP Honeycomb fabric | | PP Honeycomb fabric | | |
| Protection Device | | | Fuse | | Fuse | | |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | | |
| Water Piping Diameter *5 *6 | Inlet | 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.) | O.D.32 (1-1/4) | | O.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 part Control Box Replace Kit | | | PAC-KE70HS-E | | PAC-KE70HS-E | | |
| Unit Converter: kcal/h=kW×860. BTU/h=kW×3,412. cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB.(68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Slim Ceiling Concealed



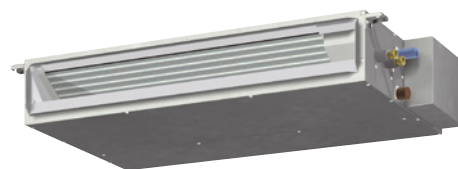
| Model | | | PEFY-WP20VMS1-E | PEFY-WP25VMS1-E | |
|---|-----------------------------|----------------|--|--|-----------------|
| Power source | | | 1-phase 220-230-240 V 50/60 Hz | 1-phase 220-230-240 V 50/60 Hz | |
| Cooling | Capacity (Nominal) *1 | kW | 2.2 | 2.8 | |
| | | kcal/h | 1,900 | 2,400 | |
| | | BTU/h | 7,500 | 9,600 | |
| | Power input *2 | kW | 0.051 | 0.06 | |
| | Current input*2 | A | 0.49 | 0.51 | |
| Heating | Capacity (Nominal) *3 | kW | 2.5 | 3.2 | |
| | | kcal/h | 2,200 | 2,800 | |
| | | BTU/h | 8,500 | 10,900 | |
| | Power input *2 | kW | 0.031 | 0.04 | |
| | Current input *2 | A | 0.38 | 0.4 | |
| External finish | | | Galvanised steel plate | Galvanised steel plate | |
| External dimension HxWxD | | 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 Weight | | kg (lbs) | 20 (45) | 20 (45) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume L | 0.9 | 0.9 | |
| Fan | Type × Quantity | | Sirocco fan x 2 | Sirocco fan x 2 | |
| | External Static Pressure *4 | | Pa | <5> - 15 - <35> - <50> | |
| | | | mmH ₂ O | <0.5> - 1.5 - <3.6> - <5.1> | |
| | 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 | 5.5 - 6.5 - 8.0 | 5.5 - 7.0 - 9.0 |
| | | | L/s | 92 - 108 - 133 | 92 - 117 - 150 |
| cf/m | | | 194 - 230 - 282 | 194 - 247 - 318 | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | dB<A> | 23-25-29 | 23-26-30 |
| Insulation Material | | | EPS, Polythene foam, Urethane foam | EPS, Polythene foam, Urethane foam | |
| Air Filter | | | PP Honeycomb fabric | PP Honeycomb fabric | |
| Protection Device | | | Fuse | Fuse | |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | |
| Water Piping Diameter *5 *6 | Inlet | 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.) | O.D.32 (1-1/4) | O.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 part Control Box Replace Kit | | | PAC-KE7OHS-E | PAC-KE7OHS-E | |
| Unit Converter: kcal/h=kW×860. BTU/h=kW×3.412. cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | |

Unit Converter: kcal/h=kW×860, 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°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B./19°C W.B. (95°F D.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°C D.B.(68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- The factory 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.
- 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.
- Please group units that operate on 1 branch.

Slim Ceiling Concealed



| Model | | | | PEFY-WP32VMS1-E | | PEFY-WP40VMS1-E | | PEFY-WP50VMS1-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 | Capacity (Nominal) *1 | | kW | 3.6 | | 4.5 | | 5.6 | | |
| | | | kcal/h | 3,100 | | 3,900 | | 4,800 | | |
| | | | BTU/h | 12,300 | | 15,400 | | 19,100 | | |
| | Power input *2 | | kW | 0.071 | | 0.090 | | 0.090 | | |
| Current input*2 | | A | 0.61 | | 0.73 | | 0.77 | | | |
| Heating | Capacity (Nominal) *3 | | kW | 4.0 | | 5.0 | | 6.3 | | |
| | | | kcal/h | 3,400 | | 4,300 | | 5,400 | | |
| | | | BTU/h | 13,600 | | 17,100 | | 21,500 | | |
| | Power input *2 | | kW | 0.051 | | 0.070 | | 0.070 | | |
| | Current input *2 | | A | 0.50 | | 0.62 | | 0.66 | | |
| External finish | | | | Galvanised steel plate | | Galvanised steel plate | | Galvanised steel plate | | |
| External dimension HxWxD | | | mm | 200x990x700 | | 200x990x700 | | 200x1,190x700 | | |
| | | | 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) | | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | | Cross fin (Aluminium fin and copper tube) | | Cross fin (Aluminium fin and copper tube) | | | |
| | | Water Volume | L | 1.0 | | 1.0 | | 1.7 | | |
| Fan | Type × Quantity | | Sirocco fan x 3 | | Sirocco fan x 3 | | Sirocco fan x 4 | | | |
| | External Static Pressure *4 | | Pa | <5> - 15 - <35> - <50> | | <5> - 15 - <35> - <50> | | <5> - 15 - <35> - <50> | | |
| | | | mmH ₂ O | <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 | | | |
| | Motor Output | | kW | 0.096 | | 0.096 | | 0.096 | | |
| | Driving Mechanism | | Direct-driven by motor | | Direct-driven by motor | | Direct-driven by motor | | | |
| | Airflow Rate | | (Low Mid High) | m3/min | 8.0 - 9.0 - 11.0 | | 9.5 - 11.0 - 13.0 | | 12.0 - 14.0 - 16.5 | |
| | | | | L/s | 133 - 150 - 183 | | 158 - 183 - 217 | | 200 - 233 - 275 | |
| cf/m | | | | 282 - 318 - 388 | | 335 - 388 - 459 | | 424 - 494 - 583 | | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | dB<A> | 28-30-33 | | 30-32-35 | | 30-33-36 | | |
| Insulation Material | | | | EPS, Polythene foam, Urethane foam | | EPS, Polythene foam, Urethane foam | | EPS, Polythene 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-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | | | | |
| Water Piping Diameter *5 *6 | | Inlet | in. | Rc 3/4 screw | | Rc 3/4 screw | | Rc 3/4 screw | | |
| | | Outlet | in. | Rc 3/4 screw | | Rc 3/4 screw | | Rc 3/4 screw | | |
| Field Drain Pipe Size | | | mm (in.) | O.D.32 (1-1/4) | | O.D.32 (1-1/4) | | O.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 Control Box Replace Kit | | | | PAC-KE70HS-E | | PAC-KE70HS-E | | PAC-KE70HS-E | | |
| Unit Converter: kcal/h= kW×860 RTU/h=kW×3.412 cfm=m ³ /min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB./66°FWB.) 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°CDB./68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Ceiling Concealed



| Model | | | | PEFY-WP20VMA-E | | PEFY-WP25VMA-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 | 2.2 | | 2.8 | | |
| | | kcal/h | 1,900 | | 2,400 | | |
| | | BTU/h | 7,500 | | 9,600 | | |
| | Power input *2 | kW | 0.07 | | 0.09 | | |
| | Current input*2 | A | 0.55 | | 0.64 | | |
| Heating | Capacity (Nominal) *3 | kW | 2.5 | | 3.2 | | |
| | | kcal/h | 2,200 | | 2,800 | | |
| | | BTU/h | 8,500 | | 10,900 | | |
| | Power input *2 | kW | 0.05 | | 0.07 | | |
| | Current input *2 | A | 0.44 | | 0.53 | | |
| External finish | | | | Galvanised steel plate | | Galvanised steel plate | |
| External dimension HxWxD | | | 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 | |
| Net Weight | | | kg (lbs) | 21 (47) | | 26 (58) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | | Cross fin (Aluminium fin and copper tube) | | |
| | | Water Volume | | | | | L |
| | | | 0.7 | | 1.0 | | |
| Fan | Type × Quantity | | Sirocco fan x 1 | | Sirocco fan x 1 | | |
| | External Static Pressure *4 | Pa | <35> - 50 - <70> - <100> - <150> | | <35> - 50 - <70> - <100> - <150> | | |
| | | mmH ₂ O | <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 | | |
| | Motor Output | kW | 0.085 | | 0.085 | | |
| | Driving Mechanism | | Direct-driven by motor | | Direct-driven by motor | | |
| | Airflow Rate | (Low Mid High) | m ³ /min | 7.5 - 9.0 - 10.5 | | 10.0 - 12.0 - 14.0 | |
| | | | L/s | 125 - 150 - 175 | | 167 - 200 - 233 | |
| cf/m | | | 265 - 318 - 371 | | 353 - 242 - 494 | | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | 23-26-29 | | 23-27-30 | | |
| Insulation Material | | | | EPS, Polythene foam, Urethane foam | | EPS, Polythene foam, Urethane foam | |
| Air Filter | | | | PP Honeycomb fabric | | PP Honeycomb fabric | |
| Protection Device | | | | Fuse | | Fuse | |
| Connectable Outdoor Unit/HBC Controller | | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | |
| Water Piping Diameter *5 *6 | Inlet | 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.) | O.D.32 (1-1/4) | | O.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 part Control Box Replace Kit | | | | PAC-KE91TB-E | | PAC-KE91TB-E | |
| Unit Converter: kcal/h=kW×860. BTU/h=kW×3.412. cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB.(68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Ceiling Concealed



| Model | | | | PEFY-WP32VMA-E | PEFY-WP40VMA-E | PEFY-WP50VMA-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 | Capacity (Nominal) *1 | kW | 3.6 | 4.5 | 5.6 | |
| | | kcal/h | 3,100 | 3,900 | 4,800 | |
| | | BTU/h | 12,300 | 15,400 | 19,100 | |
| | Power input *2 | kW | 0.11 | 0.14 | 0.14 | |
| | Current input*2 | A | 0.74 | 1.15 | 1.15 | |
| Heating | Capacity (Nominal) *3 | kW | 4.0 | 5.0 | 6.3 | |
| | | kcal/h | 3,400 | 4,300 | 5,400 | |
| | | BTU/h | 13,600 | 17,100 | 21,500 | |
| | Power input *2 | kW | 0.09 | 0.12 | 0.12 | |
| | Current input *2 | A | 0.63 | 1.04 | 1.04 | |
| External finish | | | | Galvanised steel plate | Galvanised steel plate | Galvanised steel plate |
| External dimension HxWxD | | mm | 250x900x732 | 250x1,100x732 | 250x1,100x732 | |
| | | 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 Weight | | kg (lbs) | 26 (58) | 31 (69) | 31 (69) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume | L | 1.0 | 1.8 | 1.8 |
| Fan | Type × Quantity | | Sirocco fan x 1 | Sirocco fan x 2 | Sirocco fan x 2 | |
| | External Static Pressure *4 | Pa | <35> - 50 - <70> - <100> - <150> | <35> - 50 - <70> - <100> - <150> | <35> - 50 - <70> - <100> - <150> | |
| | | mmH ₂ O | <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 | |
| | Motor Output | kW | 0.085 | 0.121 | 0.121 | |
| | Driving Mechanism | | Direct-driven by motor | Direct-driven by motor | Direct-driven by motor | |
| | Airflow Rate | (Low Mid High) | m ³ /min | 12.0 - 14.5 - 17.0 | 14.5 - 18.0 - 21.0 | 14.5 - 18.0 - 21.0 |
| | | | L/s | 200 - 242 - 283 | 242 - 300 - 350 | 242 - 300 - 350 |
| cf/m | | | 424 - 512 - 600 | 512 - 636 - 742 | 512 - 636 - 742 | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | dB<A> | 25-29-32 | 26-29-34 | 26-29-34 |
| Insulation Material | | | | EPS, Polythene foam, Urethane foam | EPS, Polythene foam, Urethane foam | EPS, Polythene 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-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | |
| Water Piping Diameter *5 *6 | | Inlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| | | Outlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| Field Drain Pipe Size | | | mm (in.) | O.D.32 (1-1/4) | O.D.32 (1-1/4) | O.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 Control Box Replace Kit | | | | PAC-KE92TB-E | PAC-KE93TB-E | PAC-KE93TB-E |
| Unit Converter: kcal/h=kW×860 RTU/h=kW×3.412 cfm=m ³ /min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB./68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Ceiling Concealed



| 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 | Capacity (Nominal) *1 | kW | 7.1 | 8.0 | 9.0 | |
| | | kcal/h | 6,100 | 6,900 | 7,700 | |
| | | BTU/h | 24,200 | 27,300 | 30,700 | |
| | Power input *2 | kW | 0.14 | 0.24 | 0.24 | |
| | Current input*2 | A | 1.15 | 1.47 | 1.47 | |
| Heating | Capacity (Nominal) *3 | kW | 8.0 | 9.0 | 10.0 | |
| | | kcal/h | 6,900 | 7,700 | 8,600 | |
| | | BTU/h | 27,300 | 30,700 | 34,100 | |
| | 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 |
| External dimension HxWxD | | mm | 250x1,100x732 | 250x1,400x732 | 250x1,400x732 | |
| | | 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 (lbs) | 31 (69) | 40 (89) | 40 (89) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume | | | | L |
| | | | 2.0 | 2.6 | 2.6 | |
| Fan | Type × Quantity | | Sirocco fan x 2 | Sirocco fan x 2 | Sirocco fan x 2 | |
| | External Static Pressure *4 | Pa | <35> - 50 - <70> - <100> - <150> | <35> - 50 - <70> - <100> - <150> | <35> - 50 - <70> - <100> - <150> | |
| | | mmH ₂ O | <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 | |
| | Motor Output | 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 in anechoic room)*2 | | (Low Mid High) | dB<A> | 26-29-34 | 28-33-37 | 28-33-37 |
| Insulation Material | | | EPS, Polythene foam, Urethane foam | EPS, Polythene foam, Urethane foam | EPS, Polythene 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-WP-V-GA1, CMB-WP-V-GB1, 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.) | O.D.32 (1-1/4) | O.D.32 (1-1/4) | O.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 Control Box Replace Kit | | | PAC-KE93TB-E | PAC-KE94TB-E | PAC-KE94TB-E | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB.(68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Ceiling Concealed



| 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 | |
| Cooling | Capacity (Nominal) *1 | | kW | 11.2 | | 14.0 | |
| | | | kcal/h | 9,600 | | 12,000 | |
| | | | BTU/h | 38,200 | | 47,800 | |
| | Power input *2 | | kW | 0.24 | | 0.36 | |
| | Current input*2 | | A | 1.47 | | 2.21 | |
| Heating | Capacity (Nominal) *3 | | kW | 12.5 | | 16.0 | |
| | | | kcal/h | 10,800 | | 13,800 | |
| | | | BTU/h | 42,700 | | 54,600 | |
| | Power input *2 | | kW | 0.22 | | 0.34 | |
| | Current input *2 | | A | 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) | 40 (89) | | 42 (93) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | | Cross fin (Aluminium fin and copper tube) | | |
| | | Water Volume | L | 2.6 | | 3.0 | |
| Fan | Type × Quantity | | Sirocco fan x 2 | | Sirocco fan x 2 | | |
| | External Static Pressure *4 | | Pa | <35> - 50 - <70> - <100> - <150> | | <35> - 50 - <70> - <100> - <150> | |
| | | | mmH ₂ O | <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 | | |
| | Motor Output | | kW | 0.244 | | 0.244 | |
| | Driving Mechanism | | Direct-driven by motor | | Direct-driven by motor | | |
| | Airflow Rate | (Low Mid High) | m3/min | 23.0 - 28.0 - 33.0 | | 29.5 - 35.5 - 42.0 | |
| | | | L/s | 383 - 467 - 550 | | 492 - 592 - 700 | |
| cf/m | | | 812 - 989 - 1,165 | | 1,042 - 1,254 - 1,483 | | |
| Sound pressure level (measured in anechoic room)*2 | | (Low Mid High) | dB<A> | 28-33-37 | | 32-36-40 | |
| Insulation Material | | | | EPS, Polythene foam, Urethane foam | | EPS, Polythene foam, Urethane foam | |
| Air Filter | | | | PP Honeycomb fabric | | PP Honeycomb fabric | |
| Protection Device | | | | Fuse | | Fuse | |
| Connectable Outdoor Unit/HBC Controller | | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, 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 | |
| | | Outlet | in. | Rc 1-1/4 screw | | Rc 1-1/4 screw | |
| Field Drain Pipe Size | | | mm (in.) | O.D.32 (1-1/4) | | O.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 part Control Box Replace Kit | | | | PAC-KE94TB-E | | PAC-KE95TB-E | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB./68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

Ceiling Cassette



| Model | | | PLFY-WL32VEM-E | PLFY-WL40VEM-E | PLFY-WL50VEM-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 | Capacity (Nominal) *1 | kW | 3.6 | 4.5 | 5.6 | |
| | | kcal/h | 3,100 | 3,900 | 4,800 | |
| | | BTU/h | 12,300 | 15,400 | 19,100 | |
| | Power input | kW | 0.03 | 0.03 | 0.04 | |
| | Current input | A | 0.33 | 0.35 | 0.40 | |
| Heating | Capacity (Nominal) *2 | kW | 4.0 | 5.0 | 6.3 | |
| | | kcal/h | 3,400 | 4,300 | 5,400 | |
| | | BTU/h | 13,600 | 17,100 | 21,500 | |
| | Power input | kW | 0.03 | 0.03 | 0.04 | |
| | Current input | A | 0.27 | 0.29 | 0.34 | |
| External finish | | | Galvanised steel sheet | Galvanised steel sheet | Galvanised steel plate | |
| External dimension HxWxD | | mm | 258 x 840 x 840 | 258 x 840 x 840 | 258 x 840 x 840 | |
| | | in. | 10-3/16 x 33-3/32 x 33-3/32 | 10-3/16 x 33-3/32 x 33-3/32 | 10-3/16 x 33-3/32 x 33-3/32 | |
| Net Weight | | kg (lbs) | 20 (44) | 20 (44) | 20 (44) | |
| Decoration Panel | | 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) | |
| | | Dimensions | mm | 40 x 950 x 950 | 40 x 950 x 950 | 40 x 950 x 950 |
| | | | 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) |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume | L | 1.8 | 1.8 | 1.8 |
| Fan | Type × Quantity | | Turbo Fan x 1 | Turbo Fan x 1 | Turbo Fan x 1 | |
| | External Static Pressure | | Pa | 0 | 0 | |
| | Motor Type | | DC Motor | DC Motor | DC Motor | |
| | Motor Output | kW | 0.05 | 0.05 | 0.05 | |
| | Driving Mechanism | | Direct-drive | Direct-drive | Direct-driven by motor | |
| | Airflow Rate (Low-Mid1-Mid2-High) | m3/min | 14 - 15 - 16 - 17 | 14 - 15 - 16 - 17 | 14 - 16 - 18 - 20 | |
| | | L/s | 233 - 250 - 267 - 283 | 233 - 250 - 267 - 283 | 233 - 267 - 300 - 333 | |
| Sound pressure level (Low-Mid1-Mid2-High) | | c/m | 459 - 530 - 565 - 600 | 459 - 530 - 565 - 600 | 494 - 565 - 636 - 706 | |
| | | dB<A> | 26 - 27 - 29 - 30 | 26 - 28 - 29 - 31 | 27 - 29 - 31 - 33 | |
| Insulation Material | | | PS | PS | PS | |
| Air Filter | | | PP Honeycomb | PP Honeycomb | PP Honeycomb | |
| Protection Device | | | Fuse | Fuse | Fuse | |
| Refrigerant Control Device | | | - | - | - | |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | |
| Water Piping Diameter *3 *4 | Inlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw | |
| | Outlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw | |
| Field Drain Pipe Size | | mm (in.) | O.D.32 (1-1/4) | O.D.32 (1-1/4) | O.D.32 (1-1/4) | |
| Optional parts | Decoration Panel *5 | | PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EAL | PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EAL | PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EAL | |
| | i-See Sensor Control Panel | | PAC-SE1ME-E | PAC-SE1ME-E | PAC-SE1ME-E | |
| | Wirelss Signal Receiver | | PAR-SE9FA-E | PAR-SE9FA-E | PAR-SE9FA-E | |
| | Valve kit *6 | | PAC-SK04VK-E | PAC-SK04VK-E | PAC-SK04VK-E | |
| Unit Converter: kcal/h=kW×860. BTU/h=kW×3.412. cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these fiigures are subject to rounding variation) | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 - Nominal heating conditions Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 - 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.
 - PLFY-WL-VEM-E should be used together with Decoration panel.
 - 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.
- * Please group units that operate on 1 branch.

Compact Ceiling Cassette



| Model | | | PLFY-WL10VFM-E | PLFY-WL15VFM-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 | 1.2 | 1.7 |
| | | kcal/h | 1,000 | 1,500 |
| | | BTU/h | 4,100 | 5,800 |
| | Power input | kW | 0.02 | 0.02 |
| | Current input | A | 0.18 | 0.19 |
| Heating | Capacity (Nominal) *2 | kW | 1.4 | 1.9 |
| | | kcal/h | 1,200 | 1,600 |
| | | BTU/h | 4,800 | 6,500 |
| | Power input | kW | 0.02 | 0.02 |
| | Current input | A | 0.13 | 0.14 |
| External finish | | | Galvanised steel sheet | Galvanised steel sheet |
| External dimension HxWxD | | mm | 208 x 570 x 570 | 208 x 570 x 570 |
| | | in. | 8-1/4x22-1/2x22-1/2 | 8-1/4x22-1/2x22-1/2 |
| Net Weight | | kg (lbs) | 13 (29) | 13 (29) |
| Decoration Panel | 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) |
| | Dimensions | mm | 10 x 625 x 625 | 10 x 625 x 625 |
| | | 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) |
| Heat Exchanger | Type | | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) |
| | Water Volume | L | 0.5 | 0.5 |
| Fan | Type × Quantity | | Turbo Fan x 1 | Turbo Fan x 1 |
| | External Static Pressure | | Pa | 0 |
| | Motor Type | | DC Motor | DC Motor |
| | Motor Output | kW | 0.05 | 0.05 |
| | Driving Mechanism | | Direct-drive | Direct-drive |
| | Airflow Rate (Low-Mid-High) | m3/min | 6.0 - 6.5 - 7.0 | 6.0 - 7.0 - 8.0 |
| | | L/s | 100 - 108 - 117 | 100 - 117 - 133 |
| cf/m | | 212 - 230 - 247 | 212 - 247 - 282 | |
| Sound pressure 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 |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | |
| Water Piping Diameter *3 *4 | Inlet | 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.) | 0.D.32 (1-1/4) | 0.D.32 (1-1/4) |
| Optional parts | Decoration Panel *5 | | SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE | SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE |
| | i-See Sensor corner panel | | PAC-SF1ME-E | PAC-SF1ME-E |
| | Wireless Signal Receiver | | PAR-SF9FA-E | PAR-SF9FA-E |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66 °FWB.), Outdoor: 35°CDB. (95°FDB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- Nominal heating conditions Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 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.
- PLFY-WP-VFM-E should be used together with Decoration panel.
- Please group units that operate on 1 branch.

Compact Ceiling Cassette



| Model | | | PLFY-WL20VFM-E | PLFY-WL25VFM-E | PLFY-WL32VFM-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 | Capacity (Nominal) *1 | kW | 2.2 | 2.8 | 3.6 |
| | | kcal/h | 1,900 | 2,400 | 3,100 |
| | | BTU/h | 7,500 | 9,600 | 12,300 |
| | Power input | kW | 0.02 | 0.03 | 0.04 |
| | Current input | A | 0.22 | 0.24 | 0.38 |
| Heating | Capacity (Nominal) *2 | kW | 2.5 | 3.2 | 4.0 |
| | | kcal/h | 2,200 | 2,800 | 3,400 |
| | | BTU/h | 8,500 | 10,900 | 13,600 |
| | Power input | kW | 0.02 | 0.02 | 0.04 |
| | Current input | A | 0.17 | 0.19 | 0.32 |
| External finish | | | Galvanised steel sheet | Galvanised steel sheet | Galvanised steel sheet |
| External dimension HxWxD | | mm | 208 x 570 x 570 | 208 x 570 x 570 | 208 x 570 x 570 |
| | | in. | 8-1/4x22-1/2x22-1/2 | 8-1/4x22-1/2x22-1/2 | 8-1/4x22-1/2x22-1/2 |
| Net Weight | | kg (lbs) | 14 (31) | 14 (31) | 14 (31) |
| Decoration Panel | Model | | SLP-2FA(L)(E) | SLP-2FA(L)(E) | SLP-2FA(L)(E) |
| | External finish | | MUNSELL (1.0Y 9.2/0.2) | MUNSELL (1.0Y 9.2/0.2) | MUNSELL (1.0Y 9.2/0.2) |
| | Dimensions | mm | 10 x 625 x 625 | 10 x 625 x 625 | 10 x 625 x 625 |
| | | in. | 3/8 x 24-5/8 x 24-5/8 | 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) | 3 (7) |
| Heat Exchanger | Type | | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) |
| | Water Volume | L | 0.9 | 0.9 | 0.5 |
| Fan | Type x Quantity | | Turbo Fan x 1 | Turbo Fan x 1 | Turbo Fan x 1 |
| | External Static Pressure | | Pa | 0 | 0 |
| | Motor Type | | DC Motor | DC Motor | DC Motor |
| | Motor Output | kW | 0.05 | 0.05 | 0.09 |
| | Driving Mechanism | | Direct-drive | Direct-drive | Direct-drive |
| | Airflow Rate (Low-Mid-High) | m3/min | 6.5 - 7.0 - 8.0 | 6.5 - 7.5 - 9.0 | 6.5 - 9.0 - 12.0 |
| | | L/s | 108 - 117 - 133 | 108 - 125 - 150 | 108 - 150 - 200 |
| | | cf/m | 230 - 247 - 282 | 230 - 265 - 318 | 230 - 318 - 424 |
| Sound pressure level (Low-Mid-High) | | dB<A> | 27 - 29 - 31 | 27 - 30 - 34 | 27 - 33 - 41 |
| Insulation Material | | | PS | PS | PS |
| Air Filter | | | PP Honeycomb | PP Honeycomb | PP Honeycomb |
| Protection Device | | | Fuse | Fuse | Fuse |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | |
| Water Piping Diameter *3 *4 | Inlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| | Outlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| Field Drain Pipe Size | | mm (in.) | O.D.32 (1-1/4) | O.D.32 (1-1/4) | O.D.32 (1-1/4) |
| Optional parts | Decoration Panel *5 | | SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE | SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE | SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE |
| | i-See Sensor corner panel | | PAC-SF1ME-E | PAC-SF1ME-E | PAC-SF1ME-E |
| | Wireless Signal Receiver | | PAR-SF9FA-E | PAR-SF9FA-E | PAR-SF9FA-E |

Unit Converter: kcal/h=kW×860, 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°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B. (95°F D.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
2. Nominal heating conditions Indoor: 20°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.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-WP-VFM-E should be used together with Decoration panel.
7. Please group units that operate on 1 branch.

Wall Mounted



| Model | | | PKFY-WL10VLM-E | PKFY-WL15VLM-E | PKFY-WL20VLM-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 | Capacity (Nominal) *1 | kW | 1.2 | 1.7 | 2.2 | |
| | | kcal/h | 1,000 | 1,500 | 1,900 | |
| | | BTU/h | 4,100 | 5,800 | 7,500 | |
| | Power input | kW | 0.02 | 0.02 | 0.03 | |
| | Current input | A | 0.20 | 0.20 | 0.25 | |
| Heating | Capacity (Nominal) *2 | kW | 1.4 | 1.9 | 2.5 | |
| | | kcal/h | 1,200 | 1,600 | 2,200 | |
| | | BTU/h | 4,800 | 6,500 | 8,500 | |
| | Power input | kW | 0.01 | 0.01 | 0.02 | |
| | Current input | A | 0.15 | 0.15 | 0.20 | |
| External finish | | | Plastic (0.7PB 9.2/0.4) | Plastic (0.7PB 9.2/0.4) | Plastic (0.7PB 9.2/0.4) | |
| External dimension HxWxD | | mm | 299 x 773 x 237 | 299 x 773 x 237 | 299 x 773 x 237 | |
| | | 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) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume | | | | L |
| | | | 0.6 | 0.6 | 0.7 | |
| Fan | Type × Quantity | | Line Flow Fan x 1 | Line Flow Fan x 1 | Line Flow Fan x 1 | |
| | External Static Pressure | | Pa | 0 | 0 | |
| | Motor Type | | DC Motor | DC Motor | DC Motor | |
| | Motor Output | kW | 0.03 | 0.03 | 0.03 | |
| | Driving Mechanism | | Direct-Drive | Direct-Drive | Direct-Drive | |
| | Airflow Rate (Low-Mid2-Mid1-High) | 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 | |
| | | 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 pressure level (Low-Mid2-Mid1-High) | | dB<A> | 22 - 26 - 28 - 30 | 22 - 26 - 29 - 32 | 22 - 28 - 33 - 36 | |
| Insulation Material | | | Polythene Sheet | Polythene Sheet | Polythene Sheet | |
| Air Filter | | | PP Honeycomb | PP Honeycomb | PP Honeycomb | |
| Protection Device | | | Fuse | Fuse | Fuse | |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | |
| Water Piping Diameter *3 *4 | | Inlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| | | Outlet | in. | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| Field Drain Pipe Size | | mm (in.) | O.D.16 (5/8) | O.D.16 (5/8) | O.D.16 (5/8) | |
| Optional Parts | Drain Pump Kit | | PAC-SK01DM-E | PAC-SK01DM-E | PAC-SK01DM-E | |
| | Valve Kit *5 | | PAC-SK04VK-E | PAC-SK04VK-E | PAC-SK04VK-E | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 - Nominal heating conditions Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 - 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.
 - 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..
- * Please group units that operate on 1 branch.

Wall Mounted



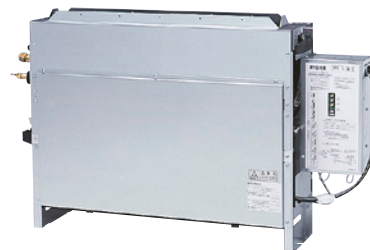
| Model | | | PKFY-WL25VLM-E | PKFY-WL32VLM-E | PKFY-WL40VLM-E | |
|---|-----------------------------|--------------|--|---|---|-------------------------|
| Power source | | | 1-phase 220-230-240 V 50/60 Hz | 1-phase 220-230-240 V 50/60 Hz | 1-phase 220-230-240 V 50/60 Hz | |
| Cooling | Capacity (Nominal) *1 | kW | 2.8 | 3.6 | 4.5 | |
| | | kcal/h | 2,400 | 3,100 | 3,900 | |
| | | BTU/h | 9,600 | 12,300 | 15,400 | |
| | Power input | kW | 0.04 | 0.04 | 0.05 | |
| | Current input | A | 0.35 | 0.35 | 0.45 | |
| Heating | Capacity (Nominal) *2 | kW | 3.2 | 4.0 | 5.0 | |
| | | kcal/h | 2,800 | 3,400 | 4,300 | |
| | | BTU/h | 10,900 | 13,600 | 17,100 | |
| | Power input | kW | 0.03 | 0.03 | 0.04 | |
| | Current input | A | 0.30 | 0.30 | 0.40 | |
| External finish | | | Plastic (0.7PB 9.2/0.4) | Plastic (0.7PB 9.2/0.4) | Plastic (0.7PB 9.2/0.4) | |
| External dimension HxWxD | | mm | 299 x 773 x 237 | 299 x 898 x 237 | 299 x 898 x 237 | |
| | | 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 | | kg (lbs) | 11 (25) | 13 (29) | 13 (29) | |
| Heat Exchanger | | Type | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | |
| | | Water Volume | L | 0.7 | 1.0 | 1.1 |
| Fan | Type × Quantity | | Line Flow Fan x 1 | Line Flow Fan x 1 | Line Flow Fan x 1 | |
| | External Static Pressure | | Pa | 0 | 0 | |
| | Motor Type | | DC Motor | DC Motor | DC Motor | |
| | Motor Output | kW | 0.03 | 0.03 | 0.03 | |
| | Driving Mechanism | | Direct-Drive | Direct-Drive | Direct-Drive | |
| | Airflow Rate (Low-Mid-High) | | 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 |
| | | | 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 pressure level (Low-Mid-High) | | dB<A> | 22 - 30 - 36 - 41 | 29 - 34 - 38 - 41 | 30 - 36 - 41 - 45 | |
| Insulation Material | | | Polythene Sheet | Polythene Sheet | Polythene Sheet | |
| Air Filter | | | PP Honeycomb | PP Honeycomb | PP Honeycomb | |
| Protection Device | | | Fuse | Fuse | Fuse | |
| Connectable Outdoor Unit/HBC Controller | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | | |
| Water Piping Diameter *3 *4 | | Inlet | 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.) | O.D.16 (5/8) | O.D.16 (5/8) | O.D.16 (5/8) | |
| Optional Parts | Drain Pump Kit | | PAC-SK01DM-E | PAC-SK01DM-E | PAC-SK01DM-E | |
| | Valve Kit *5 | | PAC-SK04VK-E | PAC-SK04VK-E | PAC-SK04VK-E | |
| [Unit Converter: kcal/h=kW×860 RTU/h=kW×3.412 cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)] | | | | | | |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 2. Nominal heating conditions Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 3. 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..
- * Please group units that operate on 1 branch.

Floor Standing Concealed



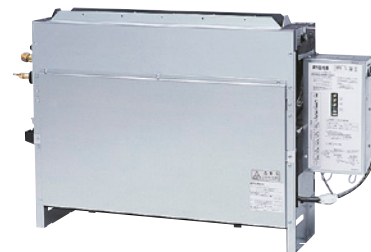
| Model | | | | PFFY-WP20VLRMM-E | PFFY-WP25VLRMM-E | PFFY-WP32VLRMM-E |
|--|-----------------------------|----------------|------------------------------------|--|--|--|
| Power source | | | | 1-phase 220-230-240 V 50/60 Hz | 1-phase 220-230-240 V 50/60 Hz | 1-phase 220-230-240 V 50/60 Hz |
| Cooling | Capacity (Nominal) *1 | | kW | 2.2 | 2.8 | 3.6 |
| | | | kcal/h | 1,900 | 2,400 | 3,100 |
| | | | BTU/h | 7,500 | 9,600 | 12,300 |
| | Power input *2 | | kW | 0.040 | 0.040 | 0.050 |
| Heating | Capacity (Nominal) *3 | | kW | 2.5 | 3.2 | 4.0 |
| | | | kcal/h | 2,200 | 2,800 | 3,400 |
| | | | BTU/h | 8,500 | 10,900 | 13,600 |
| | Power input *2 | | kW | 0.040 | 0.040 | 0.050 |
| Current input *2 | | | | A | 0.35 | 0.47 |
| External finish | | | | Galvanised steel plate | Galvanised steel plate | Galvanised steel plate |
| External dimension HxWxD | | | | mm 639 x 886 x 220 | 639 x 1,006 x 220 | 639 x 1,006 x 220 |
| | | | | in. 25-3/16 x 34-15/16 x 8-11/16 | 25-3/16 x 39-5/8 x 8-11/16 | 25-3/16 x 39-5/8 x 8-11/16 |
| Net Weight | | | | kg (lbs) 22 (49) | 25 (56) | 25 (56) |
| Heat Exchanger | | Type | | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) |
| | | Water Volume | L | 0.9 | 1.3 | 1.3 |
| Fan | Type × Quantity | | | Sirocco Fan x 1 | Sirocco Fan x 2 | Sirocco Fan x 2 |
| | External Static Pressure *4 | | Pa mmH ₂ O | 20 - <40> - <60> 2.0 - <4.1> - <6.1> | 20 - <40> - <60> 2.0 - <4.1> - <6.1> | 20 - <40> - <60> 2.0 - <4.1> - <6.1> |
| | Motor Type | | | DC Motor | DC Motor | DC Motor |
| | Motor Output | | kW | 0.096 | 0.096 | 0.096 |
| | Driving Mechanism | | | Direct-driven by motor | Direct-driven by motor | Direct-driven by motor |
| | Airflow Rate (Low-Mid-High) | | m ³ /min L/s cf/m | 4.5 - 5.0 - 6.0 75 - 83 - 100 159 - 177 - 212 | 6.0 - 7.0 - 8.0 100 - 117 - 133 212 - 247 - 282 | 7.5 - 9.0 - 10.5 125 - 150 - 175 265 - 318 - 371 |
| Sound pressure level (measured in anechoic room)*2 | | (Low-Mid-High) | dB<A> | 31 - 33 - 38 | 31 - 33 - 38 | 31 - 35 - 38 |
| Insulation Material | | | | 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 |
| Connectable Outdoor Unit/HBC Controller | | | | Hybrid City Multi CMB-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | |
| Water Piping Diameter *3 *4 | Inlet | in. | | Rc 3/4 screw | Rc 3/4 screw | Rc 3/4 screw |
| | 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 hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))> | I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))> | I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))> |
| 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 | Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band |

Unit Converter: kcal/h=kW×860, 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°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- The factory 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.
- 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.
- Please group units that operate on 1 branch.

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 |
| | | kcal/h | | 3,900 | 4,800 |
| | | 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 |
| | | kcal/h | | 4,300 | 5,400 |
| | | 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 (lbs) | | 29 (64) | 29 (64) |
| Heat Exchanger | | Type | | Cross fin (Aluminium fin and copper tube) | Cross fin (Aluminium fin and copper tube) |
| | | Water Volume | L | 1.5 | 1.5 |
| Fan | Type × Quantity | | | Sirocco Fan x 2 | Sirocco Fan x 2 |
| | External Static Pressure *4 | Pa | | 20 - <40> - <60> | 20 - <40> - <60> |
| | | mmH ₂ O | | 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 pressure level (measured in anechoic room)*2 | (Low-Mid-High) | dB<A> | | 31 - 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-WP-V-GA1, CMB-WP-V-GB1, CMB-WM-V-AA, CMB-WM-V-AB | | |
| Water Piping Diameter *3 *4 | Inlet | 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.) | I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))> | I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))> | |
| 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: kcal/h=kW×860 BTU/h=kW×3.412 cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation) | | | | | |

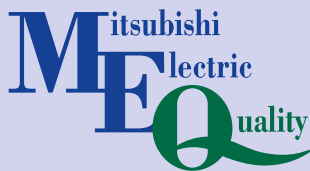
Unit Converter: kcal/h=kW×860, BTU/h=kW×3,412, cfm=m³/min×35.31 and lbs=kg/0.4536 (Please note these figures are subject to rounding variation)

Notes:

1. Nominal cooling conditions – Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB./19°CWB. (95°FDB.) 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°CDB.(68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
4. The factory 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. Please group units that operate on 1 branch.

**for a greener tomorrow**

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realisation of a sustainable society.

**Quality you can rely on:**

- All units line tested
- Performance tested
- 800 hour heat stress test
- 2000 hour endurance test

World Leaders in Heat Pump Technology

Since releasing their first wall mounted split system heat pump in 1968, Mitsubishi Electric has been a world leader in heat pump technology. Staying at the forefront of technology is of utmost importance to Mitsubishi Electric. Their commitment to rigorous factory testing and continuous investment in R&D ensures products are of the highest quality and feature superior technology.

Evaluation testing starts with replicating transportation conditions, with drop and vibration tests performed to ensure units remain protected during shipment. To ensure heat pumps perform under the harshest of environmental conditions when they are needed most, they are operated and tested in a room that simulates both freezing climates and tropical storms. Safety components are also tested by replicating abnormal conditions such as combustion; ensuring units do not react in an unexpected or unsafe manner.

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