



R32 Hybrid Catalogue

Next Generation 2-Pipe VRF Heat Recovery Systems









CITY MULTI



VRF Now with R32 Refrigerant

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.





The Future-Proof VRF Solution Offering Simultaneous Heating and Cooling with Minimal Environmental Impact

With the environmental pressure on R410A refrigerant increasing, Mitsubishi Electric's commitment to reducing the environmental impact of air conditioning has seen the introduction of New Zealand's first VRF (Variable Refrigerant Flow) solution that has utilised R32 refrigerant.

Mitsubishi Electric has long been a pioneer in the world of air conditioning and the world's first R32 Hybrid Product Range puts the company at the forefront of the industry.

The system utilises the low Global Warming Potential (GWP) refrigerant R32, providing a real solution that delivers high operational efficiency whilst minimising the GWP of the refrigerants used within these systems.

R32 Hybrid is the World's Only Low GWP 2-Pipe Hydronic Heat Recovery System

The Mitsubishi Electric R32 Hybrid solution is an evolution of Mitsubishi Electric's R410A Hybrid System. First introduced in 2014, this unique 2-Pipe System combines VRF and chiller technologies using water throughout the majority of the pipework to efficiently transfer simultaneous heating and cooling to different spaces.

By using water as the heat transfer fluid for the majority of the air conditioning system, R32 Hybrid minimises the overall amount of refrigerant charge in the system.

Furthermore, with only water circuits connecting to the indoor units, R32 Hybrid minimises the need for leak detection. Offering significant reductions in on-going maintenance and installation costs in the controlled space that would be needed to comply with AS/NZS 5149. (1-4) 2016.

All the Benefits of VRF with Significantly Lower GWP

The 2-Pipe R32 Hybrid System offers the same comfort levels normally associated with 4-pipe fan coil systems. In addition, the system also features the same design flexibility, operational efficiency and advanced control that Mitsubishi Electric traditional VRF is renowned for.

Because Hybrid now also incorporates R32 refrigerant, it delivers a VRF system with a significantly lower Global Warming Potential (GWP) than existing solutions.

In fact, the shift from R410A to R32 refrigerant realises a massive 66% reduction in Global Warming Potential.

R32 Hybrid is the New VRF Standard

Since 2015, Hybrid applications have already enjoyed significant growth in New Zealand, successfully incorporated in a variety of designs ranging from offices, hotels, retirement villages, education facilities, medical centres and much more.

The introduction of the R32 Hybrid Product Range provides the obvious answer for those customers looking for a future-proof heating and cooling solution that delivers advanced efficiency with improved corporate social responsibility and minimises environmental impact.



R32 – The Greener Solution

The Shift Away from R410A Refrigerant to Low GWP Alternatives like R32

The global community is in a race to lower its carbon footprint and decrease the rate of global warming before it is too late.

The Kigali Amendment to the Montreal Protocol ratified on the 3rd of October 2019, dictates the rate of phase down of HFC refrigerants for New Zealand as part of this strategy and commenced on the 1st of January 2020.

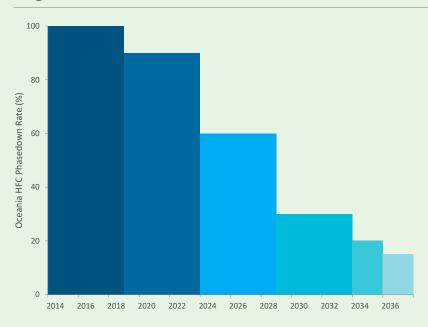
It is estimated that this directive has the potential to avoid aggregate emissions of more than 90 gigatonnes of CO₂e by 2050 – equivalent to two years of total global greenhouse gas emissions (US EPA 2016)!

The key to achieving this goal is the shift away from traditional refrigerants such as R410A.

Replacing traditional refrigerants to those with a much lower GWP, will be a big step towards significantly reducing the future potential rate of rise in the earth's temperature and the catastrophic effects that would have on our planet.

The new R32 Hybrid Air Source Range combines all the benefits of the current R410A range with 33% of the Global Warming Potential. That's the lowest GWP in the VRF market!

Regulated Phase Down of CO₂ Emissions



GWP is a measure of the warming potential as compared to ${\rm CO_2}$ which has a unitary GWP of 1.

R32 refrigerant is zero ozone depleting and has a GWP 66% less than R410A. For example, R410A will hold 2,088 times more heat when released in the upper atmosphere than the equivalent amount of CO₂ would.

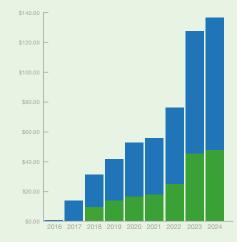
R32 refrigerant is being adopted by Mitsubishi Electric as an important step in the process towards the ultimate goal of a zero ODP, lower GWP, efficient, safe, and non-toxic refrigerant.

ETS – Emissions Trading Scheme

In New Zealand specifically, the ETS has put a price on greenhouse gas emissions and provides an incentive to reduce emissions and promote strategies to absorb carbon dioxide. This is known as the SGG (Synthetic Greenhouse Gas) Levy.

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

R32 Hybrid reduces costs as it uses less refrigerant in the total system. R32 reduces costs even further!



Year	Levy Rate Refrigerar		Levy Rate – per kg Refrigerant (R32)			
2016	\$0.31	Actual				
2017	\$13.72	Actual				
2018	\$30.78	Actual	\$9.94	Actual		
2019	\$41.55	Actual	\$13.42	Actual		
2020	\$51.29	Actual	\$16.56	Actual		
2021	\$53.50	Actual	\$17.28	Actual		
2022	\$76.29	Actual	\$24.64	Actual		
2023	\$129.85	Actual	\$45.79	Actual		
2024	\$138.18	Actual	\$48.72	Actual		

What is R32 Hybrid?

Next Generation 2-Pipe Water Based VRF Technology

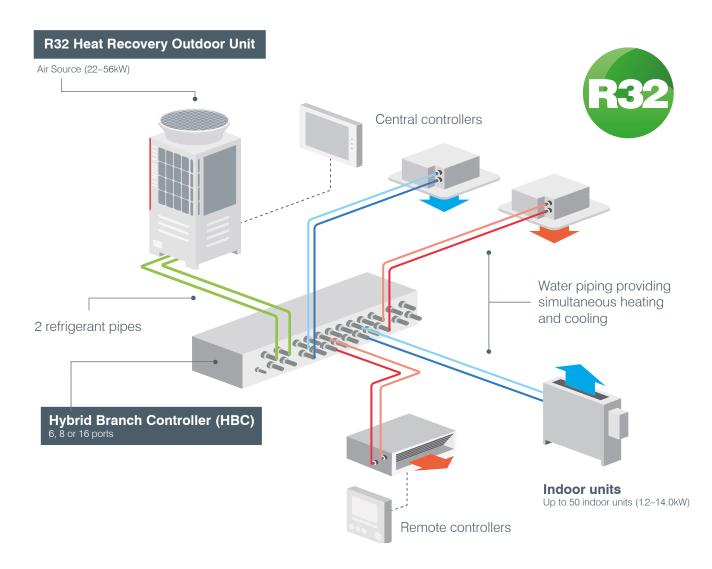
R32 Hybrid is a unique 2-Pipe Heat Recovery VRF System that replaces refrigerant with water between the Hybrid Branch Circuit Controller and the indoor units.

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.

R32 Hybrid 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, R32 Hybrid 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.

R32 Hybrid 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.





Where Can R32 Hybrid be Applied?







R32 Hybrid is the Complete Solution for Today's Modern Buildings

City Multi R32 Hybrid Systems allow for a flexible layout, making installation simple. With the use of centralised control, R32 Hybrid 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, R32 Hybrid 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. R32 Hybrid 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. R32 Hybrid removes 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 indoor units. R32 Hybrid minimises 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 – R32 Hybrid provides a truly integrated solution. R32 Hybrid delivers comfortable and stable air temperature control with no refrigerant in occupied spaces, minimising the need for leak detection.



The R32 Hybrid 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.

Mitsubishi Electric's R32 Hybrid Systems provide a commercially viable alternative solution to traditional R410A systems and addresses one of the most pressing challenges in the New Zealand air conditioning industry on how to tackle high charge volumes and lower GWP refrigerants in large systems. It offers customers a future-proof solution that delivers advanced cost efficiencies with improved corporate social responsibility.

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. R32 Hybrid minimises the need for leak detection, reducing the total cost of the system and ongoing maintenance of the leak detection system itself.

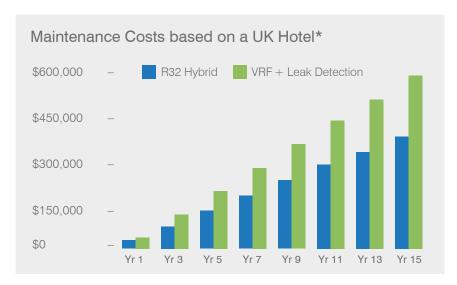
Minimise the Need for Leak Detection Systems

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

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

Realise Significant Maintenance Cost Reductions

Throughout a system's lifetime, annual testing and the recalibration of leak detection sensors adds significant cost to a VRF system. Using R32 Hybrid 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.



R32 Hybrid Key Features and Benefits

Provides Simultaneous Heating and Cooling with Full Heat Recovery

R32 Hybrid is an advanced simultaneous heating and cooling system with heat recovery and delivers a proven alternative solution to traditional R410A VRF or VRV systems.

Energy Saving

Save more energy through 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 possible by utilising the centralised control and scheduled operation.

Use Less Material and Equipment

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

The system does not require an external pump, valves, sensors, actuators, or other ancilliary controls associated with conventional 4-pipe chiller systems.

► Flexible Design and Modularity Allow for a Manageable Phased Installation

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

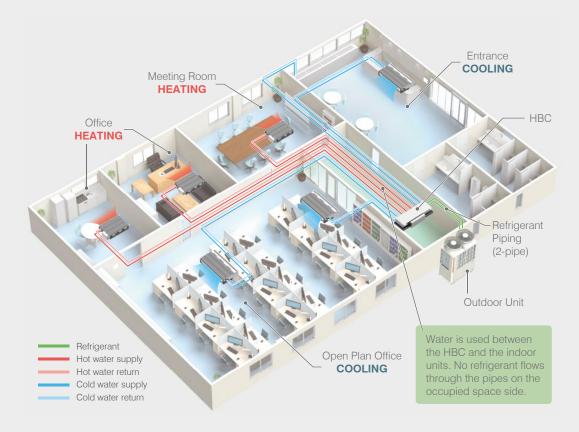


Image for representation only.

The HBC 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

R32 Hybrid 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 R32 Hybrid 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.

Quieter 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. R32 Hybrid 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, R32 Hybrid offers on average a 10% increase in sensible cooling at terminal compared to traditional VRF systems.

Combat the Rising Costs of R410A Refrigerant

The rapid and continuing price rises of R410A refrigerant is placing a strain on the viability of traditional VRF systems.

As a result Mitsubishi Electric have developed R32 Hybrid to ensure that both customers and installers not only have an alternative, but also get the added benefits of lower refrigerant costs, efficient performance and advanced controls.

▶ R32 Minimal Global Warming Impact with 66% Less GWP Than R410A

Existing VRF units use R410A which has a GWP of 2,088, the newly adopted R32 refrigerant has a reduced GWP of 675 – that's 66% less than R410A.



R32 Hybrid Case Study – Cuba Precinct



A large scale regeneration project in the heart of Wellington city uses an R32 Hybrid system operating with a significantly reduced quantity of refrigerant and only water circulating in work areas to ensure tenant comfort, safety and affordability.



Project Overview

This major inner city regeneration project required an air conditioning system able to provide a safe, comfortable working environment with a small carbon footprint while reducing operational and maintenance costs.

Mitsubishi Electric's R32 Hybrid system more than satisfies these requirements – hence its logical selection as the preferred air conditioning system.

▶ The Solution

Situated in what is often termed 'the true heart of Wellington', Cuba Precinct is the result of a large regeneration project designed to embody the character of Cuba Street and its environs, while providing space for ground floor retail businesses with office and apartment accommodation above. It involved preserving and injecting life into several historic buildings as well as raising new structures above those buildings.

In the latter part of 2020, the Greater Wellington Regional Council moved into the second and third floors of the newly created open plan office space – one of Wellington's largest with an area of 6000 square metres.

Designed to have a low carbon footprint and exceed the current New Building Standard, the refurbishment of the historic buildings was completed with these guiding principles in mind. The Mitsubishi Electric R32 Hybrid Air Conditioning System was therefore the logical choice for the large open plan office space.

This was due to its superior safety features and occupier comfort levels, as well as lower operating and maintenance costs when compared to traditional systems using R410A refrigerant.



The Hybrid Branch Controller is the heart of the system, linking outdoor and indoor units and efficiently performing heat exchange between both. The R32 Hybrid system delivers a world first with simultaneous heating and cooling. Heat is recovered and redistributed, negating the need for a separate heating system. It uses a unique two-pipe configuration, ie, a reduced number of pipes which also reduces the installation cost and time.

A significant safety feature is the use of water throughout the pipework in occupied spaces. This means that refrigerant (R32) is only used in the system between the outdoor condensers and the Hybrid Branch Controllers (HBCs) – well away from any occupied spaces. This removes the need for expensive leak detection equipment in occupied spaces – resulting in reduced maintenance costs as there is no requirement for annual leak detection checks.

Hybrid Branch Controllers are the heart of the system. They link outdoor units to indoor units and are responsible for heat exchange between refrigerant-controlled outdoor units and water-based indoor circuits to indoor units. Water is circulated to indoor units by energy efficient pumps.







Jason Mann Photography

R32 Hybrid Case Study – Cuba Precinct

Plastic piping is used to transport water throughout occupied spaces instead of the traditional soldered copper piping used to transport refrigerant. This feature combined with the unique 2-pipe heat recovery system – rather than a conventional 4-pipe chiller system – means less piping is installed and none of the extra controls associated with a 4-pipe system are required - amounting to significant installation cost savings.

The modular design and small footprint of the R32 Hybrid System along with its flexible duct layout allows airflow patterns to be arranged to suit the application, letting building owners manage a phased installation – a plus when it comes to installation budgets and their inevitable variances.

Outdoor units all have simultaneous heating and cooling and heat recovery. Indoor units are concealed within the ceiling space making for unobtrusive air conditioning while preserving the aesthetic of the working space and overall appearance of the room. Quiet operation is another feature of these units.

Low noise levels (due to the use of water instead of refrigerant in the terminal fan coils among other noise-reducing features), more stable milder off-coil temperatures, the removal of draught potential from office spaces, faster defrosts, no critical refrigeration concerns and less risk to the environment and humans all contribute to a system that provides comfort with simplified maintenance and a significant cut in long-term energy costs.

Using the system's flexible master and individual remote controls enables efficient and economic management of airflows, heating and air conditioning levels throughout the building. As well as a master control, individual room units have remote controls of their own.

The cost of R410A refrigerant continues to rise rapidly as a deterrent to its use in air conditioning systems due to its high GWP (Global Warming Potential). Mitsubishi Electric's R32 Hybrid System leverages the low GWP of R32 refrigerant (about one third that of conventional R410A refrigerant), lower refrigerant costs, a small carbon footprint and reduced running costs to provide an efficient system with built-in future proofing able to provide high comfort levels while complying with environmental legislation.





Installation Summary

R32 HYBRID

R32 Hybrid Systems

R32 Outdoor Units

- 1 x PURY-M250YNW-A1-BS
- 4 x PURY-M350YNW-A1-BS
- 2 x PURY-M450YNW-A1-BS
- 4 x PURY-M500YNW-A1-BS

Hybrid Branch Controllers

• 17 x CMB-WM108V-AA

Controls

- 1 x AE-200E Touch Screen Centralised Controller with BACnet Licence
- 1 x EW-50 Expansion Module
- 33 x PAR-U02MEDA-E Local Hardwired Controllers

Hybrid Indoor Units

- 2 x PEFY-WP32VMA-E Medium Static Ducted Units
- 1 x PEFY-WP40VMA-E Medium Static Ducted Unit
- 1 x PEFY-WP50VMA-E Medium Static Ducted Unit
- 1 x PEFY-WP63VMA-E Medium Static Ducted Unit
- 6 x PEFY-WP71VMA-E Medium Static Ducted Units
- 10 x PEFY-WP80VMA-E Medium Static Ducted Units
- 3 x PEFY-WP100VMA-E Medium Static Ducted Units
- 15 x PEFY-WP125VMA-E Medium Static Ducted Units
- 4 x PLFY-WP20VFM-E Compact Cassette Units
- 7 x PLFY-WP25VFM-E Compact Cassette Units
- 8 x PLFY-WP32VFM-E Compact Cassette Units
- 1 x PLFY-WP32VBM-E Standard Cassette Unit
- 2 x PLFY-WP40VBM-E Standard Cassette Units
- 2 x PKFY-WL20VLM-E High Wall Units
- 2 x PKFY-WL25VLM-E High Wall Units

Key Features

Safety, comfort, efficiency and reduced running costs feature heavily in the Mitsubishi Electric R32 Hybrid System

Less piping and leak detection equipment significantly reduces installation costs

Quiet operation and the reduction of operational draught from office spaces provides excellent comfort levels in occupied areas.

R32 refrigerant has a significantly lower GWP than R410A refrigerant and is also much cheaper making it the logical choice when selecting an air conditioning system.

Split Systems

Condensing Units

- 2 x PUZ-ZM100VKA-A
- 1 x MUZ-GL35VGD

High Wall Units

- 2 x PKA-M100KAL
- 1 x MSZ-GL35VGD

Hardwired Controllers

• 2 x PAR-33MAA

M-Net Interfaces

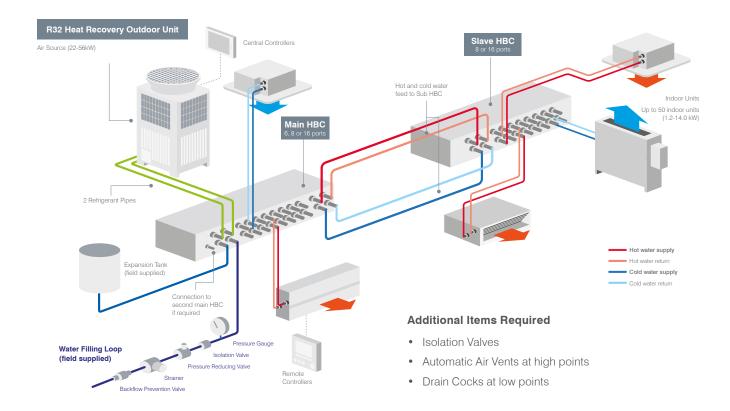
- 1 x PAC-SJ95MA-E M-Net Interface
- 1 x MAC-334IF M-Net Interface



R32 Hybrid Technical System Overview

R32 Hybrid is based on a 2-Pipe Heat Recovery VRF System but uses water as a heat exchange medium between the Hybrid Branch Controller (HBC) 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 Vertical	Main H	BC Only		Main HBC + Sub HBC						
Outdoor Unit Size	Main HBC Model	Total IDU Connection	Sub HBC Qty	Total IDU Connection	Sub HBC Qty	Total IDU Connection	Sub HBC Qty	Total IDU Connection		
200	CMB- WM350F-AA	100-170 ^{*1}	1	100-300	2	100-300	3	100-300		
250	CMB- WM350F-AA	125-170 ^{*1}	1	125-375	2	125-375	3	125-375		
300	CMB- WM350F-AA	150-170 ^{*1}	1	150-420 ^{*1}	2	150-450	3	150-450		
350	CMB- WM350F-AA	N/A ^{*1}	1	175-420 ^{*1}	2	175-525	3	175-525		
400	CMB- WM500F-AA	N/A ^{*1}	1	200-420*1	2	200-600	3	200-600		
450	CMB- WM500F-AA	N/A ^{*1}	1	225-420 ^{*1}	2	225-670 ^{*1}	3	225-675		
500	CMB- WM500F-AA	N/A ^{*1}	1	250-420 ^{*1}	2	250-670 ^{*1}	3	250-750		

^{*1} Limited by HBC.

Model Lineup Horizontal	Main HI	BC Only	Main HBC + Sub HBC					
Outdoor Unit Size	Main HBC Qty	Total IDU Connection	Sub HBC Qty	Total IDU Connection	Sub HBC Qty	Total IDU Connection		
200	1	100-300	1	100-300	2	N/A		
250	1	125-375	1	125-375	2	N/A		
300	1-2	150-450	1	150-450	2 ^{*2}	150-450		
350	1-2	175-525	1	175-525	2 ^{*2}	175-525		
400	2	200-600	1	200-600	2	200-600		
450	2	225-675	1	225-675	2	225-675		
500	2	250-750	1	250-750	2	250-750		

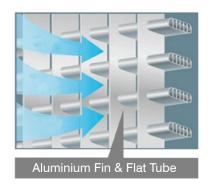
^{*2 2}x sub HBC only available if there are 2x Main HBC.

R32 Air Source Outdoor Unit

Utilising the City Multi PURY-EM-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!





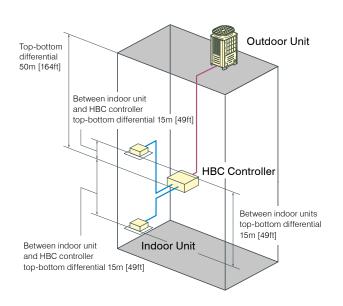


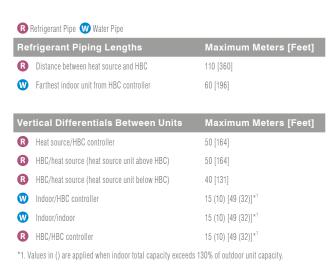
Inverter Compressor

Available on EM High COP Models Only

Size	200	250	300	350	400	450	500
Cooling (kW)	22.4	28.0	33.5	40.0	45.0	50.0	56.0
Heating (kW)	25.0	31.5	37.5	45.0	50.0	56.0	63.0

Piping Length





Hybrid Branch Controller (HBC) Horizontal

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.

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.

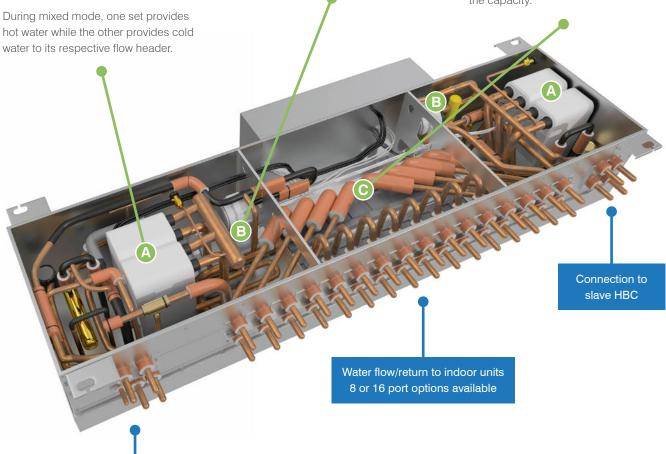
C - Valve Block

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

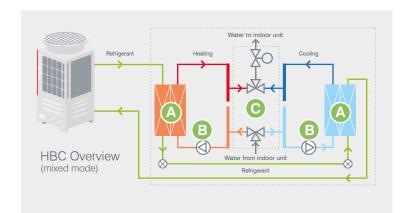
This Valve Block has two features;

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.



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



Images for representation only.

Hybrid Branch Controller (HBC)

The HBC is used for the connection of the outdoor unit and the indoor units. The heat exchange for refrigerant and water is performed simultaneously using the industry's first and patented R32 Hybrid Technology.

Туре	Main Horiz	zontal HBC	Main Ver	tical HBC	Sub Horizontal HBC		
Model	The state of	Tr distinguished			A MARKET	Minimum	
	CMB-WM108V- AA	CMB-WM1016V- AA	CMB-WM350F- AA	CMB-WM500F-	CMB-WM108V- BB	CMB-WM1016V- BB	
Number of Branches	8	16	6	6	8	16	

Indoor Models

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

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

Controller Range

Remote Controllers



Standard Controller PAR-41MAA

- · 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 screen
- 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



MelcoBEMS Mini BMS Interface

- MODBUS
- BACnet MS/TP

AT-50B

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



BAC-HD150 BMS Interface

- BACnet
- Connects directly to M-NET

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



3.5" Touch Panel

Featuring a 3.5" HVGA Full Colour LCD Touchscreen.

Bluetooth Functionality

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

Hotel Setting

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

Logo Customisation

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

Customisable Colour Options

180 different colour patterns can be selected for control parameters or background.

Available in White and Premium Black.



Patented R32 Hybrid Technology

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





Model				PURY-M200YNW-A1 (-BS)	PURY-M250YNW-A1 (-BS)
Power source	e			3-phase 4-wire 380-4	00-415 V 50/60 Hz
			kW	22.4	28.0
	Capacity (Nomin	al) *1	BTU / h	76.400	95.500
	Power input		kW	5.53	8.40
Cooling	Current input		A	9.3-8.8-8.5	14.1-13.4-12.9
	EER		kW / kW	4.05	3.33
		Indoor	W.B.	15.0~24.0°C	
	Temp. range *3	Outdoor	D.B.	-5.0~52.0°C (,
			kW	25	31.5
	Capacity (Nomin	al) *2	BTU / h	85.300	107.500
	Power input		kW	6.39	9.15
Heating	Current input		A	10.7-10.2-9.8	15.4-14.6
Hoaling	COP		kW / kW	3.91	3.44
	CUF	Indoor	D.B.	5.91 15.0~27.0°C (
	Temp. range *3		W.B.	,	,
		Outdoor	W.D.	-20.0~15.5°C	,
Indoor unit o	onnectable *4	Total capacity		50~150% of outdo	. ,
0 1		Model / Quantity	- ID 4	WP/WL10~125/1~30 *4	WP/WL10~125/1~37 *4
	ure level (measured	,		59.0/59.0	60.5/61.0
Sound powe	r level (measured in		dB <a>	76.0/78.0	78.5/80.0
Refrigerant	piping diameter	High pressure	mm (in.)	15.88 (5/8)	
		Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Type x Quantity		2	Propeller	
			m³/min	170	185
	Air flow rate		L/s	2,833	3,083
Fan			cfm	6,003	6,532
	Control, Driving	mechanism		Inverter-control, Direc	t-driven by motor
	Motor output		kW	0.92 x	
	External static pr	ess. *6		0 Pa (0 mr	nH20)
	Туре			Inverter scroll herm	etic compressor
Compressor	Starting method			Invert	er
Oumpresson	Motor output		kW	4.6	7.0
	Case heater		kW	- (- V	
External fini	sh			Pre-coated galvanized steel sheets (+powder coating	ng for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""></munsell>
Evtornal dia	ension HxWxD		mm	1,858 (1,798 without	legs) x 920 x 740
LYIGHIGH AIL	IGHOLUH HIXWXD		in.	73-3/16 (70-13/16 without	egs) x 36-1/4 x 29-3/16
	High pressure pr	otection		High pressure sensor, High pressu	re switch at 4.15 MPa (601 psi)
Protection	Inverter circuit (0	COMP./FAN)		Over-heat protection, Ov	
devices	Compressor			-	
	Fan motor			-	
Refrigerant	Type x Original c	harge		R32 x 5.2 kg	(12 lbs)
Net weight		-	kg (lbs)	227 (5)	,
Heat exchan	ger			Salt-resistant cross f	
Defrosting n				Auto-defrost mode (Reversed	
Optional par				Main HBC: CMB-WM108,1016V-AA, CMB-WM3	
- Frionai pai				main noo. one minoo, of the first of the	33. 1.1. 335 1.55. Olilo Hillioo, 10101 DD

Unit Coverter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

- Notes:

 1. Nominal cooling conditions (subject to JIS B8615-2).

 Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).

 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).

 2. Nominal heating conditions (subject to JIS B8615-2).

 Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.).

 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

 4. There are restrictions on compatible combinations among W-model, WP-model, and WL-model indoor units. Refer to DATA BOOK for detailed information.
- 5. Cooling mode/Heating mode.

- 6. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2
- Consult your dealer about the specification when setting external static pressure option.
- R32 is flammable, and certain restrictions apply to the installation of units.
- When installing new units, moving the existing units, or changing the layout of the room, ensure that
 installation restrictions are observed.
- For detail, refer to the section in the DATA BOOK on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-M30	00YNW-A1 (-BS)	PURY-M3	50YNW-A1 (-BS)			
Number of III	DC controller			Single HBC	Double / Single HBC	Single HBC	Double / Single HBC			
Н ТО ТЭЦПІШИІ	BC controller			(Horizontal type)	(Horizontal type / Vertical type)	(Horizontal type)	(Horizontal type / Vertical type)			
Power sourc	е				3-phase 4-wire 380-40	10-415 V 50/60 Hz				
	Capacity (Nomin	al\ *1	kW		33.5		40.0			
	Gapacity (Notitili	al) I	BTU / h		114,300		136,500			
	Power input		kW	11.65	9.88	14.93 12.15				
Cooling	Current input		A	19.6-18.6-18.0	16.6-15.8-15.2	25.2-23.9-23.0	20.5-19.4-18.7			
	EER		kW / kW	2.87	3.39	2.67	3.29			
	Temp. range *3	Indoor	W.B.	15.0~24.0°C (59~75°F)						
		Outdoor	D.B.		-5.0~52.0°C (2	23~126°F)				
	Capacity (Nomin	al) *2	kW		37.5		45.0			
	. , ,		BTU / h		128,000		153,500			
	Power input		kW	11.00	10.33	13.14	12.16			
Heating	Current input		A	18.5-17.6-17.0	17.4-16.5-15.9	22.1-21.0-20.3	20.5-19.5-18.7			
	COP		kW / kW	3.40	3.63	3.42	3.70			
	Temp. range *3	Indoor	D.B.		15.0~27.0°C (,				
		Outdoor	W.B.		-20.0~15.5°C (,				
Indoor unit c	onnectable *4	Total capacity		WD/W/4	50~150% of outdoo		0 405/0 50*4			
0		Model / Quantity	(F 4D A		0~125/2~45 *4	WP/WL10~125/2~50*4				
- '	ure level (measured	,			1.0/67.0		2.5/64.0			
Sound powe	r level (measured in			0	0.0/86.5		11.0/83.0			
Refrigerant p	piping diameter	High pressure Low pressure	mm (in.)	າາາ	(7/8) Brazed		(1-1/8) Brazed			
	Type x Quantity	row biessnie	mm (in.)		eller fan x 1		oeller fan x 2			
	Type x Quality		m³/min	riup	240	FIU	250			
	Air flow rate		L/s		4,000		4,167			
Fan	All How rate		cfm		8,474		8,828			
Ιαπ	Control, Driving	machanism	GIIII		Inverter-control, Direc	t_driven by motor	0,020			
	Motor output	Hoomamom	kW		0.92 x 1	,	0.46 x 2			
	External static pr	ess *6	KII	'	0 Pa (0 mn		0.40 A Z			
	Type				Inverter scroll herme	'				
	Starting method				Inverte					
Compressor	Motor output		kW		8.0		9.6			
	Case heater		kW		- (- V)				
External finis				Pre-	coated galvanized steel sheets (+powder coatin		or similar>			
			mm		thout legs) x 920 x 740		thout legs) x 1,240 x 740			
External dim	ension HxWxD		in.		thout legs) x 36-1/4 x 29-3/16		thout legs) x 48-7/8 x 29-3/16			
	High pressure pr	otection			High pressure sensor, High pressur	. , , .	* * * * * * * * * * * * * * * * * * * *			
Protection	Inverter circuit (C				Over-heat protection, Over	, , ,				
devices	Compressor	,			-					
	Fan motor				-					
Refrigerant	Type x Original cl	harge		R32 x 5	5.2 kg (12 lbs)	R32 x	8.0 kg (18 lbs)			
Net weight			kg (lbs)	2	27 (501)	2	70 (596)			
Heat exchan	ger				Salt-resistant cross f	n & copper tube				
Defrosting m	nethod				Auto-defrost mode (Reversed	efrigerant cycle, Hot gas)				
Optional par	ts			N	Main HBC: CMB-WM108,1016V-AA, CMB-WM35	OF-AA Sub HBC: CMB-WM108,1	016V-BB			

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

- I. Nominal cooling conditions (subject to JIS B8615-2).
 Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).
 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
 2. Nominal heating conditions (subject to JIS B8615-2).
 Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.).
 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with
- cooling/heating mixed operation.

 4. There are restrictions on compatible combinations among W-model, WP-model, and WL-model indoor units. Refer to DATA BOOK for detailed information.
- 5. Cooling mode/Heating mode.

- 6. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2
- Consult your dealer about the specification when setting external static pressure option.
- R32 is flammable, and certain restrictions apply to the installation of units.
- When installing new units, moving the existing units, or changing the layout of the room, ensure that
 installation restrictions are observed.
- For detail, refer to the section in the DATA BOOK on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.





Model				PURY-M400YNW-A1 (-BS)	PURY-M450YNW-A1 (-BS)	PURY-M500YNW-A1 (-BS)		
Power source)			<u> </u>	3-phase 4-wire 380-400-415 V 50/60 Hz			
	On and the Obligation	-1\ *4	kW	45.0	50.0	56.0		
	Capacity (Nomin	ai) " i	BTU / h	153,500	170,600	191,100		
	Power input		kW	15.15	15.47	22.25		
Cooling	Current input		A	25.5-24.2-23.4	26.1-24.8-23.9	37.5-35.6-34.3		
	EER		kW / kW	2.97	3.23	2.51		
	T *0	Indoor	W.B.		15.0~24.0°C (59~75°F)			
	Temp. range *3	Outdoor	D.B.		-5.0~52.0°C (23~126°F)			
	0 1 /1	D *0	kW	50.0	56.0	63.0		
	Capacity (Nomin	al) ^2	BTU / h	170,600	191,100	215,000		
	Power input		kW	14.08	16.18	18.26		
Heating	Current input		A	23.7-22.5-21.7	27.3-25.9-25.0	30.8-29.2-28.2		
	COP		kW / kW	3.55	3.46	3.45		
		Indoor	D.B.		15.0~27.0°C (59~81°F)			
	Temp. range *3	Outdoor	W.B.		-20.0~15.5°C (-4~60°F)			
		Total capacity			50~150% of outdoor unit capacity			
ndoor unit c	onnectable *4	Model / Quantity			WP/WL10~125/2~50 *4			
Sound pressi	ure level (measured		5 dB <a>	65.0/69.0	65.5/70.0	63.5/64.5		
	level (measured in			83.0/88.0	83.0/89.0	82.0/84.0		
		High pressure	mm (in.)	00.0, 00.0	19.05 (3/4) Brazed	5E.0/ 0 1.0		
Refrigerant p	iping diameter	Low pressure	mm (in.)		28.58 (1-1/8) Brazed			
	Type x Quantity	Low procedure	()		Propeller fan x 2			
	Typo A duantity		m³/min		315	295		
	Air flow rate		L/s	5.250	5,283	4.917		
Fan	7111 11011 1410		cfm	11,123	11.193	10,416		
411	Control, Driving	mechanism	01111	11,120	Inverter-control, Direct-driven by motor	10,110		
	Motor output	noonamom	kW	(0.46 x 2	0.92 x 2		
	External static pr	A* 229	KW		0 Pa (0 mmH20)	0.32 X Z		
	Туре	000. 0			Inverter scroll hermetic compressor			
	Starting method				Inverter seron nermetre compressor			
Compressor	Motor output		kW	12.2	13.1	17.4		
	Case heater		kW	IL.L	- (- V)	17.77		
External finis			IV. A.A.	Pro costad galvani	ized steel sheets (+powder coating for -BS type) <mu< td=""><td>NCELL 5V 8/1 or cimilar</td></mu<>	NCELL 5V 8/1 or cimilar		
LATOTHAL IIIII	111		mm		hout legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740		
External dime	ension HxWxD					73-3/16 (70-13/16 without legs) x 68-15/16 x 2		
			in.	73-3/16 (70-13/16 wit	hout legs) x 48-7/8 x 29-3/16	3/16		
	High pressure pr	otection		Hi	igh pressure sensor, High pressure switch at 4.15 MPa			
Protection	Inverter circuit (C	OMP./FAN)			Over-heat protection, Over-current protection			
devices	Compressor				-			
	Fan motor				-			
Refrigerant	Type x Original cl	narge		R32 x 8.0 kg (18 lbs)	R32 x 1	0.8 kg (24 lbs)		
Net weight			kg (lbs)	273 (602)	293 (646)	337 (743)		
Heat exchang	ier		, , ,	,	Salt-resistant cross fin & copper tube	,		
Defrosting method				Auto-defrost mode (Reversed refrigerant cycle)				
Optional parts				Main HBC: CMB-WM108,1016V-AA, CMB-WM500F-AA Sub HBC: CMB-WM108,1016V-BB				

Notes:

- Nominal cooling conditions (subject to JIS B8615-2).
 Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).
 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
- 2. Nominal heating conditions (subject to JIS B8615-2). Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with
- cooling/heating mixed operation.

 There are restrictions on compatible combinations among W-model, WP-model, and WL-model indoor units. Refer to DATA BOOK for detailed information.
- 5. Cooling mode/Heating mode.

- 6. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH2O).

 Consult your dealer about the specification when setting external static pressure option.
- R32 is flammable, and certain restrictions apply to the installation of units.
- When installing new units, moving the existing units, or changing the layout of the room, ensure that
 installation restrictions are observed.
- For detail, refer to the section in the DATA BOOK on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-EM200YNW-A1 (-BS)	PURY-EM250YNW-A1 (-BS)
Power source				3-phase 4-wire 380-400	0-415 V 50/60 Hz
	0 " (1)	11. +4	kW	22.4	28.0
	Capacity (Nomin	al) ^1	BTU / h	76,400	95,500
	Power input		kW	5.13	7.69
Cooling	Current input		A	8.6-8.2-7.9	12.9-12.3-11.8
Ü	EER		kW / kW	4.36	3.64
		Indoor	W.B.	15.0~24.0°C (5	9~75°F)
	Temp. range *3	Outdoor	D.B.	-5.0~52.0°C (23	
			kW	25.0	31.5
	Capacity (Nomin	al) *2	BTU / h	85,300	107,500
	Power input		kW	6.23	8.84
Heating	Current input		A	10.5-9.9-9.6	14.9-14.1-13.6
ilouting	COP		kW / kW	4.01	3.56
	COI	Indoor	D.B.	4.01 15.0~27.0°C (5	
	Temp. range *3	Outdoor	W.B.	-20.0~15.5°C (-	,
			W.D.	,	
Indoor unit co	nnectable *4	Total capacity		50~150% of outdoor	1 ,
0 1		Model / Quantity	JD A	WP/WL10~125/1~30 *4	WP/WL10~125/1~37 *4
	,	in anechoic room)*5		59.0/59.0	60.5/61.0
Sound power	level (measured in	anechoic room) *5	dB <a>	76.0/78.0	78.5/80.0
Refrigerant pi	ping diameter	High pressure	mm (in.)	15.88 (5/8) E	
		Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	Type x Quantity			Propeller fa	
			m³/min	170	185
	Air flow rate		L/s	2,833	3,083
Fan			cfm	6,003	6,532
	Control, Driving	nechanism		Inverter-control, Direct-	-driven by motor
	Motor output		kW	0.92 x 1	
	External static pr	ess. *6		0 Pa (0 mm)	H2O)
	Туре			Inverter scroll hermet	ic compressor
C	Starting method			Inverter	ſ
Compressor	Motor output		kW	4.5	6.7
	Case heater		kW	- (- V)	
External finisl	h			Pre-coated galvanized steel sheets (+powder coating	ı for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""></munsell>
			mm	1,858 (1,798 without le	** *
External dime	ension HxWxD		in.	73-3/16 (70-13/16 without le	• ,
	High pressure pr	ntection		High pressure sensor, High pressure	* /
Protection	Inverter circuit (C			Over-heat protection, Over	
devices	Compressor			over near protection, over	out on prototion
	Fan motor			•	
Refrigerant	Type x Original c	าจากอ		- R32 x 5.2 kg (12 lhe)
	Type x Original C	iaiyo	ka (lhe)	-	
Net weight	or		kg (lbs)	231 (510	•
Heat exchang				Salt-resistant cross fin 8	
Defrosting me				Auto-defrost mode (Reversed re	
Optional parts	S			Main HBC: CMB-WM108,1016V-AA, CMB-WM350	JF-AA SUD HBC: CMB-WM108,1016V-BB

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

- Notes:

 1. Nominal cooling conditions (subject to JIS B8615-2).

 Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).

 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).

 2. Nominal heating conditions (subject to JIS B8615-2).

 Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.).

 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).

 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with cooling/heating mixed operation.

- cooling/heating mixed operation.

 4. There are restrictions on compatible combinations among W-model, WP-model, and WL-model indoor units. Refer to DATA BOOK for detailed information.
- 5. Cooling mode/Heating mode.

- 6. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH20).
- Consult your dealer about the specification when setting external static pressure option.
- R32 is flammable, and certain restrictions apply to the installation of units.
- When installing new units, moving the existing units, or changing the layout of the room, ensure that
 installation restrictions are observed.
- For detail, refer to the section in the DATA BOOK on installation restrictions
- 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.



Control, Driving mechanism Motor output MW 0.92 x 1 0.46 x 2	Model				PURY-EM3	00YNW-A1 (-BS)	PURY-EM3	50YNW-A1 (-BS)	
Proper source	Number of UE	00 aaabrallar			Single HBC	Double / Single HBC	Single HBC	Double / Single HBC	
Capacity (Naminal) "1	Number of HE	3C controller			(Horizontal type)	(Horizontal type / Vertical type)	(Horizontal type)	(Horizontal type / Vertical type)	
Cooling Cool	Power source					3-phase 4-wire 380-4	00-415 V 50/60 Hz		
Promer input		Canacity (Mamin	al\ *1	kW		40.0			
Cooling		Gapacity (NOIIIII	di) i	BTU / h	•	14,300	1	36,500	
EER		Power input			10.03	8.52	13.91	11.33	
Reduct R	Cooling								
Real		EER			3.33			3.53	
Custor C		Temp. range *3					1		
Capacity (Normal) 2			Outdoor				23~126°F)		
Power input		Capacity (Nomin	al) *2						
Heating						,			
COP	Heating								
Part	пеанну								
Indication Ind		UUT	Indoor		ა.ეგ			3./U	
Total capacity Total capacity Model / Quantity Quantity Model / Quantity Model / Quantity Q		Temp. range *3					,		
Mode Ouartity Mode Oua				W.D.			` '		
Sound pressure level (measured in ametholic room)*5 dB < A> 80.0/86.5 81.0/83.0	Indoor unit co	onnectable *4			WP/WI 10		' '	1~125/2~50 */	
Sound power level (measured in _inch light pressure mm (in.)	Sound pressu	ire level (measured		dR <a>					
Refrigerant → I refrigeran	- '	,							
Netrogerant purpog damenter Low pressure mm (in.) 22.2 (7/8) Brazed 28.58 (1-1/8)								110,0010	
For Example 1 (Approximate) Type x Quantity Propeller fan x 1 Propeller fan x 1 Propeller fan x 2 Propeller fan x 3 Propeller fan x 2 Propeller fan x 3 Propel x 4 Propeller fan x 3 Propel x 4 Propeller fan x 3 Propel x 4 Propeller fan x 3	Retrigerant pi	iping diameter			22.2			1-1/8) Brazed	
Fan Air flow rate L/s 4,000 4,167 EAR Control, Driving mechanism KW 0.92 x 1 0.92 x 1 0.46 x 2 Compressor Type Inverter control, Direct driven by motor Compressor Type Inverter scroll hermetic compressor Compressor Type Inverter scroll hermetic compressor External striutes Type Inverter scroll hermetic compressor External dimethod Inverter scroll hermetic compressor External striutes Type Inverter scroll hermetic compressor External striutes Type Type <th c<="" td=""><td></td><td>Type x Quantity</td><td></td><td></td><td></td><td></td><td></td><td>'</td></th>	<td></td> <td>Type x Quantity</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>'</td>		Type x Quantity						'
Fan				m³/min		240		250	
Control, Driving mechanism Motor output M/W 0.92 x 1 0.46 x 2		Air flow rate		L/s		4,000		4,167	
Motor output	Fan			cfm		8,474		8,828	
External static press. *6 OP a (0 mmH20) Type Jype Inverter scroll hermetic compressor Compressor Acting method Inverter scroll hermetic compressor Motor output KW 7.7.7 9.6 External dimension In XWXD Mm 1,858 (1,798 without legs) x 920 x 740 1.858 (1,798 without legs) x 1,240 x 740 External dimension In XWXD mm 1,858 (1,798 without legs) x 920 x 740 1.858 (1,798 without legs) x 1,240 x 740 Protection Inverter circuit (COMP/FAN) Type x Great protection Type x Great protection (Ver-current protection) Compressor External dimension Inverter circuit (COMP/FAN) Type x Great protection (Ver-current protection) Type x Great protection		Control, Driving	mechanism			Inverter-control, Dire	ct-driven by motor		
Type Inverter scroll hermetic compressor Compressor Starting method Notor output kW 7.7 9.6 External finish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> Pre-coated galvanized steel sheets (+powder coating for</munsell></munsell></munsell></munsell></munsell></munsell></munsell></munsell></munsell>		Motor output		kW	().92 x 1		0.46 x 2	
Compressor Slarting method Motor output kW 7.7 9.6 External finish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish Pre-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> External dimish May 1,858 (1,798 without legs) x 920 x 740 1,858 (1,798 without legs) x 1,240 x 740 Protection for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""> Protection for -BS type) <munsell 10="" 5y="" 8="" or="" similar=""> Protection for -BS type) <munsell 10="" 3,140="" 3<="" 5y="" 8="" or="" td=""><td></td><td></td><td>ress. *6</td><td></td><td></td><td>0 Pa (0 m</td><td>mH20)</td><td></td></munsell></munsell></munsell></munsell></munsell></munsell></munsell></munsell></munsell>			ress. *6			0 Pa (0 m	mH20)		
Compressor Motor output kW 7.7 9.6 External finish External finish Free-coated galvanized steel sheets (+powder coating for -BS type) <munsell 1="" 5y="" 8="" 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 Protection devices Inverter circuit (COMP./FAN) Toyne circuit (COMP./FAN) Over-heat protection, Over-current protection Refrigerant veries Type x Original charge R32 x 5.2 kg (12 lbs) R32 x 8.0 kg (18 lbs) Net weight kg (lbs) 231 (510) 276 (609) Heat exchanger Salt-resistant cross fin & aluminium tube Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)</munsell>						Inverter scroll herm	etic compressor		
Motor output KW 7.7 9.6	Compressor						ter		
External finish Pre-coated galvanized steel sheets (+powder coating for -BS type) < MUNSELL 5Y 8/1 or similar > External dimer by Ext	o o mprooco i							9.6	
Mm				kW		,	,		
Frotection devices HXWXD In. T3-3/16 (70-13/16 without legs) x 36-1/4 x 29-3/16 T3-3/16 (70-13/16 without legs) x 48-7/8 x 29-3/16	External finis	h				1 1	. ,, ,		
High pressure protection	External dime	ension HxWxD				• ,		* /	
Protection devices Inverter circuit (COMP,FAN) Over-heat protection, Over-current protection devices Compressor - Fan motor - Refrigerant Type x Original charge R32 x 5.2 kg (12 lbs) R32 x 8.0 kg (18 lbs) Net weight kg (lbs) 231 (510) 276 (609) Heat exchanger Salt-resistant cross fin & aluminium tube Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)		IPsk seeses	-111	In.	/3-3/16 (/0-13/16 wit		,	hout legs) x 48-7/8 x 29-3/16	
Compressor Fan motor Compressor Com		0 1							
Fan motor Type x Original charge R32 x 5.2 kg (12 lbs) R32 x 8.0 kg (18 lbs)			JUIVIT./FAIN)			Over-near protection, Ov	rer-current protection		
Refrigerant Type x Original charge R32 x 5.2 kg (12 lbs) R32 x 5.2 kg (12 lbs) Net weight kg (lbs) 231 (510) 276 (609) Heat exchanger Salt-resistant cross fin & aluminium tube Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)	u011000					-			
Net weight kg (lbs) 231 (510) 276 (609) Heat exchanger Salt-resistant cross fin & aluminium tube Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)	Refrinerant		harne		R33 v t	- 2 kn (12 lhs)	R22 v 8	3 O kn (18 lhs)	
Heat exchanger Salt-resistant cross fin & aluminium tube Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)		1, po x original o	nurgo	ka (lbs)				* ' '	
Defrosting method Auto-defrost mode (Reversed refrigerant cycle, Hot gas)		er		và (ma)					
VICTOR IN A CONTRACT OF THE PROPERTY OF THE PR	Optional parts				M	,		016V-BB	

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

- I. Nominal cooling conditions (subject to JIS B8615-2).
 Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).
 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
 2. Nominal heating conditions (subject to JIS B8615-2).
 Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.).
 Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
- 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with
- cooling/heating mixed operation.

 4. There are restrictions on compatible combinations among W-model, WP-model, and WL-model indoor units. Refer to DATA BOOK for detailed information.
- 5. Cooling mode/Heating mode.

- 6. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2
- Consult your dealer about the specification when setting external static pressure option.
- R32 is flammable, and certain restrictions apply to the installation of units. When installing new units, moving the existing units, or changing the layout of the room, ensure that
 installation restrictions are observed.
- \bullet For detail, refer to the section in the DATA BOOK on installation restrictions.
- Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and
 other items shall be referred to the Installation Manual.
- Due to continuing improvement, above specifications may be subject to change without notice.



Model				PURY-EM400YNW-A1 (-BS)	PURY-EM450YNW-A1 (-BS)	PURY-EM500YNW-A1 (-BS)
Power source	9				3-phase 4-wire 380-400-415 V 50/60 Hz	
	Canasity (Namin	J\ *4	kW	45.0	50.0	56.0
	Capacity (Nomina	11) " 1	BTU / h	153,500	170,600	191,100
	Power input		kW	13.84	15.24	18.06
Cooling	Current input		A	23.3-22.1-21.3	25.7-24.4-23.5	30.4-28.9-27.9
	EER		kW / kW	3.25	3.28	3.10
		Indoor	W.B.		15.0~24.0°C (59~75°F)	
	Temp. range *3	Outdoor	D.B.		-5.0~52.0°C (23~126°F)	
			kW	50.0	56.0	63.0
	Capacity (Nomina	al) *2	BTU / h	170.600	191,100	215.000
	Power input		kW	13.88	15.77	17.45
Heating	Current input		A	23.4-22.2-21.4	26.6-25.2-24.3	29.4-27.9-26.9
Trouting	COP		kW / kW	3.60	3.55	3.61
	001	Indoor	D.B.	5.00	15.0~27.0°C (59~81°F)	0.01
	Temp. range *3	Outdoor	W.B.		-20.0~15.5°C (-4~60°F)	
		Total capacity	W.D.		50~15.0% of outdoor unit capacity	
Indoor unit c	onnectable *4	Model / Quantity			WP/WL10~125/2~50 *4	
Sound proces	ure level (measured	,	*5 dB <a>	65.0/69.0	65.5/70.0	63.5/64.5
	level (measured in			83.0/88.0	83.0/89.0	82.0/84.0
Sound power	ievei (ilieasureu ili	High pressure		03.0/00.0		02.0/04.0
Refrigerant p	iping diameter		mm (in.)		19.05 (3/4) Brazed	
	Tunn u Ounntitu	Low pressure	mm (in.)		28.58 (1-1/8) Brazed	
	Type x Quantity		m³/min		Propeller fan x 2 315	005
	Ata flancasta					295
F	Air flow rate		L/s		,250	4,917
Fan	0 1 1 0 1 1		cfm	11	1,123	10,416
	Control, Driving r	necnanism	1111		Inverter-control, Direct-driven by motor	
	Motor output		kW	0.4	46 x 2	0.92 x 2
	External static pro	ess. *6			0 Pa (0 mmH20)	
	Туре				Inverter scroll hermetic compressor	
Compressor	Starting method				Inverter	
	Motor output		kW	11.1	12.7	13.8
	Case heater		kW		- (- V)	
External finis	sh				ed steel sheets (+powder coating for -BS type) <munse< td=""><td></td></munse<>	
Fortered disc	and a U.M.D.		mm		ut legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740
External dim	ension HxWxD		in.		/16 without legs) x x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16
	High pressure pro	otection		Hig	h pressure sensor, High pressure switch at 4.15 MPa (601	psi)
Protection	Inverter circuit (C	OMP./FAN)			Over-heat protection, Over-current protection	
devices	Compressor			-	-	-
	Fan motor			-	-	-
Refrigerant	Type x Original ch	narge		R32 x 8.0 kg (18 lbs)	R32 x 10.8	kg (24 lbs)
Net weight			kg (lbs)	280 (618)	305 (673)	348 (768)
Heat exchang	ger			. ,	Salt-resistant cross fin & aluminium tube	, ,
Defrosting m	,				Auto-defrost mode (Reversed refrigerant cycle)	
Optional part				Main HRC· CMR_	WM108,1016V-AA, CMB-WM500F-AA Sub HBC: CMB-	WM108 1016V RR

Unit Coverter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

- 1. Nominal cooling conditions (subject to JIS B8615-2) Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B. Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- 2. Nominal heating conditions (subject to JIS B8615-2) Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.) 3. -5°CD.B. (23°FD.B.)/-6°CW.B. (21°FW.B.) to 21°CD.B. (70°FD.B.)/15.5°CW.B. (60°FW.B.) with
- cooling/heating mixed operation.
 4. Cooling mode/Heating mode
- 5. External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH20, 6.1 mmH20, 8.2 mmH20). Consult your dealer about the specification when setting external static pressure option.
- 6. This table is based on Regulation (EU) No517/2014.
- R32 is flammable, and certain restrictions apply to the installation of units.
- When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.
- For detail, refer to the section in the Databook on installation restrictions.
- 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.

HBC Controller



Horizontal Main-HBC

Model					С	MB-WM108V-	AA			CI	MB-WM1016V	-AA	
Number of bra	anch			8 16									
Power source				1-phase 220-230-240 V									
I OWEL SOULCE				50 Hz			60	Hz		50 Hz		60	Hz
Power input Cooling		kW	0.45/0.46			46/0.47							
(220/230/240	0)	Heating	kW	0.45/0.4					46/0.47				
Current input		Cooling	A					2.89/2.	83/2.79				
(220/230/240	0)	Heating	A	2.89/2.83/2.79									
Sound pressu	re level (measured	in anechoic room)	dBA					4	1				
Applicable ter	mperature range of	installation site	°C (D.B.)					0~	-32				
External finish	1							part drain pan: Pr					
Connectable o								00YNW-A1(-BS)/					
Indoor unit ca	pacity connectable	to 1 branch			Model	WP/WL80 or sma	ller (Use joint pi	pe combining 2 l	oranches when th	ie total unit capa	acity exceeds WP/	/WL80.)	
External dimension H x W x D			mm	300 x 1,520 x 630				300 x 1,800 x 630					
LAternal unine	IISIOII II A W A D		in.	11-13/16 x 59-7/8 x 24-13/16				11-13/16 x 70-7/8 x 24-13/16					
		To outdoor unit			Connect	able outdoor unit	capacity			Connec	table outdoor unit	capacity	
				M200	M250/300	M350	M400	M450/500	M200	M250/300	M350	M400	M450/500
Refrigerant pi	ping diameter	High press. pipe (0.D.)	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
		Low press. pipe (0.D.)	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
		To Main HBC	mm (in.)					15.88 (5/	8) Brazed				
	To Sub HBC												
	Connection size	Inlet/Outlet (O.D.)	mm (in.)					2	2				
				WP	/WL10-100		20		WP,	/WL101-200		25.8	
Water piping	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)	WP/	WL201-300		30		WP/	WL301-400		33.3	
diameter				WP/	WL401-500		36.2		WP/	WL501-525		36.8	
	To indoor unit												
	Connection size	Inlet/Outlet (O.D.)	mm (in.)					2	2				
	Field pipe size	Inlet/Outlet (I.D.) (Min.)	mm (in.)		P/WL10-50 /WL51-125		20 30			WP/WL10-50 WP/WL51-125		20 30	
Field drain pip	oe size	/	mm (in.)					0.D. 32				30	
Net weight			kg (lbs)		86 (19	0) [96 (212) with	water]		,	98 (21	7) [111 (245) with	n water]	
Standard attac	chment Accessor	у			,	,	,	ection pipe (with	flexible hose and	,	, , ,	,	
Optional parts		,						, , , , , , , , , , , , , , , , , , , ,					

Notes:

- *Works not included: Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.
- *The equipment is for R32 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).
- ${}^{\star}\mathsf{Please}$ 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.
- ${}^{\star}\mathsf{This}$ 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).
- *R32 is flammable, and certain restrictions apply to the installation of units. When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed. For detail, refer to the section in the Databook on installation restrictions.

HBC Controller



Vertical Main-HBC

Model					СМЕ	B-WM350F-AA		CMB-WM500F-AA				
Number of bra	ınch							6				
Power source							1-phase 22	0-230-240 V				
TOWER SOUTH			50 Hz			60 Hz		50 Hz		60 Hz		
Power input Cooling		kW		1.50/1.50								
(220/230/240))	Heating	kW	1.50/1.50								
Current input		Cooling	A	6.82/6.25								
(220/230/240))	Heating	А	6.82/6.52/6.25								
Sound pressu	re level (measured	in anechoic room)	dBA	54								
Applicable ter	nperature range of	installation site	°C (D.B.)				0-	~40				
xternal finish	1						Galvanize	d steel plate				
Connectable o	outdoor unit			PURY-M200	~350YNW-A10	(-BS)/PURY-EM200~	350YNW-A1(-BS)	PURY-M400~	500YNW-A1(-BS)/	PURY-EM400~500	(NW-A1(-BS)	
ndoor unit ca	pacity connectable	to 1 branch					e joint pipe combining 2					
			mm		,	(==	, , , ,	800 x 500	, ,	. ,		
External dime	nsion H x W x D		in.					-1/2 x 19-11/16				
			1	Connectable outdoor unit capacity Connectable outdoor unit capacity								
		To outdoor unit		M200	Cominocial	M250/300	M350	M40			0/500	
Refrigerant piping diameter		High press. pipe (O.D.)	mm (in.)	15.88 (5/8) Brazed		15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 Braz	(3/4)	19.05	5 (3/4) azed	
nonigorani pi	ping diamotor	Low press, pipe		19.05 (3/4)		22.2 (7/8)	28.58 (1-1/8)	28.58 ((1-1/8)	
		(O.D.)	mm (in.)	Brazed		Brazed	Brazed	Braz			ızed	
		To Main HBC	mm (in.)					-				
	To Sub HBC							-				
	Connection size	Inlet/Outlet (O.D.)	mm (in.)	42								
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)	As per indoor unit								
	To indoor unit			-								
	Connection size	Inlet/Outlet (O.D.)	mm (in.)	22								
				Total down-	Piping ler	ngth from Main-HBC	o farthest indoor unit	Total down-	Piping length fr	om Main-HBC to fart	thest indoor un	
				stream Indoor Unit capacity	Max 20m	Max 40m	Max 60m	stream indoor unit capacity	Max 20m	Max 40m	Max 60r	
Water piping				WP/WL10	12	12	12	WP/WL10	12	12	12	
diameter				WP/WL11 - 15	12	12	15.5	WP/WL11 - 15	12	12	15.5	
anumotor				WP/WL16 - 25	15.5	15.5	15.5	WP/WL16 - 25	15.5	15.5	15.5	
	Field steeds	Inlet/Outlet (I.D.)	(!-)	WP/WL26 - 32	15.5 19.9	19.9	19.9 19.9	WP/WL26 - 32	15.5	19.9 19.9	19.9	
	Field pipe size	(Min.)	mm (in.)	WP/WL33 - 50 WP/WL51 - 63	19.9	19.9 25.2	25.2	WP/WL33 - 50 WP/WL51 - 63	19.9 19.9	25.2	19.9 25.2	
				WP/WL51 - 63 WP/WL64 - 80	25.2	25.2	25.2 25.2	WP/WL51 - 63 WP/WL64 - 80	25.2	25.2	25.2	
				WP/WL81 - 100	25.2	25.2	32.6	WP/WL81 - 100	25.2	25.2	32.6	
				WP/WL101 - 150	32.6	32.6	32.6	WP/WL101 - 100	32.6	32.6	32.6	
				WP/WL151 - 250	32.6	32.6	39.6	WP/WL151 - 250	32.6	32.6	39.6	
				WP/WL251 - 300	32.6	39.6	50.8	WP/WL251 - 300	32.6	39.6	50.8	
				WP/WL301 - 750	50.8	50.8	50.8	WP/WL301 - 750	50.8	50.8	50.8	
Field drain pip	oe size		mm (in.)				0.D. 26.	7 (1-1/16)				
Net weight			kg (lbs)		196 (433)	[216 (477) with water			209 (461) [233	(514) with water]		
Standard atta	chment Accessor	V			, ,	. ,		-	. , ,			

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 R32 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.
- ${}^{\star}\mathsf{Please}$ 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).
- *R32 is flammable, and certain restrictions apply to the installation of units. When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed. For detail, refer to the section in the Databook on installation restrictions.

HBC Controller



Horizontal Sub-HBC

Model				CMB-WM108V-BB					CMB-WM1016V-BB			
Number of br	anch					8			1	6		
D							1-phase 2	20-230-240 V				
Power source					50 Hz		60 Hz		50 Hz		60 Hz	
Power input		Cooling	kW				0.01/0.01					
220/230/24	0)	Heating	kW					0.01/0.01				
Current input		Cooling	A					0.14/0.14				
220/230/24		Heating	A	0.14/0.14								
	re level (measured		dBA	U.17/U.14/U.14								
	mperature range of		°C (D.B.)	- 0~32								
External finis		IIIStaliativii Site	G (D.D.)					ed steel plate				
							Galvailize	eu steet plate				
Connectable		to d books			4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 41 2		. 01 1 1 1		1 MD/M/ 00)		
ndoor unit ca	apacity connectable	to 1 branch					al joint pipe combin	ing 2 branches when the		,		
xternal dime	ension H x W x D		mm			30 x 630				210 x 630		
.xcorriar arriv			in.		12-1/4 x 36-5	5/8 x 24-13/16			12-1/4 x 47-11	/16 x 24-13/16		
	To HBC						To Horizor	ntal Main HBC				
	Connection size	Inlet/Outlet (O.D.)	mm (in.)			28						
				WP/WL1	0-100	2	20	WP/WL10	1-200	25	5.8	
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)	WP/WL2	01-300	3	10	WP/WL30	11-400	33	3.3	
				WP/WL4	01-500	36	6.2	WP/WL50	11-525	36	6.8	
	To HBC						To Vertic	al Main HBC				
	Connection size	Inlet/Outlet (O.D.)	mm (in.)					28				
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)					indoor unit				
	To indoor unit	inici, outlet (i.b.)	111111 (111.)					ontal HBC				
	Connection size	Inlet/Outlet (O.D.)	mm (in.)					22				
	CONNECTION 2176	Inlet/Outlet (O.D.)	111111 (111.)	W/WP/WL10-50		,	20 W/WP/WL10-50			,	20	
	Field pipe size	(Min.)	mm (in.)	W/WP/WI			10	W/WP/WL			30	
	To indoor unit	(141111.)		**/ **! / **!	-01-120			Vertical HBC				
Nater piping		Inlet/Outlet (O.D.)	mm (in.)	22								
diameter	OUTHICOTION SIZE	inici, outlet (o.b.)	111111 (111.)	Total down-	Piping length from Main-HBC to farthest indoor unit		Total down-			theet indoor unit		
				stream indoor unit	Max 20m	Max 40m	Max 60m	stream indoor unit	Max 20m	Max 40m	Max 60m	
				WP/WL10	12	12	12	WP/WL10	12	12	12	
				WP/WL11 - 15	12	12	15.5	WP/WL11 - 15	12	12	15.5	
				WP/WL16 - 25	15.5	15.5	15.5	WP/WL16 - 25	15.5	15.5	15.5	
		Inlet/Outlet (I.D.)		WP/WL26 - 32	15.5	19.9	19.9	WP/WL26 - 32	15.5	19.9	19.9	
	Field pipe size	(Min.)	mm (in.)	WP/WL33 - 50	19.9	19.9	19.9	WP/WL33 - 50	19.9	19.9	19.9	
		, ,		WP/WL51 - 63	19.9 25.2	25.2	25.2	WP/WL51 - 63	19.9	25.2	25.2	
				WP/WL64 - 80 WP/WL81 - 100	25.2	25.2 25.2	25.2 32.6	WP/WL64 - 80 WP/WL81 - 100	25.2 25.2	25.2 25.2	25.2 32.6	
				WP/WL101 - 150	32.6	32.6	32.6	WP/WL101 - 150	32.6	32.6	32.6	
				WP/WL151 - 250	32.6	32.6	39.6	WP/WL151 - 250	32.6	32.6	39.6	
				WP/WL251 - 300	32.6	39.6	50.8	WP/WL251 - 300	32.6	39.6	50.8	
				WP/WL301 - 750	50.8	50.8	50.8	WP/WL301 - 750	50.8	50.8	50.8	
ield drain pi	pe size		mm (in.)				0.D. 3	32 (1-1/4)				
Net weight			kg (lbs)		40 (89) [45 (1	00) with water]			53 (117) [62 (137) with water]		
-	chment Accessor	V	,		() [(.	,	Drain connection r	pipe, Washer, Tie band	(),,(,		
Optional parts	'	,						, , ,				

Notes:

- *Works not included: Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.
- *The equipment is for 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.
- ${}^{\star}\mathsf{This}$ 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 sour	ce			1-phase 220-23	0-240 V 50/60 Hz				
	One with Alexander	Capacity (Nominal) *1		1.2	1.7				
Caalina	Capacity (Nomina			4,100	5,800				
Cooling	Power input *2	Power input *2		0.03	0.05				
	Current input*2		A	0.21	0.44				
	Capacity (Nomina	al\ *0	kW	1.4	1.9				
Heating	Сараспу (поппп	11) 3	BTU/h	4,800	6,500				
IIcallily	Power input *2		kW	0.	03				
	Current input *2		A	0.21	0.33				
External fin	ish			Galvanized	d steel plate				
Evternal dir	nension HxWxD		mm		90x700				
	IICIISIOII I IAWAD		in.		/8 x 27-9/16				
Net weight	Net weight kg (lbs)			19 (42)					
Heat exchanger Type			Cross fin (Aluminium fin and copper tube)						
TTOUT ONOTICE		Water volume	L	0.4	0.7				
	Type × Quantity		Pa		o fan x 2				
	External static nr	External static pressure *4			:35> - <50>				
	· ·				<3.6> - <5.1>				
_	Motor type				Motor				
Fan	Motor output		kW	0.096					
	Driving mechanis	m	2	Direct-driven by motor					
			m³/min	4.0 - 4.5 - 5.0	5.0 - 6.0 - 7.0				
	Airflow rate	(Low Mid High)	L/s	67 - 75 - 83	83 - 100 - 117				
0 1			cf/m	141 - 159 - 177	177 - 212 - 247				
Sound pres in anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	20-23-25	22-24-28				
Insulation r	naterial			EPS, Polyethylene f	oam, Urethane foam				
Air filter				PP Honeyo	comb fabric				
Protection (Fi	ise				
Connectabl	e outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-	WM-AA, CMB-WM-V-BB				
Water ninin	g diameter *5 *6	Inlet	mm ID		20				
		Outlet	mm ID		0				
Field drain			mm (in.)		(1-1/4)				
	tachment Accessor	,		Insulation pipe for water pipe	Washer, Drain hose, Tie Band				
Optional pa	rt Control Box Repla	ace Kit		PAC-KE	F70HS-E				

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

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

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

Slim Ceiling Concealed



Model				PEFY-WP20VMS1-E	PEFY-WP25VMS1-E			
Power sou	rce			1-phase 220-2	30-240 V 50/60 Hz			
	Oit (Noit	D *4	kW	2.2	2.8			
Cooling	Capacity (Nomina	Capacity (Nominal) *1		7,500	9,600			
Cooling	Power input *2	Power input *2		0.051	0.06			
	Current input*2		A	0.49	0.51			
	Canacity (Namin	1) *0	kW	2.5	3.2			
Llooting	Capacity (Nomina	11) "3	BTU/h	8,500	10,900			
Heating	Power input *2		kW	0.031	0.04			
	Current input *2		A	0.38	0.4			
External fi	nish			Galvanize	ed steel plate			
Eutornal d	mension HxWxD		mm	200x790x700				
EXIGIIIAI U	IIIEIISIOII HXWXD		in.	7-7/8 x 31-	-1/8 x 27-9/16			
Net weight			kg (lbs)	20	0 (45)			
Heat exchanger Type			Cross fin (Aluminium fin and copper tube)					
TIEAL EXUIT	lligei	Water Volume	L		0.9			
	Type × Quantity			Siroc	co fan x 2			
	External static pr	External static pressure *4		<5> - 15 -	<35> - <50>			
	External static pri			<0.5> - 1.5 -	<3.6> - <5.1>			
	Motor type	Motor type		DC	Motor			
Fan	Motor output		kW	0	.096			
	Driving mechanis	Driving mechanism		Direct-driven by motor				
			m³/min	5.5 - 6.5 - 8.0	5.5 - 7.0 - 9.0			
	Airflow rate	(Low Mid High)	L/s	92 - 108 - 133	92 - 117 - 150			
			cf/m	194 - 230 - 282	194 - 247 - 318			
Sound pre in anechoi	ssure level (measured c room)*2	(Low Mid High)	dB <a>	23-25-29	23-26-30			
Insulation	material			EPS, Polyethylene	foam, Urethane foam			
Air filter				PP Hone	ycomb fabric			
Protection	device			Ī	-use			
Connectat	le outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Water nini	ng diameter *5 *6	Inlet	mm ID		20			
Marei hihi	iy ulallicici J 0	Outlet	mm ID		20			
Field drain			mm (in.)	0.D.32 (1-1/4)				
Standard a	ttachment Accessor	у		Insulation pipe for water pipe, Washer, Drain hose, Tie Band				
Optional p	art Control Box Repla	ace Kit		PAC-H	KE70HS-E			

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

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate. 5. Be sure to install a valve on the water outlet.
- 6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

Slim Ceiling Concealed



Model				PEFY-WP32VMS1-E	PEFY-WP40VMS1-E	PEFY-WP50VMS1-E			
Power sou	rce				1-phase 220-230-240 V 50/60 Hz				
	Canasity (Namin	al\ *4	kW	3.6	4.5	5.6			
Cooling	Capacity (Normin	Capacity (Nominal) *1		12,300	15,400	19,100			
Cooling	Power input *2		kW	0.071	0.090				
	Current input*2	Current input*2		0.61	0.73	0.77			
	Canasity (Namin	al) *0	kW	4.0	5.0	6.3			
Llaatina	Capacity (Nomin	al) 3	BTU/h	13,600	17,100	21,500			
Heating	Power input *2		kW	0.051					
	Current input *2		A	0.50	0.62	0.66			
xternal fi	nish				Galvanized steel plate				
External dimension HxWxD mm in.		mm	200)	x990x700	200x1,190x700				
			in.	7-7/8 x	7-7/8 x 46-7/8 x 27-9/16				
Net weight kg (lbs)		kg (lbs)	2	5 (56)	27 (60)				
Heat exchanger Type		Туре			Cross fin (Aluminium fin and copper tube)				
ital txuii	aliyel	Water volume	L		1.0	1.7			
	Type × Quantity			Siroc	cco fan x 3	Sirocco fan x 4			
	Evtornal static nr	External static pressure *4			<5> - 15 - <35> - <50>				
	External static pr				<0.5> - 1.5 - <3.6> - <5.1>				
	Motor type	7.			DC Motor				
an	Motor output		kW	0.096					
	Driving mechanis	sm		Direct-driven by motor					
			m³/min	8.0 - 9.0 - 11.0	9.5 - 11.0 - 13.0	12.0 - 14.0 - 16.5			
	Airflow rate	(Low Mid High)	L/s	133 - 150 - 183	158 - 183 - 217	200 - 233 - 275			
			cf/m	282 - 318 - 388	335 - 388 - 459	424 - 494 - 583			
	ssure level (measured c room)*2	(Low Mid High)	dB <a>	28-30-33	30-32-35	30-33-36			
nsulation	material			EPS, Polyethylene foam, Urethane foam					
Air filter					PP Honeycomb fabric				
Protection					Fuse				
Connectal	ole outdoor unit/HBC (Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Nater nini	ng diameter *5 *6	Inlet	mm ID		20				
		Outlet	mm ID		20				
	n pipe size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)			
	attachment Accessor	/			Insulation pipe for water pipe, Washer, Drain hose, Tie Band				
)ptional p	art Control Box Repl	ace Kit			PAC-KE70HS-E				

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

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.
- 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

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

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



Model				PEFY-WP20VMA-E	PEFY-WP25VMA-E				
Power sou	irce			1-phase 220-23	0-240 V 50/60 Hz				
	On a situ (Noncia	-IV *4	kW	2.2	2.8				
Cooling	Capacity (Nomin	Capacity (Nominal) *1		7,500	9,600				
Cooling	Power input *2	Power input *2		0.07	0.09				
	Current input*2		A	0.55	0.64				
	Consoity (Nomin	ol\ *0	kW	2.5	3.2				
Heating	Gapacity (Notiting	Capacity (Nominal) *3		8,500	10,900				
Healing	Power input *2		kW	0.05	0.07				
	Current input *2		A	0.44	0.53				
External fi	nish			Galvanize	d steel plate				
Evtornal d	imension HxWxD		mm	250x700x732	250x900x732				
LAtomaru	IIIICIISIOII IIAWAD		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8				
Net weigh	t		kg (lbs)	21 (47)	26 (58)				
Heat exchanger Type			Cross fin (Aluminium fin and copper tube)						
TIOUL GAOII		Water volume	L	0.7	1.0				
	Type \times Quantity		Pa	Siroco	o fan x 1				
	Eyternal static nr	External static pressure *4			> - <100> - <150>				
	External statio pr				> - <10.2> - <15.3>				
	Motor type	7.		DC Motor					
Fan	Motor output		kW		085				
	Driving mechanis	Driving mechanism		Direct-driven by motor					
			m³/min	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0				
	Airflow rate	(Low Mid High)	L/s	125 - 150 - 175	167 - 200 - 233				
			cf/m	265 - 318 - 371	353 - 242 - 494				
in anecho	ssure level (measured ic room)*2	(Low Mid High)	dB <a>	23-26-29	23-27-30				
Insulation	material				foam, Urethane foam				
Air filter					comb fabric				
Protection				•	use				
Connectal	ole outdoor unit/HBC C				WM-AA, CMB-WM-V-BB				
Water nini	ng diameter *5 *6	Inlet	mm ID		20				
		Outlet	mm ID		20				
	ı pipe size		mm (in.)		2 (1-1/4)				
	attachment Accessor				, Washer, Drain hose, Tie Band				
Optional p	art Control Box Repl	ace Kit		PAC-KE91TB-E	PAC-KE92TB-E				

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

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

 5. Be sure to install a valve on the water outlet.
- 6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.



Model				PEFY-WP32VMA-E	PEFY-WP40VMA-E	PEFY-WP50VMA-E			
Power soul	ce				1-phase 220-230-240 V 50/60 Hz				
	Canacity (Namin	Capacity (Nominal) *1		3.6	4.5	5.6			
Onalina	Capacity (Nomin			12,300	15,400	19,100			
Cooling	Power input *2		kW	0.11	0.1	4			
	Current input*2		A	0.74 1.15					
	Canacity (Namin	al\ *0	kW	4.0	5.0	6.3			
looting	Capacity (Nomin	al) 3	BTU/h	13,600	17,100	21,500			
leating	Power input *2		kW	0.09	0.1	2			
	Current input *2		A	0.63	1.0	14			
xternal fir	ish				Galvanized steel plate				
Tytornal di	mension HxWxD		mm	250x900x732	250x1,1	00x732			
.xterrial ui	HEHSIOH HXWXD		in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 42-5	/16 x 28-7/8			
let weight			kg (lbs)	26 (58)	31 (69)			
last avchs	Heat exchanger Type				Cross fin (Aluminium fin and copper tube)				
IGAL GAUIIA	nyei	Water Volume	L	1.0	1.	8			
	$Type \times Quantity$			Sirocco fan x 1	Sirocco	fan x 2			
	Evtornal etatic nr	External static pressure *4			<35> - 50 - <70> - <100> - <150>				
	External static pr				<3.6> - 5.1 - <7.1> - <10.2> - <15.3>				
	Motor type			DC Motor					
an	Motor output		kW	0.085		0.121			
	Driving mechanis	Driving mechanism		Direct-driven by motor					
			m³/min	12.0 - 14.5 - 17.0	14.5 - 18.0 - 21.0				
	Airflow rate	(Low Mid High)	L/s	200 - 242 - 283	242 - 300 - 350				
			cf/m	424 - 512 - 600	512 - 63	6 - 742			
Sound pres in anechoi	sure level (measured croom)*2	(Low Mid High)	dB <a>	25-29-32	26-2	9-34			
nsulation	material				EPS, Polyethylene foam, Urethane foam				
Air filter					PP Honeycomb fabric				
Protection	device			Fuse					
Connectab	le outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Vator ninir	g diameter *5 *6	Inlet	mm ID		20				
ναισι μιμιι	iy ulallicici J 0	Outlet	mm ID		20				
ield drain			mm (in.)		0.D.32 (1-1/4)				
Standard a	ttachment Accessor	у			Insulation pipe for water pipe, Washer, Drain hose, Tie Bar	d			
Optional pa	rt Control Box Repla	ace Kit		PAC-KE92TB-E	PAC-KE	93TB-E			

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

- 1. Normal countries Indoor: 27 Gb.D./19 Gw.B. (81 Fb.D./90 f w.B.), Outdoor: 33 Gb.B./19 Gw.B. (93 Fb.B./19 Fereingil: 7.5 m (24-9/16 ft.), Level difference: Om (0ff).

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

 3. Norminal heating conditions Indoor: 20 Gb.B.(68 Fb.B.), Outdoor: 7 Gb.B./6 Gw.B. (45 Fb.B./43 Fw.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: Om (0ff).

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

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

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



Model				PEFY-WP63VMA-E	PEFY-WP71VMA-E	PEFY-WP80VMA-E			
Power sou	rce			<u> </u>	1-phase 220-230-240 V 50/60 Hz				
	Consoity (Namin	11 *4	kW	7.1	8.0	9.0			
O I !	Capacity (Nomina	al) " l	BTU/h	24,200	27,300	30,700			
Cooling	Power input *2		kW	0.14	0.2	24			
	Current input*2		A	1.15					
	On and the Allered	-1) *0	kW	8.0	9.0	10.0			
la akin a	Capacity (Nomina	al) "3	BTU/h	27,300	30,700	34,100			
Heating	Power input *2		kW	0.12	0.2	22			
	Current input *2		A	1.04	1.3	36			
External fi	nish				Galvanized steel plate				
Eutornal d	mension HxWxD		mm	250x1,100x732 250x1,400x732					
_xterrial a	IIIGII91011 LIXWXD		in.	9-7/8 x 43-5/16 x 28-7/8					
Net weight			kg (lbs)	31 (69) 40 (89)					
Heat exchanger Type			Cross fin (Aluminium fin and copper tube)						
i ical chullaliyol	lligei	Water volume	L	2.0	2.	6			
	Type \times Quantity				Sirocco fan x 2				
	External static pre	External static pressure *4			<35> - 50 - <70> - <100> - <150>				
	External static pit				<3.6> - 5.1 - <7.1> - <10.2> - <15.3>				
	Motor type			DC Motor					
an	Motor output		kW	0.121	44				
	Driving mechanis	Driving mechanism		Direct-driven by motor					
			m³/min	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0				
	Airflow rate	(Low Mid High)	L/s	242 - 300 - 350	383 - 467 - 550				
			cf/m	512 - 636 - 742	812 - 989	9 - 1,165			
	ssure level (measured c room)*2	(Low Mid High)	dB <a>	26-29-34	28-3	3-37			
nsulation	material				EPS, Polyethylene foam, Urethane foam				
Air filter					PP Honeycomb fabric				
Protection					Fuse				
Connectat	le outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Nater nini	ng diameter *5 *6	Inlet	mm ID		30				
- ' '		Outlet	mm ID		30				
	pipe size		mm (in.)		0.D.32 (1-1/4)				
	ttachment Accessor				Insulation pipe for water pipe, Washer, Drain hose, Tie Bar				
Optional p	art Control Box Repla	ace Kit		PAC-KE93TB-E	PAC-KE	94TB-E			

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

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

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

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



Model				PEFY-WP100VMA-E	PEFY-WP125VMA-E				
Power sou	ırce			1-phase 220-23	0-240 V 50/60 Hz				
	One and the Obligation	1\ *4	kW	11.2	14.0				
Cooling	Capacity (Nomi	Capacity (Nominal) *1		38,200	47,800				
Cooling	Power input *2		kW	0.24	0.36				
	Current input*2		A	1.47	2.21				
	Capacity (Nomi	nol\ *?	kW	12.5	16.0				
Heating	Gapacity (Notifi	iiai) s	BTU/h	42,700	54,600				
пеашц	Power input *2		kW	0.22	0.34				
	Current input *2	2	A	1.36	2.10				
External f	inish			Galvanize	d steel plate				
Evtornal	limancian HvWvD		mm	250x1,400x732	250x1,600x732				
External dimension HxWxD			in.	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8				
Net weigh	t		kg (lbs)	40 (89)	42 (93)				
Haat avch	Heat exchanger Type			Cross fin (Aluminium	n fin and copper tube)				
TIGAL GAGII	angor	Water volume	L	2.6	3.0				
	Type \times Quantit	у		Siroco	o fan x 2				
	Evtornal Static	External Static Pressure *4		<35> - 50 - <70>	- <100> - <150>				
	External otation			<3.6> - 5.1 - <7.1>	- <10.2> - <15.3>				
	Motor type				Motor				
Fan	Motor output		kW		0.244				
	Driving mechan	Driving mechanism		Direct-driven by motor					
			m³/min	23.0 - 28.0 - 33.0	29.5 - 35.5 - 42.0				
	Airflow rate	(Low Mid High)	L/s	383 - 467 - 550	492 - 592 - 700				
			cf/m	812 - 989 - 1,165	1,042 - 1,254 - 1,483				
	essure level (measure ic room)*2	d (Low Mid High)	dB <a>	28-33-37	32-36-40				
Insulation	material			EPS, Polyethylene	foam, Urethane foam				
Air filter				PP Honey	comb fabric				
Protection				F	use				
Connecta	ble outdoor unit/HBC	Controller		Hybrid City Multi CMB-	WM-AA, CMB-WM-V-BB				
Water nin	ing diameter *5 *6	Inlet	mm ID		30				
		Outlet	mm ID	<u></u>	30				
	n pipe size		mm (in.)	0.0.32 (1-1/4)					
	attachment Accesso	/			, Washer, Drain hose, Tie Band				
Optional p	oart Control Box Rep	olace Kit		PAC-KE94TB-E	PAC-KE95TB-E				

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

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.
- 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.

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

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

Ceiling Concealed



Model				PEFY-WL40VMHS-A	PEFY-WL50VMHS-A	PEFY-WL63VMHS-A	PEFY-WL71VMHS-		
Power sourc	e				1-phase 220-230	-240 V 50/60 Hz			
	Canacity (Namine	1) *4	kW	4.5	5.6	7.1	8.0		
Osalisa	Capacity (Nomina	11) " 1	BTU/h	15,400	19,100	24,200	27,300		
Cooling	Power input *2	Power input *2		0.055	0.077	0.095	0.075		
	Current input*2		A	0.41-0.39-0.38	0.58-0.55-0.52	0.70-0.67-0.64	0.54-0.52-0.50		
	Capacity (Nomina	.1\ *0	kW	5.0	6.3	8.0	9.0		
Haatina	Capacity (Normina	11) "3	BTU/h	17,100	21,500	27,300	30,700		
Heating	Power input *2		kW	0.055	0.077	0.095	0.075		
	Current input *2		A	0.41-0.39-0.38	0.58-0.55-0.52	0.70-0.67-0.64	0.54-0.52-0.50		
xternal fini	sh				Galvanized	steel plate			
Eutornal dim	ongion HyWyD		mm		380 x 745 x 900		380 x 1,030 x 900		
.xtelligi dili	ension HxWxD		in.		15 x 29-3/8 x 35-7/16		15 x 40-9/16 x 35-7/16		
Net weight			kg (lbs)	35 (78)	36 (80)	45 (100)		
Heat exchanger Type Water volume L				Cross fin (Al and copp					
		Water volume	L	1.	4	1.	8		
	Type \times Quantity				Sirocco fan x 1		Sirocco fan x 2		
	Eyternal static nre	External static pressure *4			50 - <100> - <				
	' mmH ₂ U				5.1 - <10.2> - <				
	Motor type				DC N 0.1				
an	Motor output		kW						
	Driving mechanis	m		Direct-driven by motor					
			m³/min	10.0 - 12.0 - 14.0	13.0 - 15.0 - 18.0	13.5 - 16.0 - 19.0	15.5 - 18.0 - 22.0		
	Airflow rate	(Low Mid High)	L/s	167 - 200 - 233	217 - 250 - 300	225 - 267 - 317	258 - 300 - 367		
			cf/m	353 - 424 - 494	459 - 530 - 636	477 - 565 - 671	547 - 636 - 777		
Sound press in anechoic	rure level (measured room)*2	(Low Mid High)	dB <a>	22.0-25.0-29.0	24.0-27.0-32.0	25.5-28.5-32.5	24.0-27.0-31.0		
Insulation m	aterial				Polystyrene foam, Polyethy				
Air filter				Opti	on: Synthetic fiber unwoven cloth filter (lo	ng life filter) and filter box are recommend	ed.		
Protection d					Fu	se e			
Connectable	outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-V				
Water nining	diameter *5 *6	Inlet	mm ID	20		31			
	'	Outlet	mm ID	20		31)		
Field drain p			mm (in.)		0.D.32	(1-1/4)			
Standard att	achment Accessory	/			Washer, Drain I	,			
	Drain pump kit				PAC-DRP	10DP-E2			
Optional par	Long life filter				PAC-KE86LAF		PAC-KE88LAF		
optivital hal	Filter box				PAC-KE63TB-F		PAC-KE99TB-F		
	Valve kit*7				PAC-SK	B5VK-E			

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

Notes:

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

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

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

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

7. Certain restrictions apply to indoor unit combinations.

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

When the valve kit is installed farther away from the HBC than the distance between the HBC and the WLmodel indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

Please group units that operate on 1 branch.

Ceiling Concealed



Model				PEFY-WL80VMHS-A	PEFY-WL100VMHS-A	PEFY-WL125VMHS-A	
Power source	9				1-phase 220-230-240 V 50/60 Hz		
	Conneity (Newsia)	J\ *4	kW	9.0	11.2	14.0	
Cooling	Gapacity (Nonlina	Capacity (Nominal) *1		30,700	38,200	47,800	
Cooling	Power input *2		kW	0.090	0.160	0.175	
	Current input*2		A	0.63-0.61-0.58	1.05-1.01-0.96	1.17-1.13-1.09	
	Consoity (Naming	11. *2	kW	10.0	12.5	16.0	
leating .	Capacity (Nomina	11) 3	BTU/h	34,100	42,700	54,600	
пеанну	Power input *2		kW	0.090	0.160	0.175	
	Current input *2		A	0.63-0.61-0.58	1.05-1.01-0.96	1.17-1.13-1.09	
External finis	sh				Galvanized steel plate		
Eutornal dim	ension HxWxD		mm	380 x 1,030 x 900	380 x 1,195	x 900	
EXICIIIAI UIIII	GIIZIOII UXWXD		in.	15 x 40-9/16 x 35-7/16	15 x 47-1/16 x		
Net weight			kg (lbs)	45 (100)	51 (113)	53 (117)	
Heat evelope	Туре			Cross fin (Aluminium fin and copper tube)			
Heat exchanç	lei.	Water volume	L	1.8	2.3	2.9	
	Type × Quantity	Type × Quantity			Sirocco fan x 2		
	External static pre	External static pressure *4			50 - <100> - <150> - <200>		
	External Static pit	535UIE 4	mmH ₂ 0		5.1 - <10.2> - <15.3> - <20.4>		
	Motor type				DC Motor		
Fan	Motor output		kW	0.244	0.375		
	Driving mechanis	Driving mechanism		Direct-driven by motor			
			m³/min	18.0 - 21.5 - 25.0 26.5 - 32.0 - 38.0		- 38.0	
	Airflow rate	(Low Mid High)	L/s	300 - 358 - 417	0 - 358 - 417 442 - 533 - 633		
			cf/m	636 - 759 - 883	936 - 1,130 -	- 1,342	
Sound pressi in anechoic r	ure level (measured oom)*2	(Low Mid High)	dB <a>	26-29-32	28-32-3	36	
Insulation ma	aterial				EPS, Polyethylene foam, Urethane foam		
Air filter				Option:Syntheti	c fiber unwoven cloth filter (long life filter) and fil-ter box are	recommended.	
Protection de	evice				Fuse		
Connectable	outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB		
Water nining	diameter *5 *6	Inlet	mm ID		30		
vvatet hihilið	uiaiilelel J U	Outlet	mm ID		30		
Field drain pi	ipe size		mm (in.)		0.D.32 (1-1/4)		
Standard atta	achment Accessor	y			Washer, Drain hose, Tie band		
	Drain pump kit				PAC-DRP10DP-E2		
Optional part	Long life filter			PAC-KE88LAF	PAC-KE89	DLAF	
optivilai pall	Filter box			PAC-KE99TB-F	PAC-KE140	TB-F	
	Valve kit*7				PAC-SK35VK-E		

Unit Converter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

Notes:

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.
- 5. Be sure to install a valve on the water outlet.
- 6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

7. Certain restrictions apply to indoor unit combinations.

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

When the valve kit is installed farther away from the HBC than the distance between the HBC and the WLmodel indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.

Please group units that operate on 1 branch.

Ceiling Cassette



Model				PLFY-WL20VEM-E	PLFY-WL25VEM-E	PLFY-WL32VEM-E		
Power source	ce				1-phase 220-240 V 50Hz			
	Consoity (Nami	nol\ *4	kW	2.2	2.8	3.6		
0 11	Capacity (Nomi	iiai) ii	BTU/h	7,500	9,600	12,300		
Cooling	Power input		kW		0.03			
	Current input		A	0.26	0.29	0.33		
	0 " 01 "	Conscitu (Naminal) *0		2.5	3.2	4.0		
Hartina	Capacity (Nomi	nai) "Z	BTU/h	8,500	10,900	13,600		
Heating	Power input		kW	0.03				
	Current input		A	0.20	0.23	0.27		
External fin	ish				Galvanized steel sheet			
Fotom of alle	mm				258 x 840 x 840			
External din	nension HxWxD		in.	10-3/16 x 33-1/16 x 33-1/16				
Net weight			kg (lbs)	11	3 (40)	20 (44)		
	Model External finish				PLP-6EA	, ,		
					MUNSELL (1.0Y 9.2/0.2)			
Decoration	panel	D: .	mm		40 x 950 x 950			
		Dimensions	in.	1-9/16 x 37-13/32 x 37-13/32				
		Net weight	kg (lbs)		5 (11)			
		Туре			Cross fin (Aluminium fin and copper tube)			
Heat exchar	eat exchanger Water volume L			1.0	1.8			
	Type × Quantity	Type × Quantity			Turbo Fan x 1			
	External static p	ressure	Pa					
	Motor type			DC Motor				
-	Motor output		kW	0.05				
Fan	Driving mechan	ism			Direct-driven by motor			
			m³/min	12 - 13 - 14 - 15	12 - 13 - 15 - 17	14 - 15 - 16 - 17		
	Airflow rate (Lov	w-Mid1-Mid2-High)	L/s	200 - 217 - 233 - 250	200 - 217 - 250 - 283	233 - 250 - 267 - 283		
			cf/m	424 - 459 - 494 - 530	424 - 459 - 530 - 600	494 - 530 - 565 - 600		
Sound pres	sure level (Low-Mid	1-Mid2-High)	dB <a>	24 - 26 - 27 - 28	24 - 26 - 28 - 30	26 - 27 - 29 - 30		
Insulation n	naterial				PS			
Air filter					PP Honeycomb			
Protection of	device				Fuse			
Refrigerant	control device				-			
Connectabl	e outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
		Inlet	mm ID		20			
Water pipin	g diameter *3 *4	Outlet	mm ID		20			
Field drain	pipe size		mm (in.)		0.D.32 (1-1/4)			
	Decoration pane	el *5	/		PLP-6EA/PLP-6EAE/PLP-6EALE			
Optional	i-See Sensor co				PAC-SE1ME-E			
parts	Wirelss signal r				PAR-SE9FA-E			
parto	Wirelss signal receiver Valve kit *6			PAR-SE9FA-E PAC-SK35VK-E				

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

Notes:

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

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

- 3. Be sure to install a valve on the water outlet.

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

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

 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Ceiling Cassette



Model				PLFY-WL40VEM-E	PLFY-WL50VEM-E	PLFY-WL63VEM-E		
Power sour	ce				1-phase 220-240 V 50Hz			
	Conneity (Nomi	nal\ *4	kW	4.5	5.6	7.1		
	Capacity (Nomi	nai) ^1	BTU/h	15,400	19,100	24,200		
Cooling	Power input	Power input		0.03	0.0	4		
	Current input		A	0.35	0.4	0		
			kW	5.0	6.3	8.0		
	Capacity (Nomi	nal) *2	BTU/h	17,100	21.500	27.300		
Heating	Power input		kW	0.03	0.0	4		
	Current input		A	0.29	0.3			
External fin					Galvanized steel sheet			
			mm	258 x 8	40 x 840	298 x 840 x 840		
External dir	nension HxWxD		in.		-1/16 x 33-1/16	11-3/4 x 33-1/16 x 33-1/16		
Net weight			kg (lbs)		(44)	23 (51)		
		Model	31.7		PLP-6EA	25 (5.)		
		External finish			MUNSELL (1.0Y 9.2/0.2)			
Decoration	panel	mm		40 x 950 x 950				
		Dimensions	in.	1-9/16 x 37-13/32 x 37-13/32				
		Net weight	kg (lbs)		5 (11)			
		Туре	3 ()		Cross fin (Aluminium fin and copper tube)			
Heat exchai	eat exchanger Water volume L		1	1.8	2.1			
	Type × Quantit	Type × Quantity			Turbo Fan x 1			
	External static p		Pa	0				
	Motor type			DC Motor				
_	Motor output		kW	0.05				
Fan	Driving mechan	ism			Direct-driven by motor			
	Ü		m³/min	14 - 15 - 16 - 17	14 - 16 - 18 - 20	15 - 17 - 19 - 21		
	Airflow rate (Lo	w-Mid1-Mid2-High)	L/s	233 - 250 - 267 - 283	233 - 267 - 300 - 333	250 - 283 - 317 - 350		
			cf/m	494 - 530 - 565 - 600	494 - 565 - 636 - 706	530 - 600 - 671 - 742		
Sound pres	sure level (Low-Mid	I1-Mid2-High)	dB <a>	26 - 28 - 29 - 31	27 - 29 -			
Insulation n		5 /			PS			
Air filter					PP Honeycomb			
Protection (device				Fuse			
	control device				-			
	e outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
		Inlet	mm ID	:	20	30		
Water pipin	g diameter *3 *4	Outlet	mm ID		20	30		
ield drain	pipe size		mm (in.)		0.D.32 (1-1/4)	••		
	Decoration pane	el *5			PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE			
Optional	i-See Sensor co				PAC-SE1ME-E			
parts	Wirelss signal r				PAR-SE9FA-E			
Jui (U	Valve kit *6				PAC-SK35VK-E			

Unit Converter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

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

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

- 3. Be sure to install a valve on the water outlet.

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

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

 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Ceiling Cassette



Model				PLFY-WL80VEM-E	PLFY-WL100VEM-E	PLFY-WL125VEM-E		
Power sour	ce				1-phase 220-240 V 50Hz			
	Canacity (Nami	nol\ *4	kW	9.0	11.2	14.0		
	Capacity (Nomi	nai) " i	BTU/h	30,700 38,200		47,800		
Cooling	Power input		kW	0.05	0.08	0.11		
	Current input		A	0.46	0.66	1.05		
			kW	10.0	12.5	16.0		
	Capacity (Nomi	nal) *2	BTU/h	34,100	42,700	54,600		
Heating	Power input		kW	0.05	0.08	0.11		
	Current input		A	0.40	0.60	0.99		
External fin					Galvanized steel sheet			
			mm		298 x 840 x 840			
xternal dii.	mension HxWxD		in.		11-3/4 x 33-1/16 x 33-1/16			
let weight			kg (lbs)	2	3 (51)	25 (55)		
		Model	- '		PLP-6EA	. ,		
		External finish			MUNSELL (1.0Y 9.2/0.2)			
Decoration	panel	el .			40 x 950 x 950			
		Dimensions	in.	1-9/16 x 37-13/32 x 37-13/32				
		Net weight	kg (lbs)		5 (11)			
		Type	0 ()		Cross fin (Aluminium fin and copper tube)			
leat excha	oat ovchannor		L	2.1	2.2	3.1		
	Type × Quantit	Type × Quantity			Turbo Fan x 1			
	External static p				0			
	Motor type			DC Motor				
_	Motor output		kW	0.12				
an	Driving mechan	ism			Direct-driven by motor			
	Ü		m³/min	15 - 18 - 21 - 23	19 - 23 - 26 - 30	20 - 25 - 30 - 35		
	Airflow rate (Lo	w-Mid1-Mid2-High)	L/s	250 - 300 - 350 - 383	317 - 383 - 433 - 500	333 - 417 - 500 - 583		
			cf/m	530 - 636 - 742 - 812	671 - 812 - 918 - 1059	706 - 883 - 1059 - 1236		
Sound pres	sure level (Low-Mic	1-Mid2-High)	dB <a>	27 - 30 - 33 - 35	31 - 35 - 37 - 40	33 - 37 - 40 - 46		
nsulation r		0 /			PS			
Air filter					PP Honeycomb			
Protection	device				Fuse			
	control device				-			
	le outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
		Inlet	mm ID		30			
Vater pipin	g diameter *3 *4	Outlet	mm ID		30			
ield drain	pipe size		mm (in.)		0.D.32 (1-1/4)			
	Decoration pan	el *5	()		PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE			
)ptional	i-See Sensor co				PAC-SE1ME-E			
parts	Wirelss signal r				PAR-SE9FA-E			
μαιτο	Valve kit *6				PAC-SK35VK-E			

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

Notes:

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

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

- 3. Be sure to install a valve on the water outlet.

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

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

 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Compact Ceiling Cassette



Model				PLFY-WL10VFM-E	PLFY-WL15VFM-E		
Power sou	rce			1-phase 2:	20-240 V 50Hz		
	0	11 *4	kW	1.2	1.7		
0 11	Capacity (Nomi	nai) " i	BTU/h	4,100	5,800		
Cooling	Power input	Power input			0.02		
	Current input	Current input		0.23	0.24		
	0 " "			1.4	1.9		
Harden	Capacity (Nomi	nai) ^2	BTU/h	4,800	6,500		
Heating	Power input		kW		0.02		
	Current input		A	0.17	0.18		
External fi	nish			Galvanize	ed steel sheet		
Futornal di	External dimension HxWxD			208 x	570 x 570		
External di	IIIEIISIOII HXWXD		in.	8-1/4x22	2-1/2x22-1/2		
Net weight	Net weight kg (lbs)		kg (lbs)	1:	3 (29)		
		Model		SLP-	2FA(L)(E)		
	External finish			MUNSELL	(1.0Y 9.2/0.2)		
Decoration	n panel	Dimensions	mm	10 x (625 x 625		
		Dimensions	in.	3/8 x 24-	-5/8 x 24-5/8		
		Net weight	kg (lbs)		3 (7)		
Heat excha	ngor	Туре		Cross fin (Aluminic	um fin and copper tube)		
TIEAL EXUITA	iliyel	Water volume	L		0.5		
	Type \times Quantit	Type \times Quantity		Turb	o Fan x 1		
	External static p	atic pressure Pa		0			
	Motor type			DC Motor			
Fan	Motor output		kW	0.05			
Ιαπ	Driving mechan	ism		Direct-dr	iven by motor		
	Airflow rate (Lo	u Mid High)	m³/min	6.0 - 6.5 - 7.0	6.0 - 7.0 - 8.0		
	All llow rate (Lo	w-iviiu-⊓igii)	L/s	100 - 108 - 117	100 - 117 - 133		
			cf/m	212 - 230 - 247	212 - 247 - 282		
Sound pre	ssure level (Low-Mid	-High)	dB <a>	25 - 26 - 27	25 - 26 - 29		
Insulation	material				PS		
Air filter				PP Ho	oneycomb		
Protection					Fuse		
Connectab	le outdoor unit/HBC				3-WM-AA, CMB-WM-V-BB		
Water nini	ng diameter *3 *4	Inlet	mm ID		20		
		Outlet	mm ID		20		
Field drain			mm (in.)		32 (1-1/4)		
	Decoration pan			SLP-2FA/SLP-2FAE/SLP-2FAL/SLP-2FALE			
Optional	i-See Sensor co				SF1ME-E		
parts	Wireless signal	receiver			-SF9FA-E		
	Valve kit *6			PAC-	SK35VK-E		

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

Notes:

Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66 °FW.B.), Outdoor: 35°CD.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
 Nominal heating conditions Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

- 3. 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-VFM-E should be used together with decoration panel.
- 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.

 The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Compact Ceiling Cassette



Model				PLFY-WL20VFM-E	PLFY-WL25VFM-E		
Power sou	Irce				D-240 V 50Hz		
1 01101 000			kW	2.2	2.8		
	Capacity (Nomi	nal) *1	BTU/h	7,500	9,600		
Cooling	Power input		kW	0.02	0.03		
		Current input		0.26	0.29		
				2.5	3.2		
	Capacity (Nomi	Capacity (Nominal) *2		8,500	10,900		
Heating	Power input		kW	0.02	0.03		
	Current input		A	0.20	0.23		
External fi					steel sheet		
F			mm	208 x 5	70 x 570		
External d	limension HxWxD		in.	8-1/4x22-	1/2x22-1/2		
Net weigh	t		kg (lbs)	14	(31)		
		Model			FA(L)(E)		
		External finish		MUNSELL (1.0Y 9.2/0.2)			
Decoratio	n panel	Dimensions	mm	10 x 625 x 625			
		Dimensions	in.	3/8 x 24-5	/8 x 24-5/8		
		Net weight	kg (lbs)	3	(7)		
Heet evels		Туре		Cross fin (Aluminiur	n fin and copper tube)		
Heat exch	anger	Water volume	L		.9		
	Type × Quantity	Type × Quantity		Turbo	Fan x 1		
	External static p	ressure	Pa	0			
	Motor type			DC Motor			
Fan	Motor output		kW	0	05		
I dii	Driving mechan	ism		Direct-driv	en by motor		
	Al-floorest off or	. Med Heals	m³/min	6.5 - 7.0 - 8.0	6.5 - 7.5 - 9.0		
	Airflow rate (Lov	v-Iviia-Hign)	L/s	108 - 117 - 133	108 - 125 - 150		
			cf/m	230 - 247 - 282	230 - 265 - 318		
Sound pre	essure level (Low-Mid	-High)	dB <a>	27 - 29 - 31	27 - 30 - 34		
Insulation	material				P\$		
Air filter				PP Hor	eycomb		
Protection				Fi	ise		
Connectal	ble outdoor unit/HBC	Controller		Hybrid City Multi CMB-	WM-AA, CMB-WM-V-BB		
Water nini	ing diameter *3 *4	Inlet	mm ID	2	20		
		Outlet	mm ID		20		
Field draii	n pipe size		mm (in.)	0.D.32 (1-1/4)			
Optional	Decoration Pane				SLP-2FAL/SLP-2FALE		
parts	i-See Sensor co				F1ME-E		
1	Wireless Signal	Receiver			F9FA-E		
	Valve kit *6			PAC-SI	K35VK-E		

Unit Converter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

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

2. Nominal heating conditions Indoor: 2°°CD.B. (6°°FD.B.), Outdoor: 7°°CD.B. (6°°FD.B.), 43°FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

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

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VFM-E should be used together with decoration panel
- 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.

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

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

Compact Ceiling Cassette



Model				PLFY-WL32VFM-E	PLFY-WL40VFM-E		
Power soul	ce			1-phase 2	20-240 V 50Hz		
	Canasitu (Nami	aal\ *4	kW	3.6	4.5		
0 1'	Capacity (Nomin	181) " 1	BTU/h	12,300	15,400		
Cooling	Power input		kW	0.04	0.05		
	Current input			0.38	0.46		
	Canasity (Nami	aal\ *0	kW	4.0	5.0		
Heating	Capacity (Normi	Capacity (Nominal) *2		13,600	17,100		
пеаші	Power input		kW	0.04	0.05		
	Current input		A	0.32	0.40		
External fir	nish			Galvaniz	ed steel sheet		
Evtornal di	mension HxWxD		mm	208 x	570 x 570		
LXICIIIAI UI	IIIGII2IOII LIXWXD		in.	8-1/4x22	2-1/2x22-1/2		
Net weight			kg (lbs)	1	4 (31)		
		Model		SLP-	2FA(L)(E)		
		External finish		MUNSELL (1.0Y 9.2/0.2)			
Decoration	panel	Dimensions	mm	10 x	625 x 625		
		DIIIIGII3IUII3	in.	3/8 x 24-	-5/8 x 24-5/8		
	Net weight		kg (lbs)		3 (7)		
Heat eycha	eat exchanger Type			Cross fin (Aluminia	ım fin and copper tube)		
TIOUL OXUITO		Water volume	L		0.9		
	Type × Quantity			Turb	o Fan x 1		
	External static p	ressure	Pa	0			
	Motor type			DC Motor			
Fan	Motor output		kW		0.05		
1 411	Driving mechani	ism			iven by motor		
	Airflow rate (Lov	v_Mid_High)	m³/min	6.5 - 9.0 - 12.0	6.5 - 11.5 - 13.0		
	All llow rate (Lov	v-iviiu-i iigii)	L/s	108 - 150 - 200	108 - 192 - 217		
			cf/m	230 - 318 - 424	230 - 406 - 459		
	ssure level (Low-Mid	-High)	dB <a>	27 - 33 - 41	27 - 40 - 43		
Insulation	material				PS		
Air filter					oneycomb		
Protection					Fuse		
Connectab	le outdoor unit/HBC			Hybrid City Multi CME	3-WM-AA, CMB-WM-V-BB		
Water pipir	ng diameter *3 *4	Inlet	mm ID		20		
		Outlet	mm ID		20		
Field drain		1.45	mm (in.)		32 (1-1/4)		
Optional	Decoration Pane				E/SLP-2FAL/SLP-2FALE		
parts	i-See Sensor co				SF1ME-E		
	Wireless Signal	Keceiver			SF9FA-E		
				PAC-	SK35VK-E		

Unit Converter: $BTU/h=kW\times3,412$, $cfm=m^3/min\times35.31$ and lbs=kg/0.4536 (Please note these figures are subject to rounding variation).

Notes:

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

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

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

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-VFM-E should be used together with decoration panel.
- 6. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units.

 When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.

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

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

Wall Mounted



Model				PKFY-WL10VLM-E	PKFY-WL15VLM-E	PKFY-WL20VLM-E	
Power sou	rce				1-phase 220-240 V 50Hz		
	Canacity (Nami	aal\ 84	kW	1.2	1.7	2.2	
Caaliaa	Capacity (Nomi	iai) " i	BTU/h	4,100	5,800	7,500	
Cooling	Power input		kW	(0.02	0.03	
	Current input		A	(1.20	0.25	
	Canacity (Nami	201/ *0	kW	1.4	1.9	2.5	
Heating	Capacity (Nomi	IdI) Z	BTU/h	4,800	6,500	8,500	
realing	Power input		kW	(0.01	0.02	
	Current input		A	(0.15	0.20	
External fi	nish				Plastic (0.7PB 9.2/0.4)		
Evtornal d	imension HxWxD		mm		299 x 773 x 237		
LVIGILIQI A	IIIIGII9IUII I IXWXD		in.	11-25/32 x 30-7/16 x 9-11/32			
Net weigh			kg (lbs)		11 (25)		
Joot ovoh	leat exchanger Type				Cross fin (Aluminium fin and copper tube)		
IEAL EXUIT	iliyel	Water volume	L		0.6	0.7	
	Type × Quantity			Line Flow Fan x 1			
	External static pressure		Pa		0		
	Motor type			DC Motor			
an	Motor output		kW		0.03		
an	Driving mechan	ism		Direct-driven by motor			
			m³/min	3.3 - 3.8 - 4.1 - 4.5	3.3 - 3.8 - 4.3 - 4.9	4.0 - 5.0 - 6.0 - 7.0	
	Airflow rate (Lov	v-Mid2-Mid1-High)	L/s	55 - 63 - 68 - 75	55 - 63 - 72 - 82	67 - 83 - 100 - 117	
			cf/m	117 - 134 - 145 - 159	117 - 134 - 152 - 173	141 - 177 - 212 - 247	
	ssure level (Low-Mid	2-Mid1-High)	dB <a>	22 - 26 - 28 - 30	22 - 26 - 29 - 32	22 - 28 - 33 - 36	
nsulation	material				Polyethylene Sheet		
Air filter					PP Honeycomb		
Protection					Fuse		
Connectal	le outdoor unit/HBC				Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB		
Vater nini	ng diameter *3 *4	Inlet	mm ID		20		
		Outlet	mm ID		20		
ield drair	pipe size		mm (in.)	I.D.16 (5/8)			
Optional	Drain Pump Kit				PAC-SK01DM-E		
Parts	Valve Kit *5				PAC-SK35VK-E		

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 3. Be sure to install a valve on the water outlet.

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. When using the W-type and the WL-type indoor units in the same system, install the valve kit is 15 meters. The maximum allowable piping length between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5
- meters.

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

Wall Mounted



Model				PKFY-WL25VLM-E	PKFY-WL32VLM-E	PKFY-WL40VLM-E		
Power sou	гсе				1-phase 220-240 V 50Hz			
	Conseite (Nomi	aal\ *4	kW	2.8	3.6	4.5		
0	Capacity (Nomi	iiai) "I	BTU/h	9,600	12,300	15,400		
Cooling	Power input		kW	0.0	4	0.05		
	Current input		A	0.3	5	0.45		
	Canacity (Nami	04/10	kW	3.2	4.0	5.0		
lastina	Capacity (Nomi	ildi) "Z	BTU/h	10,900	13,600	17,100		
Heating	Power input		kW	0.0	3	0.04		
	Current input		A	0.3	0.30 0.40			
External fi	nish				Plastic (0.7PB 9.2/0.4)			
External dimension HxWxD		mm	299 x 773 x 237	299 x 898	x 237			
EXTERNAL DIMENSION HXWXD		in.	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 35-3/	/8 x 9-11/32			
Net weight	et weight kg (lbs)		kg (Ibs)	11 (25)	13 (29))		
		Туре			Cross fin (Aluminium fin and copper tube)			
Heat excha	Heat exchanger Water volume		L	0.7	1.0	1.1		
	Type × Quantit	Type × Quantity			Line Flow Fan x 1			
	External static pressure Pa		Pa		0			
	Motor type			DC Motor				
	Motor output		kW		0.03			
an	Driving mechan	ism		Direct-Drive				
			m³/min	4.0 - 5.4 - 7.0 - 8.4	6.3 - 7.6 - 9.0 - 10.4	6.4 - 8.2 - 10.0 - 11.9		
	Airflow rate (Lo	v-Mid-High)	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 pre	ssure level (Low-Mid	-High)	dB <a>	22 - 30 - 36 - 41	29 - 34 - 38 - 41	30 - 36 - 41 - 45		
nsulation	material				Polyethylene Sheet			
Air filter					PP Honeycomb			
Protection	device				Fuse			
	le outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Notor pini	na diameter *9 *4	Inlet	mm ID	20				
vater prpii	ng diameter *3 *4	Outlet	mm ID		20			
ield drain	pipe size		mm (in.)	I.D.16 (5/8)				
Optional	Drain Pump Kit				PAC-SK01DM-E			
arts	Valve Kit *5				PAC-SK35VK-E			

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 3. Be sure to install a valve on the water outlet.
- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
- * Due to continuing improvement, above specifications may be subject to change without notice.

Wall Mounted



Model				PKFY-WL50VKM-E	PKFY-WL63VKM-E	PKFY-WL80VKM-E		
Power sou	irce				1-phase 220-240 V 50Hz			
	Canacity (Nami	aal\ *4	kW	5.6	7.1	9.0		
0 1!	Capacity (Nomi	iiai) " i	BTU/h	19,100	24,200	30,700		
Cooling	Power input		kW	0.04	0.05	0.07		
	Current input		A	0.46	0.56	0.76		
	0	1\ *0	kW	6.3	8.0	10.0		
laatina	Capacity (Nomi	nai) "Z	BTU/h	21,500	27,300	34,100		
leating	Power input		kW	0.04	0.05	0.07		
	Current input		A	0.40	0.50	0.70		
xternal fi	nish				Plastic (1.0Y 9.2/0.2)			
utornal di	imanaian HyWyD		mm		365 x 1170 x 295			
XIEIIIAI UI	xternal dimension HxWxD in.		in.		14-3/8 x 46-1/16 x 11-5/8			
let weight	t		kg (lbs)		20 (44)			
eat exchanger Type			Cross fin (Aluminium fin and copper tube)					
eat excita	anger	Water volume	L		2.0			
	Type × Quantity	Type × Quantity			Line Flow Fan x 1			
	External static p	External static pressure Pa			0			
	Motor type			DC Motor				
an	Motor output		kW		0.069			
dII	Driving mechan	ism		Direct-Drive				
	Ataflania anta (La	Med testa	m³/min	18 - 20	18 - 22	18 - 26		
	Airflow rate (Lov	v-Iviia-Hign)	L/s	300 - 333	300 - 367	300 - 433		
			cf/m	636 - 706	636 - 777	636 - 918		
ound pre	essure level (Low-Mid	-High)	dB <a>	39 - 42	39 - 45	39 - 49		
nsulation	material				Polyethylene Sheet			
vir filter					PP Honeycomb			
rotection	device				Fuse			
Connectab	ble outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Vator nini	ing diameter *3 *4	Inlet	mm ID	20	30			
		Outlet	mm ID	20	30			
ield drain	n pipe size		mm (in.)		I.D.16 (5/8)			
Optional	Drain Pump Kit				PAC-SK19DM-E			
Parts	Valve Kit *5				PAC-SK35VK-E			

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 3. Be sure to install a valve on the water outlet.

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. When using the W-type and the WL-type indoor units in the same system, install the valve kit on all WL-type indoor units. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.
- * Please group units that operate on 1 branch.
- * 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.

Floor Standing Concealed



Model				PFFY-WP20VLRMM-E	PFFY-WP25VLRMM-E	PFFY-WP32VLRMM-E		
Power source	ce				1-phase 220-230-240 V 50/60 Hz			
	Capacity (Nomin	aal\ *1	kW	2.2	2.8	3.6		
Cooling	Gapacity (Norm	141) 1	BTU/h	7,500	9,600	12,300		
Gooning	Power input *2		kW	0.	040	0.050		
	Current input *2		A	0	.35	0.47		
	Capacity (Nomi	nal\ *2	kW	2.5	3.2	4.0		
Heating	Capacity (NOIIII	iai) J	BTU/h	8,500	10,900	13,600		
Healing	Power input *2		kW	0.	040	0.050		
	Current input *2	Current input *2		0	.35	0.47		
External fin	ish				Galvanized steel plate			
Evtornal din	External dimension HxWxD			639 x 886 x 220	639 x 1,0	006 x 220		
LAIGIIIAI UIII	LATERINAL UITTETISTOTI TIAWAD		in.	25-3/16 x 34-15/16 x 8-11/16	25-3/16 x 39	-5/8 x 8-11/16		
Net weight	Net weight kg (lbs)		22 (49)	25	(56)			
Heat eychar	leat exchanger Type				Cross fin (Aluminium fin and copper tube)			
ricut chomui	•	Water volume	L	0.9	1			
	Type × Quantity			Sirocco Fan x 1				
	External static n	External static pressure *4			20 - <40> - <60>			
		1000010	mmH ₂ 0		2.0 - <4.1> - <6.1>			
	Motor type			DC Motor				
Fan	Motor output		kW	0.096				
	Driving mechan	ism			Direct-driven by motor			
	Airflow rate (Lov	v_Mid_Hinh)	m³/min	4.5 - 5.0 - 6.0	6.0 - 7.0 - 8.0	7.5 - 9.0 - 10.5		
	/IIIIow late (Lot	v miu riigii)	L/s	75 - 83 - 100	100 - 117 - 133	125 - 150 - 175		
		.1	cf/m	159 - 177 - 212	212 - 247 - 282	265 - 318 - 371		
in anechoic	,	(Low-Mid-High)	dB <a>	31 - 3	33 - 38	31 - 35 - 38		
Insulation n	naterial				Polyethylene foam, Urethane foam			
Air filter					PP Honeycomb fabric			
Protection of	Protection device				Fuse			
Connectabl	Connectable outdoor unit/HBC Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Water ninin	g diameter *3 *4	Inlet	mm ID		20			
		Outlet	mm ID		20			
Field drain	pipe size		mm (in.)	I.D.26 (*	I.D.26 (1) < Accessory hose O.D.27 (1-3/32) (top end: O.D.20 (13/16))>			
Standard at	tachment Accesso	гу		Insulation pipe for wate	r pipe, Drain hose (flexible joint), Screw plate, Level adj	usting screw, Hose band		

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

Notes:

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.
- 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 4. The facory setting for external pressure is shown without <>. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.
- 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.
- 7. Please group units that operate on 1 branch.

Floor Standing Concealed



Model				PFFY-WP40VLRMM-E	PFFY-WP50VLRMM-E			
Power sou	гсе			1-phase 220-230	-240 V 50/60 Hz			
	Canacity (Namin	JI\ *4	kW					
Cooling	Capacity (Nomin	Capacity (Nominal) *1		15,400 19,100				
	Power input *2		kW	0.050	0.070			
	Current input *2		A	0.47	0.65			
Heating	Capacity (Nominal) *3		kW	5.0	6.3			
			BTU/h	17,100	21,500			
Healing	Power input *2		kW	0.050	0.070			
	Current input *2		A	0.47	0.65			
External fi	nish			Galvanized steel plate				
			mm	639 x 1,246 x 220				
			in.	25-3/16 x 49-1/16 x 8-11/16				
Net weight kg (lbs)				29 (64)				
Heat exch	nnor	Type		Cross fin (Aluminium fin and copper tube)				
TIGAL GAGIII	Water volume		L	1.5				
	Type × Quantity			Sirocco Fan x 2				
	External static pressure *4		Pa	20 - <40> - <60>				
			mmH ₂ 0	2.0 - <4.1> - <6.1>				
	Motor type			DC Motor				
Fan		Motor output kW		0.096				
	Driving mechanis	m		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>	34 - 37 - 40	37 - 42 - 45			
Insulation	material			Polyethylene foam, Urethane foam				
Air filter				PP Honeycomb fabric				
Protection device				Fu	Fuse			
Connectable outdoor unit/HBC Controller				Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Water nini	Water pining diameter *2 *4		mm ID	21	20			
Water piping diameter *3 *4		Outlet	mm ID	21	20			
Field drain pipe size mm (in.)			mm (in.)	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				

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

Notes:

- 1. Nominal cooling conditions Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- 2. The value are measured at the factory setting of external static pressure.

 3. Nominal heating conditions Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).
- $4. \, \text{The facory setting for external pressure is shown without} < >. \, \text{Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.} \\$
- 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.
- 7. Please group units that operate on 1 branch.

Floor Standing Exposed



Model				PFFY-WL20VEM-A	PFFY-WL25VEM-A	PFFY-WL32VEM-A	PFFY-WL40VEM-A	PFFY-WL50VEM-A		
Power sour	ce					1-phase 220-230-240 V 50/60 Hz				
	O 11 - / Al	to all #4	kW	2.2	2.8	3.6	4.5	5.6		
Cooling	Capacity (Nominal) *1		BTU/h	7,500	9,600	12,300	15,400	19,100		
	Power input		kW	0.021	0.029	0.036	0.037	0.064		
	Current input		A	0.26-0.25-0.24	0.34-0.33-0.31	0.40-0.39-0.37	0.39-0.38-0.36	0.68-0.65-0.63		
Heating	Capacity (Nominal) *2		kW	2.5	3.2	4.0	5.0	6.3		
			BTU/h	8,500	10,900	13,600	17,100	21,500		
	Power input		kW	0.021	0.029	0.036	0.037	0.064		
	Current input		A	0.26-0.25-0.24	0.34-0.33-0.31	0.40-0.39-0.37	0.39-0.38-0.36	0.68-0.65-0.63		
External finish				Galvanized steel plate, MUNSELL (1.0Y 9.2/0.2)/ABS, MUNSELL (5.32GY 8.75/0.37)						
External dimension HxWxD *3 in.			mm	669 (726) x 1,142 x 217			669 (726) x 1,342 x 217			
			in.	26-3/8 (28-5/8) x 45 x 8-9/16			26-3/8 (28-5/8) x 52-7/8 x 8-9/16			
Net weight kg (lbs)			kg (lbs)	29.5	29.5 (67) 30 (67) 3					
Heat make		Туре		Cross fin (Aluminium fin and copper tube)						
Heat exchai	nger	Water volume L		0.8 1.0		1.0	1.3			
	Type × Quantity		Sirocco Fan x 2 Sirocco fan x 3							
	External static pressure		Pa	0						
			mmH ₂ 0	0.0						
	Motor type		DC Motor							
Fan	Motor output kW		0.096							
	Driving mechanism		Direct-driven by motor							
	Airflow rate (Low-Mid-High)		m³/min	5.0 - 6.0 - 7.0	5.5 - 7.0 - 8.5	6.5 - 7.5 - 9.0	8.0 - 9.5 - 11.0	10.5 - 12.5 - 14.5		
			L/s	83 - 100 - 117	92 - 117 - 142	108 - 125 - 150	133 - 158 - 183	175 - 208 - 242		
			cf/m	177 - 212 - 247	194 - 247 - 300	230 - 265 - 318	282 - 335 - 388	371 - 441 - 512		
Sound pressure level (Low-Mid- (measured in anechoic room) High) dB-		dB <a>	23.0-27.0-31.0	25.0-31.0-36.0	29.0-33.0-37.0	29.0-33.0-36.0	35.0-40.0-43.0			
Insulation r	naterial			Polyethylene foam, Urethane foam						
Air filter				PP Honeycomb fabric						
Protection device				Fuse						
Connectabl	le outdoor unit/HB0	C Controller		CMB-WM-V-AA, CMB-WM-FAA, CMB-WM-V-BB						
Water piping diameter *4 *5		20								
		Outlet	mm ID	20						
Field drain pipe size mm (in.)			mm (in.)	0.D.32 (1-1/4)						
Standard attachment Accessory				Washer, Drain hose, Tie band, Leg, Leg cover, M4 screw, M5 screw						

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

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

 3. The values in () show the height of unit with leg.

 4. Be sure to install a valve on the water inlet/outlet.

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

Notes







Black Diamond Technologies and Mitsubishi Electric – an Exclusive Partnership **Since 1981**

The Mitsubishi Electric Product Range has been exclusively distributed by 100% locally owned and operated Black Diamond Technologies Limited for over 40 years in New Zealand.

The combination of an internationally trusted brand with the comfort of a locally owned and operated company means that you will always get the best products, the best local service and the best local support.

Based in Wellington with a further 4 support offices throughout New Zealand, Black Diamond Technologies Limited is here to help.

Our Vision - Creating New Zealand's Sustainable Future

Black Diamond Technologies Limited in partnership with Mitsubishi Electric, strives to develop and introduce new technologies for New Zealanders that will make our lives more comfortable while creating a greener tomorrow.

Peace of Mind Commissioning and Maintenance Services

The Black Diamond Technologies Limited commissioning service is carried out in-house by our team of technical staff. Having attended specialised product training, they are the most equipped, qualified and experienced technicians in New Zealand to evaluate Mitsubishi Electric commercial installations.

In addition, Black Diamond Technologies Limited offer maintenance services during and after the warranty period. Our specialised team can help with a high-level annual health check using specialised factory system integration tools to ensure superior performance, reliability and ultimate peace of mind for clients.

Please contact your Applied Products Sales Representative for more information.



For more information please visit our website or call our Applied Products Sales Team. mitsubishi-electric.co.nz | 0800 784 382

PLEASE LOOK AFTER THE ENVIRONMENT AND RECYCLE







PUBLISHED JUN 2024