



R32 Hybrid Catalogue

Next Generation 2-Pipe VRF Heat Recovery Systems



CITY MULTI

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 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 CO_p 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.





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.

Maintenance Costs based on a UK Hotel*



* 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.



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 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

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



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.



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.



Image for representation only.

Model		
Lineup	Main HBC Only	Main HBC + Sub HBC
Vertical		

vertical								
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 2x 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 inverterdriven 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



🛚 Refrigerant Pipe 🖤 Water Pipe								
Refrigerant Piping Lengths	Maximum Meters [Feet]							
B Distance between heat source and HBC	110 [360]							
Farthest indoor unit from HBC controller	60 [196]							
/ertical Differentials Between Units	Maximum Meters [Feet]							
R Heat source/HBC controller	50 [164]							
· · · · · · · · · · · · · · · · · · ·	00[101]							
B HBC/heat source (heat source unit above HBC)	50 [164]							
 B HBC/heat source (heat source unit above HBC) B HBC/heat source (heat source unit below HBC) 								
	50 [164]							
R HBC/heat source (heat source unit below HBC)	50 [164] 40 [131]							
HBC/heat source (heat source unit below HBC) Indoor/HBC controller	50 [164] 40 [131] 15 (10) [49 (32)]*1							

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

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.

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

B - Pumps

Each set of Plate Heat Exchangers has a Water Pump.

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

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

C - Valve Block

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

This Valve Block has two features;

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

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

Connection to slave HBC

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

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



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	contal HBC	Main Ver	tical HBC	Sub Horizontal HBC		
Model	Statistic St	and the state of t			annun:		
	CMB-WM108V-				CMB-WM108V-		
	AA	AA	AA	AA	BB	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				•	•	•	•	•	•		•	•	•
Compact Cassette	PLFY-WL VFM-E		•	•	•	•	•	•						
Wall Mounted	PKFY-WL VLM-E		•	•	•	•	•	•						
Wall Mounted	PKFY-WL VKM-E								•	•		•		
Floor Standing Concealed	PFFY-WP VLRMM-E				•	•	•	•	•					
Floor Standing Exposed	PFFY-WL VEM-A				•	•	•	•	•					

Controller Range

Remote Controllers



28 810 (V)

.



- Operation lock
- Dual set point option Energy saving
- Backlit LCD screen Error information
- 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 N
 - 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.

CITY MULTI



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	;			3-phase 4-wire 380	-400-415 V 50/60 Hz		
	Oracity (Newsia	-1) *4	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		
5	EER		kW / kW	4.05	3.33		
		Indoor	W.B.		°C (59~75°F)		
	Temp. range *3	Outdoor	D.B.		C (23~126°F)		
			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	15.4-14.6-14.1		
	COP		kW / kW	3.91	3.44		
	001	Indoor	D.B.		∏ 3.44 C (59∼81°F)		
	Temp. range *3	Outdoor	W.B.				
		Total capacity					
ndoor unit c	onnectable *4	Model / Quantity		WP/WL10~125/1~30 *4	WP/WL10~125/1~37 *4		
ound proces	iro loval (maggurad		5 dR < A >	59.0/59.0	60.5/61.0		
Sound pressure level (measured in anechoic room)*5		dB <a>	76.0/78.0				
				78.5/80.0			
Refrigerant piping diameter High pressure Low pressure			mm (in.)		/8) Brazed		
		Low pressure	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed		
	Type x Quantity		m ³ /m:n		er fan x 1		
	A to floor out a		m³/min L/s	170	185		
	AIT HOW FALL	Air flow rate		2,833	3,083		
an	0		cfm	6,003	6,532		
	Control, Driving r	nechanism	1147	Inverter-control, Direct-driven by motor			
	Motor output	**	kW		2 x 1		
	External static pr	ess. *6			mmH20)		
	Туре				rmetic compressor		
Compressor	Starting method				erter		
F	Motor output		kW	4.6	7.0		
	Case heater		kW		(- V)		
external finis	h			• • • • • • • • • • • • • • • • • • • •	ating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""></munsell>		
xternal dim	ension HxWxD		mm		out legs) x 920 x 740		
			in.		ut legs) x 36-1/4 x 29-3/16		
	High pressure pr			High pressure sensor, High pres	sure switch at 4.15 MPa (601 psi)		
rotection	Inverter circuit (C	OMP./FAN)		Over-heat protection,	Over-current protection		
evices	Compressor				-		
	Fan motor				-		
Refrigerant	Type x Original cl	narge		R32 x 5.2	kg (12 lbs)		
let weight			kg (lbs)	227	(501)		
leat exchang	jer			Salt-resistant cros	ss fin & copper tube		
)efrosting m	ethod			Auto-defrost mode (Revers	ed refrigerant cycle, Hot gas)		
Optional part	\$			Main HBC: CMB-WM108,1016V-AA, CMB-WM			

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

Notes :

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

- 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
- So busing the result of the res
- 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.



Model			PURY-M3	00YNW-A1 (-BS)	PURY-M350YNW-A1 (-BS)			
Number of U				Single HBC	Double / Single HBC	Single HBC	Double / Single HBC	
Number of HI	BC controller			(Horizontal type)	(Horizontal type / Vertical type)	(Horizontal type)	(Horizontal type / Vertical type)	
Power source)			3-phase 4-wire 380-400-415 V 50/60 Hz				
	Canacity (Namin	al\ *1	kW		40.0			
	Capacity (Nomin	ai) " i	BTU / h		114,300	136,500		
	ng Current input A EER kV		kW	11.65 9.88		14.93	12.15	
Cooling			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	
			kW / kW	2.87 3.39		2.67	3.29	
			W.B.		15.0~24.0°C (59~75°F)		
	Temp. range *3	Outdoor	D.B.		-5.0~52.0°C (23~126°F)		
	Consoity (Namin	ol\ *0	kW		37.5		45.0	
	Capacity (Nomin	al) Z	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	
	Tomp range *9	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)				
ndoor unit o	oppostable */	Total capacity			50~150% of outdo	or unit capacity		
nuoor unit Ci	ndoor unit connectable *4 Model / Quantity			WP/WL1	0~125/2~45 *4	WP/WL10~125/2~50*4		
Sound pressu	ure level (measured	in anechoic room)*5	dB <a>	61.0/67.0		62.5/64.0		
Sound power level (measured in anechoic room) *5 dB <a>		dB <a>	80.0/86.5		8	1.0/83.0		
High pressure mm (in)		mm (in.)		15.88 (5/8)	Brazed			
Ketrigerant p	efrigerant piping diameter Low pressure mm (in.)		mm (in.)	22.2	(7/8) Brazed	28.58	(1-1/8) Brazed	
	Type x Quantity			Prop	peller fan x 1	Prop	oeller fan x 2	
		Air flow rate		240			250	
	Air flow rate			4,000		4,167		
Fan			cfm		8,474	8,828		
	Control, Driving	nechanism		Inverter-control, Direct-driven by motor				
	Motor output		kW	0.92 x 1 0.46 x 2				
	External static pr	ess. *6		0 Pa (0 mmH20)				
	Туре			Inverter scroll hermetic compressor				
Comproses	Starting method				Invert	er		
Compressor	Motor output		kW		8.0		9.6	
	Case heater		kW		- (- V)		
External finis	h			Pre-	coated galvanized steel sheets (+powder coatir	g for -BS type) <munsell 1<="" 5y="" 8="" td=""><td>or similar></td></munsell>	or similar>	
Extornal di	anaian UyWyD		mm	1,858 (1,798 w	ithout legs) x 920 x 740	1,858 (1,798 wit	hout legs) x 1,240 x 740	
External dime	ension HxWxD		in.	73-3/16 (70-13/16 wi	thout legs) x 36-1/4 x 29-3/16	73-3/16 (70-13/16 wi	thout legs) x 48-7/8 x 29-3/16	
	High pressure pr	otection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
Protection	Inverter circuit (C	OMP./FAN)			Over-heat protection, Ov	er-current protection		
devices	Compressor				-			
Fan motor								
Refrigerant	Type x Original c	narge		R32 x	5.2 kg (12 lbs)	R32 x	8.0 kg (18 lbs)	
Net weight			kg (lbs)		227 (501)	2	70 (596)	
Heat exchang	jer				Salt-resistant cross f	in & copper tube		
Defrosting m	ethod				Auto-defrost mode (Reversed	refrigerant cycle, Hot gas)		
Optional part				Ν	Main HBC: CMB-WM108,1016V-AA, CMB-WM3		016V-BB	

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

Notes :

Nominal cooling conditions (subject to JIS B8615-2).
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.).
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
Nominal heating conditions (subject to JIS B8615-2).
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.).
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
Good D. (20°CD.B.) (68°FD.B.), Dutdoor: 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 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.



Model				PURY-M400YNW-A1 (-BS)	PURY-M450YNW-A1 (-BS)	PURY-M500YNW-A1 (-BS)			
Power source	e				3-phase 4-wire 380-400-415 V 50/60 Hz				
	Canacity (Namin	al\ *4	kW	45.0	50.0	56.0			
	Capacity (Nomin	ai) i i	BTU / h	153,500	170,600	191,100			
	Power input	Power input		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			
0	EER		kW / kW	2.97	3.23	2.51			
		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 (Nomin	al) *2	BTU / h	170,600	191.100	215.000			
	Power input		kW	14.08	16.18	18.26			
leating	Current input		A	23.7-22.5-21.7	27.3-25.9-25.0	30.8-29.2-28.2			
io atting	COP		kW / kW	3.55	3.46	3.45			
		Indoor	D.B.	0.00	15.0~27.0°C (59~81°F)	0.10			
	Temp. range *3	Outdoor	W.B.		-20.0~15.5°C (-4~60°F)				
		Total capacity	W.D.		50~150% of outdoor unit capacity				
ndoor unit c	onnectable *4	Model / Quantity			50~150% of buildoor binit capacity WP/WL10~125/2~50 *4				
Cound proces	ura laval (massurad		dB <a>	65.0/69.0	65.5/70.0	63.5/64.5			
Sound pressure level (measured in anechoic room)*5 dB - Sound power level (measured in anechoic room) *5 dB -		dB < A >	83.0/88.0	83.0/89.0	82.0/84.0				
Refrigerant piping diameter High pressure mm (in.)			03.0/00.0	19.05 (3/4) Brazed					
	Tuno u Quantitu	Low pressure	mm (in.)		28.58 (1-1/8) Brazed				
	Type x Quantity		m ³ /min		Propeller fan x 2	205			
	Ale flammada	Air flow roto			315	295			
	Air flow rate		L/s	5,250	5,283	4,917			
an			cfm	11,123	11,193	10,416			
	Control, Driving mechanism				Inverter-control, Direct-driven by motor				
	Motor output		kW	0.	46 x 2	0.92 x 2			
	External static pr	ess. *6			0 Pa (0 mmH20)				
	Туре				Inverter scroll hermetic compressor				
Compressor	Starting method				Inverter				
5011p100001	Motor output		kW	12.2	13.1	17.4			
	Case heater		kW		- (- V)				
xternal finis	sh			Pre-coated galvaniz	ed steel sheets (+powder coating for -BS type) $<$ MUNS	ELL 5Y 8/1 or similar>			
			mm	1,858 (1,798 with	out legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740			
External dim	ension HxWxD		in.	73-3/16 (70-13/16 with	out legs) x 48-7/8 x 29-3/16	73-3/16 (70-13/16 without legs) x 68-15/16 x 29 3/16			
	High pressure pr			Hig	h pressure sensor, High pressure switch at 4.15 MPa (60				
Protection	Inverter circuit (C	OMP./FAN)			Over-heat protection, Over-current protection				
levices	Compressor				-				
	Fan motor				-				
Refrigerant	Type x Original cl	narge		R32 x 8.0 kg (18 lbs)	R32 x 10.8	3 kg (24 lbs)			
let weight			kg (lbs)	273 (602)	293 (646)	337 (743)			
leat exchanç	ger				Salt-resistant cross fin & copper tube				
)efrosting m	iethod				Auto-defrost mode (Reversed refrigerant cycle)				
Optional part	ts			Main HBC: CMB-	WM108,1016V-AA, CMB-WM500F-AA Sub HBC: CMB	-WM108.1016V-BB			

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

Notes :

- 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
- Costa, (Costa), Costa, (Costa), Costa, (Costa), (Cost
- 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-EM200YNW-A1 (-BS)	PURY-EM250YNW-A1 (-BS)		
Power sourc	e			3-phase 4-wire 380-	400-415 V 50/60 Hz		
			kW	22.4	28.0		
	Capacity (Nomin	al) *1	BTU / h	76.400	95,500		
	Power input		kW	5.13	7.69		
Cooling	Current input		A	8.6-8.2-7.9	12.9-12.3-11.8		
5	EER		kW / kW	4.36	3.64		
		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	25.0	31.5		
	Capacity (Nomin	ial) *2	BTU / h	85,300	107,500		
	Power input		kW	6.23	8.84		
Heating	Current input			10.5-9.9-9.6	14.9-14.1-13.6		
	COP		kW / kW	4.01	3.56		
		Indoor	D.B.	15.0~27.0°(
	Temp. range *3 Outdoor		W.B.	-20.0~15.5°			
		Total capacity	11.0.	50~150% of out	· · · ·		
Indoor unit o	connectable *4	Model / Quantity		WP/WL10~125/1~30 *4	WP/WL10~125/1~37 *4		
Sound press	sure level (measured	in anechoic room)*	< A > Ab	59.0/59.0	60.5/61.0		
	r level (measured in	,	dB <a>	76.0/78.0	78.5/80.0		
		High pressure	mm (in.)	15.88 (5/			
Refrigerant	Refrigerant piping diameter Low pressure		mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed		
	Type x Quantity	Low prossure	_ mm (m.)	Propelle			
	Type x duality	.,,,,		170	185		
	Air flow rate		m³/min L/s	2.833	3.083		
Fan	All How fato		cfm	6,003	6.532		
i un	Control, Driving	mechanism	0111	Inverter-control, Dir			
	Motor output	moonumonn	kW	0.92	,		
	External static pr	ress *6	NW .				
	Type	633. 0		0 Pa (0 mmH20) Inverter scroll hermetic compressor			
	Starting method			Inverter scion ner	· · · · · · · · · · · · · · · · · · ·		
Compressor	Motor output		kW	4.5	6.7		
	Case heater		kW				
External fini			1.11	r) - Pre-coated galvanized steel sheets (+powder coa			
	511		mm	1,858 (1,798 witho			
External dim	iension HxWxD		in.	73-3/16 (70-13/16 withou			
	High pressure pr	otaction		High pressure sensor, High press			
Destantion	Inverter circuit (
Protection devices		JOIVIL / LANJ		Over-heat protection, Over-current protection			
devices Compressor Fan motor			·				
Dofrigorant				R32 x 5.2			
Refrigerant	Type x original c	narye	ka (lbs)		•		
Net weight	aor		kg (lbs)	231 · Selt registert groop	,		
Heat exchan	0			Salt-resistant cross			
Defrosting n				Auto-defrost mode (Reversed refrigerant cycle, Hot gas)			
Optional par	15			Main HBC: CMB-WM108,1016V-AA, CMB-WM	ISOR-AV 200 HRC: CWR-MW108'1010A-RR		

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

Notes :

- Notes : 1. Nominal cooling conditions (subject to JIS B8615-2). Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./24°CW.B. (95°FD.B./75°FW.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.). 2. Nominal heating conditions (subject to JIS B8615-2). Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.). Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.). 5.50CP (27°CD.B./42°FW.B.). 40°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.

- 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.



Model				PURY-EM30	DOYNW-A1 (-BS)	PURY-EM3	50YNW-A1 (-BS)		
Number of U	BC controller			Single HBC	Double / Single HBC	Single HBC	Double / Single HBC		
NUMBER OF H	BC controller			(Horizontal type)	(Horizontal type / Vertical type)	(Horizontal type)	(Horizontal type / Vertical type)		
Power source	е				3-phase 4-wire 380-	400-415 V 50/60 Hz			
	Capacity (Nomin	al) *1	kW		33.5	40.0			
		ai) i	BTU / h	1	14,300	1	36,500		
	Power input		kW	10.03	8.52	13.91	11.33		
Cooling	Current input		A	16.9-16.0-15.5	14.3-13.6-13.1	23.4-22.3-21.5	19.1-18.1-17.5		
	EER		kW / kW	3.33	3.93	2.87	3.53		
	Temp. range *3		W.B.		15.0~24.0°C	(/ /			
		Outdoor	D.B.		-5.0~52.0°C	, ,	45.0		
	Capacity (Nomin	al) *2	kW		37.5		45.0		
	Power input		BTU / h kW	10.46	9,93		53,500		
Heating	Current input		A			13.10	12.16 20.5-19.5-18.7		
Heating	COP		A kW/kW	17.6-16.7-16.1 3.58	16.7-15.9-15.3 3.77	22.1-21.0-20.2 3.43	20.5-19.5-18.7		
		Indoor	D.B.	3.00	3.77 15.0~27.0°C		3.70		
	Temp. range *3	Outdoor	W.B.		-20.0~15.5°	. ,			
		Total capacity	W.D.		50~150% of outd	· · ·			
Indoor unit c	onnectable *4	Model / Quantity		WP/WI 10-	~125/2~45 *4	oor unit capacity WP/WL10~125/2~50 *4			
Sound press	ure level (measured	in anechoic room)*5	dB <a>		.0/67.0	62.5/64.0			
	r level (measured in	,	dB <a>		.0/86.5	81.0/83.0			
		High pressure	mm (in.)		15.88 (5/	3) Brazed			
Ketrigerant p	piping diameter	Low pressure	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed		
	Type x Quantity			Prope	ller fan x 1	Prope	eller fan x 2		
			m³/min		240		250		
	Air flow rate		L/s		4,000		4,167		
Fan			cfm		8,474	8,828			
	Control, Driving I	mechanism			Inverter-control, Dir	,			
	Motor output		kW	0.	.92 x 1	0.46 x 2			
	External static pr	'ess. *6		0 Pa (0 mmH20)					
	Туре			Inverter scroll hermetic compressor					
Compressor	Starting method Motor output		kW		7.7	rter	0.0		
	Case heater		kW			10	9.6		
External finis			KVV	Dro. o	- (- oated galvanized steel sheets (+powder coa	,	ar similar>		
			mm		hout legs) x 920 x 740	• ,, ,	iout legs) x 1,240 x 740		
External dim	External dimension HxWxD in.				iout legs) x 36-1/4 x 29-3/16	, (,	10ut legs) x 48-7/8 x 29-3/16		
High pressure protection			10 0/10 (10 10/10 with	High pressure sensor, High press		100110337 x 40 170 x 23 0710			
Protection					Over-heat protection, C	(, , ,			
devices	, ,								
	Fan motor				-				
Refrigerant	efrigerant Type x Original charge			R32 x 5.	.2 kg (12 lbs)	R32 x 8	.0 kg (18 lbs)		
Net weight				231 (510) 276 (609)					
Heat exchang	at exchanger			Salt-resistant cross fin & aluminium tube					
Defrosting m	nethod				Auto-defrost mode (Reverse	d refrigerant cycle, Hot gas)			
Optional part	ts			Ma	ain HBC: CMB-WM108,1016V-AA, CMB-WM	350F-AA Sub HBC: CMB-WM108,10	16V-BB		

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

Notes :

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



Model				PURY-EM400YNW-A1 (-BS)	PURY-EM450YNW-A1 (-BS)	PURY-EM500YNW-A1 (-BS)			
Power source	;				3-phase 4-wire 380-400-415 V 50/60 Hz				
			kW	45.0	50.0	56.0			
	Capacity (Nomina	I) *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.	0.20	0.110				
	Temp. range *3	Outdoor	D.B.		15.0~24.0°C (59~75°F) -5.0~52.0°C (23~126°F)				
	kW		50.0	56.0	63.0				
	Capacity (Nomina	I) *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			
ricating	COP		kW / kW	3.60	3.55	3.61			
	001	Indoor	D.B.	5.00	5.55 15.0∼27.0°C (59∼81°F)	3.01			
	Temp. range *3	Outdoor	W.B.		-20.0~15.5°C (-4~60°F)				
		Total capacity	W.D.						
Indoor unit co	onnectable ^4	Model / Quantity			50~150% of outdoor unit capacity				
Cound proport	ure level (measured i		dD cAs	CE 0/C0 0	WP/WL10~125/2~50 *4	CD E /CA E			
	1	/		65.0/69.0	65.5/70.0 83.0/89.0	63.5/64.5			
Sound power	level (measured in a		dB <a>	83.0/88.0	82.0/84.0				
Refrigerant pi	iping diameter	High pressure	mm (in.)		19.05 (3/4) Brazed				
		Low pressure	mm (in.)		28.58 (1-1/8) Brazed				
	Type x Quantity		2		Propeller fan x 2				
			m³/min	3:	295				
	Air flow rate		L/s	5,2	4,917				
Fan			cfm	11,	10,416				
	Control, Driving m	iechanism			Inverter-control, Direct-driven by motor				
	Motor output		kW	0.46		0.92 x 2			
	External static pre	ss. *6			0 Pa (0 mmH20)				
	Туре			Inverter scroll hermetic compressor					
Compressor	Starting method				Inverter				
0011111103301	Motor output		kW	11.1	12.7	13.8			
	Case heater		kW		- (- V)				
External finis	h			Pre-coated galvanized	steel sheets (+powder coating for -BS type) $<$	/UNSELL 5Y 8/1 or similar>			
			mm	1,858 (1,798 withou	t legs) x 1,240 x 740	1,858 (1,798 without legs) x 1,750 x 740			
External dime	External dimension HxWxD in.		73-3/16 (70-13/ 48-7/8 x		73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16				
	High pressure protection		High	pressure sensor, High pressure switch at 4.15 MI	Pa (601 psi)				
Protection	Protection Inverter circuit (COMP./FAN)				Over-heat protection, Over-current protection	n			
devices	o chipi co co i			-					
Fan motor		-	-	-					
Refrigerant Type x Original charge		R32 x 8.0 kg (18 lbs)	R32	x 10.8 kg (24 lbs)					
Net weight kg (lbs)		280 (618)							
Heat exchanger					Salt-resistant cross fin & aluminium tube	348 (768)			
Defrosting m					Auto-defrost mode (Reversed refrigerant cyc	le)			
Optional part				Main HBC: CMB-W	M108,1016V-AA, CMB-WM500F-AA Sub HBC				

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

Notes :

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

cooling/heating mixed operation.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	inch					8					16		
Dowor course				1-phase 220-230-240 V									
Power source Coolina			50 Hz 60 Hz				50 Hz		60	Hz			
Power input		Cooling	kW		0.45/0.46/0.47								
(220/230/240	(220/230/240) Heating		kW					0.45/0.	46/0.47				
Current input Cooling		A					2.89/2.	83/2.79					
(220/230/240))	Heating	A					2.89/2.	83/2.79				
Sound pressu	re level (measured	in anechoic room)	dBA					4	1				
Applicable ter	nperature range of	installation site	°C (D.B.)					0~	-32				
External finish	1					Galvanized st	eel plate (Lower	part drain pan: Pr	e-coated galvan	ized sheets + p	owder coating)		
Connectable of	outdoor unit						PURY-M200~50	DOYNW-A1(-BS)/	PURY-EM200~5	500YNW-A1(-BS	6)		
Indoor unit ca	pacity connectable	to 1 branch			Model	WP/WL80 or sma	ıller (Use joint pi	pe combining 2 t	oranches when th	ie total unit capa	acity exceeds WP/	WL80.)	
External dime	nsion H x W x D		mm			300 x 1,520 x 63	0				300 x 1,800 x 630)	
External dime	IISIOII H X W X 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 control or constitu		Connectable outdoor unit capacity					Connectable outdoor unit capacity				
		To outdoor unit		M200	M250/300	M350	M400	M450/500	M200	M250/300	M350	M400	M450/500
Refrigerant pi	ping diameter	High press. pipe (O.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.)	Diazou	Diazoa	Diazoa	Didtod	15.88 (5/		Diazoa	Dialou	Brazoa	Diazoa
	To Sub HBC												
	Connection size	Inlet/Outlet (0.D.)	mm (in.)					2	2				
				WP	/WL10-100		20		WP	/WL101-200		25.8	
Water sising	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)	WP/	WL201-300		30		WP/	WL301-400		33.3	
Water piping diameter				WP/	WL401-500		36.2		WP/	WL501-525		36.8	
ulumotor	To indoor unit												
	Connection size	Inlet/Outlet (0.D.)	mm (in.)					2	22				
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)		P/WL10-50		20		W	P/WL10-50		20	
	· · · (MIN.) · · ·		WF	/WL51-125		30			/WL51-125		30		
	ld drain pipe size mm (in.)							0.D. 32	(1-1/4)				
Net weight			kg (lbs)		86 (19	0) [96 (212) with				,	7) [111 (245) with	n water]	
	dard attachment Accessory						Drain conn	ection pipe (with	flexible hose and	l insulation)			
Optional parts													

Notes:

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

*The equipment is for 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.

*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



Vertical Main-HBC

Model					СМ	B-WM350F-AA			CMB-WN	1500F-AA			
Number of bra	anch							6					
Power source							1-phase 22	20-230-240 V					
I UWEI SUUICE	lower input Cooling			5	0 Hz		60 Hz		50 Hz		60 Hz		
Power input		Cooling	kW				1.50/1	.50/1.50					
(220/230/240))	Heating	kW		1.50/1.50								
Current input		Cooling	A	6.82/6.52/6.25									
(220/230/240	/	Heating	A	6.82/6.52/6.25									
			dBA					54					
	pplicable temperature range of installation site °C (D.E							~40					
External finish								d steel plate					
Connectable of				PURY-M200-		(-BS)/PURY-EM200-				PURY-EM400~500'	YNW-A1(-BS)		
Indoor unit ca	pacity connectable	e to 1 branch			Model WP	/WL80 or smaller (Us	se joint pipe combining 2		unit capacity exce	eds WP/WL80.)			
External dime	nsion H x W x D		mm				,	800 x 500					
			in.				,	-1/2 x 19-11/16					
		To outdoor unit			Connectab	le outdoor unit capac				door unit capacity			
		10.1		M200		M250/300	M350	M40			0/500		
Refrigerant pi	ping 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			5 (3/4) azed		
		Low press. pipe	mm (in.)	19.05 (3/4)		22.2 (7/8)	28.58 (1-1/8)	28.58 (1	-1/8)	28.58	(1-1/8)		
		(O.D.) To Main HBC	mm (in.)	Brazed		Brazed	Brazed	Braz	ed	Bra	azed		
	To Sub HBC	TO WAITTIDO	(III.)					-					
	Connection size	Inlet/Outlet (O.D.)	mm (in.)					42					
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)					ndoor unit					
	To indoor unit	, , , ,	()					-					
	Connection size	Inlet/Outlet (0.D.)	mm (in.)					22					
				Total down-	Piping lei	ngth from Main-HBC	to farthest indoor unit	Total down-	Piping length fr	om Main-HBC to far	thest indoor unit		
				stream Indoor Unit capacity	Max 20m	Max 40m	Max 60m	stream indoor unit capacity	Max 20m	Max 40m	Max 60m		
Water sision				WP/WL10	12	12	12	WP/WL10	12	12	12		
Water piping diameter				WP/WL11 - 15	12	12	15.5	WP/WL11 - 15	12	12	15.5		
ulamotor				WP/WL16 - 25	15.5	15.5	15.5	WP/WL16 - 25	15.5	15.5	15.5		
	Etablishe a star	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	WP/WL51 - 63	19.9	25.2	25.2		
				WP/WL64 - 80	25.2	25.2	25.2	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 - 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		
ration				WP/WL301 - 750	50.8	50.8	50.8	WP/WL301 - 750	50.8	50.8	50.8		
	ld drain pipe size mm (in												
Net weight			kg (lbs)		196 (433)	[216 (477) with wate	er]		209 (461) [233	(514) with water]			
	chment Accessor						-						
Optional parts	3							-					

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.

*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-WI	M108V-BB			CMB-WN	1016V-BB		
Number of br	anch				8 16							
Dowor oouroo							1-phase 23	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	D)	Heating	kW		0.01/0.01							
Current input		Cooling	A		0.14/0.14/							
220/230/240) Heating		A	0.14/0.14									
ound pressure level (measured in anechoic room) dBA							,	-				
			°C (D.B.)				0	~32				
xternal finis	1		- (ed steel plate				
Connectable							durrumze	-				
	pacity connectable	to 1 branch			Model WP/WI 80 or	smaller (lise ontion:	I joint nine comhin	ing 2 branches when the	total unit canacity	exceeds WP/WL80)		
	ipaony connectable		mm			30 x 630	ii joini pipe combin	ing z branonos whon the		210 x 630		
external dime	ension H x W x D		in.			5/8 x 24-13/16			,	/16 x 24-13/16		
	To HBC		111.		12-1/4 X 30-3	J/0 X 24-13/10	To United	tel Mein UDO	12-1/4 X 41-11	/10 X 24-13/10		
		Inlet/Outlet (0.D.)	mm (in)					ntal Main HBC				
	Connection size	IIIIel/Outlet (O.D.)	mm (in.)	WD/WL	0 100		0	28	1 000	01	. 0	
Field pipe size		In lat (Outlat (LD.)	mm (in.)	WP/WL1			20		WP/WL101-200		25.8	
	Field pipe size	Field pipe size Inlet/Outlet (I.D.)		WP/WL201-300		30		WP/WL301-400 WP/WL501-525		33.3 36.8		
	T 1100			WP/WL4	WP/WL401-500 36.2				J1-525	3t	0.8	
	To HBC							al Main HBC				
	Connection size	Inlet/Outlet (0.D.)	mm (in.)			28 Az ess index unit						
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)				As per indoor unit Horizontal HBC					
	To indoor unit											
	Connection size	Inlet/Outlet (0.D.)	mm (in.)					22				
	Field pipe size	Inlet/Outlet (I.D.)	mm (in.)	W/WP/W			0	W/WP/W			0	
		(Min.)	. ,	W/WP/W	L51-125		0	W/WP/WL	.51-125	3	0	
Nater piping	To indoor unit	Inlat/Outlat (O.D.)	mm (in)					ical HBC				
diameter	Connection size	Inlet/Outlet (0.D.)	mm (in.)	Total down-	Dining length fr	ram Main UDC to fast		22 Total down-	Dining Japath fr	am Main UDO to fast	heat indeer unit	
				stream indoor unit		rom Main-HBC to fart		stream indoor unit		om Main-HBC to fart		
				capacity	Max 20m	Max 40m	Max 60m	capacity	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	
	Field pipe size	Inlet/Outlet (I.D.)	mm (in)	WP/WL26 - 32 WP/WL33 - 50	15.5 19.9	19.9 19.9	19.9 19.9	WP/WL26 - 32 WP/WL33 - 50	15.5 19.9	19.9 19.9	19.9 19.9	
	Field pipe size	(Min.)	mm (in.)	WP/WL33 - 50 WP/WL51 - 63	19.9	25.2	25.2	WP/WL33 - 50 WP/WL51 - 63	19.9	25.2	25.2	
				WP/WL64 - 80	25.2	25.2	25.2	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/WL01 - 100 WP/WL101 - 150	32.6	32.6	32.6	WP/WL01 - 100 WP/WL101 - 150	32.6	32.6	32.0	
				WP/WL101 - 150 WP/WL151 - 250	32.6	32.6	39.6		32.6	32.6	32.0	
								WP/WL151 - 250				
				WP/WL251 - 300	32.6	39.6	50.8	WP/WL251 - 300	32.6	39.6	50.8	
			0.5	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)				
Vet weight			kg (lbs)		40 (89) [45 (1	00) with water]			53 (117) [62 (1	37) with water]		
Standard atta	chment Accessor	у					Drain connection p	oipe, Washer, Tie band				
ptional part	S							-				

Notes:

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

*The equipment is for water.

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

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

*Please attach an expansion vessel (field supply).

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

*When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.

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

*Please refer to the databook or the installation manual for the specified water quality.

*This unit is not designed for outside installations.

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

*Please do not use ground water and well water.

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

*Main HBC Controller is necessary with sub HBC.

Slim Ceiling Concealed



Model				PEFY-WP10VMS1-E	PEFY-WP15VMS1-E			
Power sourc	ce			1-phase 220-230-	240 V 50/60 Hz			
	Capacity (Nominal) *1		kW	1.2	1.7			
Cooling	Capacity (Nomina	ll) I	BTU/h	4,100	5,800			
Cooling	Power input *2		kW	0.03	0.05			
	Current input*2		A	0.21	0.44			
	Capacity (Nomina	11 *0	kW	1.4	1.9			
Heating		u) J	BTU/h	4,800	6,500			
ricatiliy	Power input *2		kW	0.0	3			
	Current input *2		A	0.21	0.33			
External fini	sh			Galvanized s	teel plate			
External dim	nension HxWxD		mm	200x790				
			in.	7-7/8 x 31-1/8				
Net weight	et weight kg (lbs)			19 (4	,			
Heat exchan	ider	Туре		Cross fin (Aluminium I				
inout ononui	exchanger Water volume		L	0.4	0.7			
	Type $ imes$ Quantity			Sirocco				
	External static pre	' mmH ₂ 0		<5> - 15 - <3				
				<0.5> - 1.5 - <3.6> - <5.1>				
_	Motor type			DC M				
Fan	Motor output		kW	0.09	-			
	Driving mechanis	m	3	Direct-driver				
			m ³ /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			cf/m	141 - 159 - 177	177 - 212 - 247			
in anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	20-23-25	22-24-28			
Insulation m	naterial			EPS, Polyethylene for	am, Urethane foam			
Air filter				PP Honeyco	mb fabric			
Protection d	rotection device			Fus	e			
Connectable	ectable outdoor unit/HBC Controller			Hybrid City Multi CMB-W	M-AA, CMB-WM-V-BB			
Water nining	g diameter *5 *6	Inlet	mm ID	20				
		Outlet	mm ID	20				
	eld drain pipe size mm (in.)		mm (in.)	0.D.32 (1-1/4)				
	Standard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band				
Optional par	rt Control Box Repla	ice Kit		PAC-KE7	OHS-E			

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

Notes:

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

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

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

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

Slim Ceiling Concealed



Model				PEFY-WP20VMS1-E	PEFY-WP25VMS1-E				
Power sou	irce			1-phase 220-230-2	240 V 50/60 Hz				
	Capacity (Nominal) *1		kW	2.2	2.8				
Cooling	Capacity (Nomina	1) " 1	BTU/h	7,500	9,600				
Cooling	Power input *2		kW	0.051	0.06				
	Current input*2 Capacity (Nominal) *3		A	0.49	0.51				
	Oracette (Newsia)		kW	2.5	3.2				
Heating	Capacity (Nomina	1) 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			Galvanized st	eel plate				
Extornal d	imension HxWxD		mm	200x790x700					
LXICIIIdi u	IIIIGIISIOII LIX WXD		in.	7-7/8 x 31-1/8	x 27-9/16				
Net weigh	t weight kg (lbs)			20 (45	i)				
Host eyeb	Type			Cross fin (Aluminium fin and copper tube)					
HEAL EAGH	leat exchanger Water Volume		L	0.9					
	$Type \times Quantity$			Sirocco fa	in x 2				
	External static pro	accuro */	Pa	<5> - 15 - <35	5> - <50>				
	External static pri	500UC 4	mmH ₂ 0	<0.5> - 1.5 - <3	.6> - <5.1>				
	Motor type			DC Motor					
Fan	Motor output		kW	0.096)				
	Driving mechanis	m		Direct-driven	by motor				
			m ³ /min	5.5 - 6.5 - 8.0	5.5 - 7.0 - 9.0				
	Airflow rate	(Low Mid High)	L/s	92 - 108 - 133	92 - 117 - 150				
			cf/m	194 - 230 - 282	194 - 247 - 318				
	ssure level (measured) ic room)*2	(Low Mid High)	dB <a>	23-25-29	23-26-30				
Insulation	material			EPS, Polyethylene foar	m, Urethane foam				
Air filter				PP Honeycon	nb fabric				
Protection	I device			Fuse					
Connectal	ole outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-WN	1-AA, CMB-WM-V-BB				
Water nini	ping diameter *5 *6		mm ID	20					
Uutlet		mm ID	20						
Field drain	n pipe size		mm (in.)	0.D.32 (1	-1/4)				
Standard	Standard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band					
Optional p	art Control Box Repla	ice Kit		PAC-KE70	HS-E				

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

Notes:

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

2. The value are measured at the factory setting of external static pressure. 3. Nominal heating conditions – Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B.(6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: Om (Off).

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 source	ce				1-phase 220-230-240 V 50/60 Hz						
	Capacity (Nominal) *1		kW	3.6	4.5	5.6					
Cooling	Capacity (Nomina	II) I	BTU/h	12,300	15,400	19,100					
Cooling	Power input *2		kW	0.071	0.09	90					
	Current input*2		A	0.61	0.73	0.77					
	Capacity (Nomina	I\ *0	kW	4.0	5.0	6.3					
Heating	Gapacity (NUTITITA	u) ə	BTU/h	13,600	17,100	21,500					
Treating	Power input *2		kW	0.051	0.07	70					
	Current input *2		A	0.50	0.62	0.66					
External fini	ish				Galvanized steel plate						
Extornal din	nension HxWxD		mm	200x9	90x700	200x1,190x700					
LXICIIIdi UII	IIGH2I0H HXWXD		in.	7-7/8 x 39	9 x 27-9/16	7-7/8 x 46-7/8 x 27-9/16					
Net weight			kg (lbs)	25	(56)	27 (60)					
Hoat evenar	aar	Туре		Cross fin (Aluminium fin and copper tube)							
Πσαι σλυπαι	eat exchanger Water volume L		L	1	1.0						
	$Type\timesQuantity$			Siroco	Sirocco fan x 4						
	External static pre	leeuro */	Pa	<5> - 15 - <35> - <50>							
	External static pre	mmH ₂ 0			<0.5> - 1.5 - <3.6> - <5.1>						
	Motor type				DC Motor						
Fan	Motor output		kW		0.096						
	Driving mechanis	m			Direct-driven by motor						
			m³/min	8.0 - 9.0 - 11.0	9.5 - 11.0 - 13.0	12.0 - 14.0 - 16.5					
	Airflow rate	(Low Mid High)	L/s	133 - 150 - 183	158 - 183 - 217	200 - 233 - 275					
			cf/m	282 - 318 - 388	335 - 388 - 459	424 - 494 - 583					
Sound press in anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	28-30-33	30-32-35	30-33-36					
Insulation m	naterial				EPS, Polyethylene foam, Urethane foam						
Air filter					PP Honeycomb fabric						
Protection d	levice				Fuse						
Connectable	e outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB						
Water pipie	Matar piping diamatar *5 *6		mm ID		20						
Water piping diameter *5 *6 Outlet		Outlet	mm ID		20						
Field drain p	pipe size		mm (in.)	0.D.32 (1-1/4)	0.D.32 (1-1/4)	0.D.32 (1-1/4)					
Standard at	Standard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band							
Optional par	rt Control Box Repla	ice Kit			PAC-KE70HS-E						

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

Notes:

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

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

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

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



Model				PEFY-WP20VMA-E	PEFY-WP25VMA-E				
Power sou	rce			1-phase 220-230-2	240 V 50/60 Hz				
Capacity (Nominal) *1		kW	2.2	2.8					
Cooling	Capacity (Nomina	() - 1	BTU/h	7,500	9,600				
Cooling	Power input *2		kW	0.07	0.09				
	Current input*2		A	0.55	0.64				
	Capacity (Nomina	1/ *0	kW	2.5	3.2				
Heating	Capacity (NUIIIIIa	u) ə	BTU/h	8,500	10,900				
Treating	Power input *2		kW	0.05	0.07				
	Current input *2		A	0.44	0.53				
External fi	nish			Galvanized s	teel plate				
Extornal d	imension HxWxD		mm	250x700x732	250x900x732				
LAIGINALU			in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8				
Net weight			kg (lbs)	21 (47)	26 (58)				
Heat eych:	eat exchanger			Cross fin (Aluminium fin and copper tube)					
TIGUE GAOIN	÷	Water volume	L	0.7	1.0				
	Type $ imes$ Quantity			Sirocco fa	an x 1				
	External static pre	ic pressure *4		<35> - 50 - <70> -					
			mmH_2O	<3.6> - 5.1 - <7.1> -					
	Motor type			DC Motor					
Fan	Motor output		kW	0.08					
	Driving mechanis	m		Direct-driven					
			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 anechoi	· · · · · ·	(Low Mid High)	dB <a>	23-26-29	23-27-30				
Insulation	material			EPS, Polyethylene foa	ım, Urethane foam				
Air filter				PP Honeycor					
Protection				Fuse					
Connectat	le outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-W	M-AA, CMB-WM-V-BB				
Water nini	ng diameter *5 *6	Inlet	mm ID	20					
		Outlet	mm ID	20					
Field drair	pipe size		mm (in.)	0.D.32 (1	1-1/4)				
Standard a	dard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band					
Optional p	art Control Box Repla	ice Kit		PAC-KE91TB-E	PAC-KE92TB-E				

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

Notes:

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

2. The value are measured at the factory setting of external static pressure. 3. Nominal heating conditions – Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B.(6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: Om (Off).

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 sour	ce				1-phase 220-230-240 V 50/60 Hz				
	Canacity (Nominal) *1		kW	3.6 4.5		5.6			
Cooling	Capacity (Nomina	ll)	BTU/h	12,300	15,400	19,100			
Cooling	Power input *2		kW	0.11	0.1	4			
	Current input*2		A	0.74	1.1	5			
	Consoity (Noming	J\ *0	kW	4.0	5.0	6.3			
leating	Capacity (Nominal) *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)4			
kternal fin	ish				Galvanized steel plate				
vtornal dir	nension HxWxD		mm	250x900x732	250x1,1	00x732			
ALCI II AI UII			in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 42-5	/16 x 28-7/8			
et weight			kg (lbs)	26 (58)	31 (69)			
oat oveha	agar	Туре		Cross fin (Aluminium fin and copper tube)					
eatexchanger		L	1.0 1.8						
	${\rm Type}\times {\rm Quantity}$			Sirocco fan x 1	Sirocco	fan x 2			
	External static pre	A* arus	Pa	<35> - 50 - <70> - <100> - <150>					
	External static pre	500UC 4	mmH ₂ 0		<3.6> - 5.1 - <7.1> - <10.2> - <15.3>				
	Motor type			DC Motor					
an	Motor output		kW	0.085	0.1	21			
	Driving mechanis	m			Direct-driven by motor				
			m³/min	12.0 - 14.5 - 17.0	14.5 - 18				
	Airflow rate	(Low Mid High)	L/s	200 - 242 - 283	242 - 30				
			cf/m	424 - 512 - 600	512 - 63	6 - 742			
iound pres n anechoic	sure level (measured room)*2	(Low Mid High)	dB <a>	25-29-32	26-2	9-34			
nsulation r	naterial				EPS, Polyethylene foam, Urethane foam				
ir filter					PP Honeycomb fabric				
rotection	device				Fuse				
onnectabl	e outdoor unit/HBC C	ontroller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
lator ninin	g diameter *5 *6	Inlet	mm ID		20				
ater hihili	y ulailleter 5 0	Outlet	mm ID		20				
ield drain	eld drain pipe size mm (in.)			0.D.32 (1-1/4)					
tandard at	ndard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band					
ptional pa	rt Control Box Repla	ice Kit		PAC-KE92TB-E	PAC-KE	93TB-E			

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

Notes:

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

Nominal heating conditions – Indoor. 20°CD.8. (68°FD.8.), Outdoor: 7°CD.8./6°FD.8./43°FW.8) Pipe length: 7.5 m (24-9/16 ft.), Level difference: Om (0ft).
 The facory setting for external pressure is shown without < >. Refer to "Fan characteristics curves", according to the external pressure, in DATA BOOK for the usable range of air flow rate.
 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.



Model				PEFY-WP63VMA-E	PEFY-WP71VMA-E	PEFY-WP80VMA-E			
Power sou	rce				1-phase 220-230-240 V 50/60 Hz				
	Capacity (Nominal) *1		kW	7.1 8.0		9.0			
Cooling	Capacity (Nomina	() - 1	BTU/h	24,200	27,300	30,700			
Cooling	Power input *2		kW	0.14	0.24	l l			
	Current input*2		A	1.15	1.47	,			
	Canacity (Naming	1) *0	kW	8.0	9.0	10.0			
Heating	Capacity (Nominal) *3		BTU/h	27,300	30,700	34,100			
Heating	Power input *2		kW	0.12	0.22	2			
	Current input *2		A	1.04	1.36	;			
External fi	nish				Galvanized steel plate				
External d	imension HxWxD		mm	250x1,100x732	250x1,40	0x732			
EXTGUIUL			in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/	8 x 28-7/8			
Net weigh			kg (lbs)	31 (69)	40 (8	9)			
Heat exch	angor	Туре		Cross fin (Aluminium fin and copper tube)					
HEAL EXUIN	liigei	Water volume	L	2.0 2.6					
	Type $ imes$ Quantity				Sirocco fan x 2				
	External static pre	200uro */	Ра	<35> - 50 - <70> - <100> - <150>					
	External static pre	:55UIC 4	mmH ₂ 0		<3.6> - 5.1 - <7.1> - <10.2> - <15.3>				
	Motor type			DC Motor					
Fan	Motor output		kW	0.121	0.24	4			
	Driving mechanis	m			Direct-driven by motor				
			m ³ /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	- 1,165			
	ssure level (measured c room)*2	(Low Mid High)	dB <a>	26-29-34	28-33-	-37			
Insulation	material				EPS, Polyethylene foam, Urethane foam				
Air filter					PP Honeycomb fabric				
Protection	ction device		Fuse						
Connectal	nnectable outdoor unit/HBC Controller		Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB						
Watar pipi	nining diameter *5 *6		mm ID	30					
Water piping diameter *5 *6 Outlet		mm ID		30					
Field drair	pipe size		mm (in.)		0.D.32 (1-1/4)				
Standard a	indard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band					
	art Control Box Repla			PAC-KE93TB-E	PAC-KE9	4TB-E			

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

Notes:

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

2. The value are measured at the factory setting of external static pressure. 3. Nominal heating conditions – Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B.(6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: Om (Off).

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	rce			1-phase 220-230-24	10 V 50/60 Hz				
	Our stille (Norsia	-1) *4	kW	11.2	14.0				
Cooling	Capacity (Nomina	al) " I	BTU/h	38,200	47,800				
Cooling	Power input *2	Power input *2		0.24	0.36				
	Current input*2		A	1.47	2.21				
	Capacity (Nomina) * 0	kW	12.5	16.0				
Heating	Gapacity (NUTITI	1) 5	BTU/h	42,700	54,600				
neating	Power input *2		kW	0.22	0.34				
	Current input *2		A	1.36	2.10				
External fi	nish			Galvanized ste	el plate				
Evternal d	imension HxWxD		mm	250x1,400x732	250x1,600x732				
External u			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)				
Heat eych:	eat exchanger			Cross fin (Aluminium fin and copper tube)					
TIGUL CAUT	aligoi	Water volume	L	2.6	3.0				
	$Type \times Quantity$			Sirocco fan					
	External Static Pr	Il Static Pressure *4		<35> - 50 - <70> - <					
	External otation	000010 4	mmH ₂ O	<3.6> - 5.1 - <7.1> - <	<10.2> - <15.3>				
	Motor type			DC Motor					
Fan	Motor output		kW	0.244					
	Driving mechanis	m		Direct-driven b	,				
			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				
in anechoi	/	(Low Mid High)	dB <a>	28-33-37	32-36-40				
Insulation	material			EPS, Polyethylene foam	ı, Urethane foam				
Air filter				PP Honeycomi	b fabric				
Protection				Fuse					
Connectat	ole outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-WM-	AA, CMB-WM-V-BB				
Water nini	ter piping diameter *5 *6		mm ID	30					
	Uuliel		mm ID	30					
Field drair			mm (in.)	0.D.32 (1-	,				
	dard attachment Accessory			Insulation pipe for water pipe, Washer, Drain hose, Tie Band					
Optional p	art Control Box Repla	ace Kit		PAC-KE94TB-E	PAC-KE95TB-E				

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

Notes:

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

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



Model				PEFY-WL40VMHS-A	PEFY-WL50VMHS-A	PEFY-WL63VMHS-A	PEFY-WL71VMHS-A		
Power sourc	e				1-phase 220-230)-240 V 50/60 Hz			
	Oran the Alexandre	-1\ *d	kW	4.5	5.6	7.1	8.0		
Veeline	Capacity (Nominal) *1		BTU/h	15,400	19,100	24,200	27,300		
Cooling	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		
	Capacity (Nomina	N * 2	kW	5.0	6.3	8.0	9.0		
Heating	Capacity (NOTITIA	11) 0	BTU/h	17,100	21,500	27,300	30,700		
reating	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 finis	sh				Galvanized	steel plate			
	ension HxWxD		mm		380 x 745 x 900		380 x 1,030 x 900		
.Aternar unn			in.		15 x 29-3/8 x 35-7/16				
Net weight			kg (lbs)	35		36 (80)	45 (100)		
Heat exchani	ger	Туре			Cross fin (Aluminium fin and copper tube)				
	Water volume L		L	1.4		1.			
	Type imes Quantity				Sirocco fan x 1		Sirocco fan x 2		
	External static pressure *4		Pa		50 - <100> - <				
	L		mmH ₂ 0		5.1 - <10.2> - <				
	Motor type				DC N				
an	Motor output		kW	0.121 Diset drive human					
	Driving mechanis	m	37 .	Direct-driven by motor					
	A1 0 1		m ³ /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		
•••••	ure level (measured		cf/m	353 - 424 - 494	459 - 530 - 636	477 - 565 - 671	547 - 636 - 777		
in anechoic i	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		
nsulation m	aterial				Polystyrene foam, Polyeth				
Air filter				Opt		ong life filter) and filter box are recommend	ed.		
Protection de						se			
Connectable	e outdoor unit/HBC C				Hybrid City Multi CMB-V				
Nater nining	diameter *5 *6	Inlet	mm ID	2		31			
11 0		Outlet	mm ID	2		31)		
ield drain p			mm (in.)		0.D.32	(.)			
Standard atta	achment Accessor	y.			Washer, Drain	1			
	Drain pump kit				PAC-DRF	210DP-E2			
Optional par	Long life filter				PAC-KE86LAF		PAC-KE88LAF		
sparonai pur	Filter box				PAC-KE63TB-F		PAC-KE99TB-F		
	Valve kit*7				PAC-SK	35VK-E			

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

Notes:

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

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

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

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

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 VLmodel 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 sourc	e				1-phase 220-230-240 V 50/60 Hz			
	Canacity (Marris	al) *1	kW	9.0	11.2	14.0		
Cooling	Capacity (Nomina	apacity (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		
	Canacity (Marrin	al) *0	kW	10.0	12.5	16.0		
Heating	Capacity (Nomin	al) 3	BTU/h	34,100	42,700	54,600		
Heating	Power input *2		kW	0.090	0.160	0.175		
	Current input *2		A	0.63-0.61-0.58	1.05-1.01-0.96	1.17-1.13-1.09		
External finis	sh			Galvanized steel plate				
Extornal dim	ension HxWxD		mm	380 x 1,030 x 900	380 x 1,195	i x 900		
LALEITIAI UIIII			in.	15 x 40-9/16 x 35-7/16	15 x 47-1/16 >	35-7/16		
Net weight			kg (lbs)	45 (100)	51 (113)	53 (117)		
Heat exchan	aar	Туре			Cross fin (Aluminium fin and copper tube)			
lieal excilai	yei	Water volume	L	1.8	2.3	2.9		
	Type $ imes$ Quantity				Sirocco fan x 2			
	External static pressure *4		Ра		50 - <100> - <150> - <200>			
	External static pr	essure 4	mmH ₂ 0		5.1 - <10.2> - <15.3> - <20.4>			
	Motor type				DC Motor			
Fan	Motor output	Notor 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		
	Airflow rate	(Low Mid High)	L/s	300 - 358 - 417	- 358 - 417 442 - 533 - 633			
			cf/m	636 - 759 - 883	936 - 1,130	- 1,342		
Sound press in anechoic i	ure level (measured room)*2	(Low Mid High)	dB <a>	26-29-32	28-32-	36		
Insulation m	aterial				EPS, Polyethylene foam, Urethane foam			
Air filter				Option:Synthetic	fiber unwoven cloth filter (long life filter) and fil-ter box are	recommended.		
Protection d	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			
water piping	ulailletei J U	Outlet	mm ID		30			
Field drain p			mm (in.)		0.D.32 (1-1/4)			
Standard att	achment Accessor	у			Washer, Drain hose, Tie band			
	Drain pump kit				PAC-DRP10DP-E2			
Optional par	Long life filter			PAC-KE88LAF	PAC-KE8	9LAF		
ορτιντιαι μαι	Filter box			PAC-KE99TB-F	PAC-KE14	OTB-F		
	Valve kit*7				PAC-SK35VK-E			

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

Notes:

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

2. The value are measured at the factory setting of external static pressure. 3. Nominal heating conditions – Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 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 sour	се				1-phase 220-240 V 50Hz				
	Conscilu (Mamin	al) *1	kW	2.2	2.8	3.6			
0	Capacity (Nomin	iai) " i	BTU/h	7,500	9,600	12,300			
Cooling	Power input	Power input			0.03				
	Current input			0.26	0.29	0.33			
	0 11 01 1	0.00	kW	2.5	3.2	4.0			
He effect	Capacity (Nomin	al) "2	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				
E			mm		258 x 840 x 840				
External dir	mension HxWxD		in.		10-3/16 x 33-1/16 x 33-1/16				
Net weight			kg (lbs)	1	8 (40)	20 (44)			
		Model			PLP-6EA				
		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)					
	Type				Cross fin (Aluminium fin and copper tube)				
Heat exchai			L		1.0	1.8			
	Type × Quantity	Type \times Quantity			Turbo Fan x 1				
	External static pr	External static pressure			0				
	Motor type	Motor type		DC Motor					
-	Motor output		kW	0.05					
Fan	Driving mechani	sm			Direct-driven by motor				
			m ³ /min	12 - 13 - 14 - 15	12 - 13 - 15 - 17	14 - 15 - 16 - 17			
	Airflow rate (Low	-Mid1-Mid2-High)	L/s	200 - 217 - 233 - 250	200 - 217 - 250 - 283	233 - 250 - 267 - 283			
			cf/m	424 - 459 - 494 - 530	424 - 459 - 530 - 600	494 - 530 - 565 - 600			
Sound pres	sure level (Low-Mid1	-Mid2-High)	dB <a>	24 - 26 - 27 - 28	24 - 26 - 28 - 30	26 - 27 - 29 - 30			
Insulation r	naterial				PS				
Air filter					PP Honeycomb				
Protection	device				Fuse				
Refrigerant	control device				-				
	le outdoor unit/HBC (Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
		Inlet	mm ID		20				
Water pipin	ig diameter *3 *4	Outlet	mm ID		20				
Field drain	pipe size		mm (in.)		0.D.32 (1-1/4)				
	Decoration pane	*5			PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE				
Optional	i-See Sensor co				PAC-SE1ME-E				
parts	Wirelss signal re				PAR-SE9FA-E				
	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:

- 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.)
 Bo ever the includ evel on a the webe evel at the evel of the set of
- 3. Be sure to install a valve on the water outlet.

- 6. Use of a standard tarter of 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.
 7. Determine with the transmission of 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	се				1-phase 220-240 V 50Hz			
	Capacity (Nomin	aal\ *1	kW	4.5	5.6	7.1		
Cooling	Gapacity (Norrin	lidi) i	BTU/h	15,400	19,100	24,200		
Cooling	Power input		kW	0.03 0.04				
	Current input		A	0.35	0.4	40		
	Conscilu (Nomi	aal\ *0	kW	5.0	8.0			
laating	Capacity (Nomin	lial) Z	BTU/h	17,100	21,500	27,300		
Heating	Power input		kW	0.03	0.0	04		
	Current input		A	0.29	0.1	34		
xternal fin	ish				Galvanized steel sheet			
Eutornal die	nension HxWxD		mm	258 x 8	40 x 840	298 x 840 x 840		
zxternar dir	nension hxwxd		in.	10-3/16 x 33	-1/16 x 33-1/16	11-3/4 x 33-1/16 x 33-1/16		
Net weight			kg (lbs)	20	(44)	23 (51)		
		Model			PLP-6EA			
		External finish			MUNSELL (1.0Y 9.2/0.2)			
Decoration	panel	Dimensions	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)			
	eat exchanger				Cross fin (Aluminium fin and copper tube)			
Heat exchai	nger	Water volume	L		1.8	2.1		
	Type × Quantity	Type $ imes$ Quantity			Turbo Fan x 1			
	External static p	External static pressure			0			
	Motor type	Motor type		DC Motor				
an	Motor output		kW	0.05 0.1				
FdII	Driving mechani	ism			Direct-driven by motor			
			m ³ /min	14 - 15 - 16 - 17	14 - 16 - 18 - 20	15 - 17 - 19 - 21		
	Airflow rate (Lov	v-Mid1-Mid2-High)	L/s	233 - 250 - 267 - 283	233 - 267 - 300 - 333	250 - 283 - 317 - 350		
			cf/m	494 - 530 - 565 - 600	494 - 565 - 636 - 706	530 - 600 - 671 - 742		
Sound pres	sure level (Low-Mid	1-Mid2-High)	dB <a>	26 - 28 - 29 - 31	27 - 29 -	- 31 - 33		
nsulation n	naterial				PS			
Air filter					PP Honeycomb			
Protection (device				Fuse			
Refrigerant	control device				-			
Connectabl	e outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Notor nin'-	a diamatar *0 *4	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	ntrol panel			PAC-SE1ME-E			
parts	Wirelss signal re	eceiver			PAR-SE9FA-E			
	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:

- 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.)
 Page user include user to explore outled.
- 3. Be sure to install a valve on the water outlet.

- 6. Botal is divide a function in a function in the pipe next to the valve to remove the foreign matters.
 5. PLFY-WL-YEM-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.
 7. Pleter wave with the there is the pipe 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



Power source	Model			PLFY-WL80VEM-E	PLFY-WL100VEM-E	PLFY-WL125VEM-E			
					1-phase 220-240 V 50Hz				
	Our still (North	-11 *4	kW	9.0	11.2	14.0			
0 1	Capacity (Nomin	al) " 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 (Nomin	al) *2	BTU/h	34,100	42,700	54,600			
Heating	Power input		kW	0.05	0.08	0.11			
	Current input		A	0.40	0.60	0.99			
External finish					Galvanized steel sheet				
			mm	298 x 840 x 840					
External dime	ension HxWxD		in.		11-3/4 x 33-1/16 x 33-1/16				
Net weight			kg (lbs)		23 (51)	25 (55)			
		Model	5()		PLP-6EA	()			
		External finish			MUNSELL (1.0Y 9.2/0.2)				
Decoration pa	anel		mm		40 x 950 x 950				
		Dimensions in.		1-9/16 x 37-13/32 x 37-13/32					
		Net weight	kg (lbs)	1-9/10 X 3/-13/32 X 3/-13/32 5 (11)					
	Τνηρ		5()		Cross fin (Aluminium fin and copper tube)				
Heat exchang	ler	Water volume	L	2.1	2.2	3.1			
	Type \times Quantity				Turbo Fan x 1				
	External static pressure		Ра	0					
	Motor type			DC Motor					
_	Motor output		kW	0.12					
Fan	Driving mechanis	sm			Direct-driven by motor				
			m ³ /min	15 - 18 - 21 - 23	19 - 23 - 26 - 30	20 - 25 - 30 - 35			
	Airflow rate (Low	-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 pressu	ure level (Low-Mid1	-Mid2-High)	dB <a>	27 - 30 - 33 - 35	31 - 35 - 37 - 40	33 - 37 - 40 - 46			
Insulation ma		0 /			PS				
Air filter					PP Honeycomb				
Protection dev	vice				Fuse				
Refrigerant co	ontrol device				-				
Connectable /	outdoor unit/HBC C	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
		Inlet	mm ID		30				
Water piping (diameter *3 *4	Outlet	mm ID		30				
Field drain pig	pe size		mm (in.)		0.D.32 (1-1/4)				
· bit	Decoration panel	*5	<u> </u>		PLP-6EA/PLP-6EAE/PLP-6EAL/PLP-6EALE				
Optional	i-See Sensor cor				PAC-SE1ME-E				
parts	Wirelss signal re				PAR-SE9FA-E				
	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:

- 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.)
 Bo ever the include use on the weter outled events.
- 3. Be sure to install a valve on the water outlet.

- 6. Bostion to make a value of the pipe next to the value 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 value kit on all WL-type indoor units. When the value 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 value kit is 5 meters.
 7. Diverse units the same system in the value 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 sour	ce			1-phase 220-	-240 V 50Hz		
	Our stille (Normi	11 *4	kW	1.2	1.7		
0	Capacity (Nomin	nai) " i	BTU/h	4,100	5,800		
Cooling	Power input		kW	0.0	12		
	Current input		A	0.23	0.24		
	Our stille (News)	1) *0	kW	1.4	1.9		
Heating	Capacity (Nomin	nal) "Z	BTU/h	4,800	6,500		
Heating	Power input		kW	0.0	12		
	Current input		A	0.17	0.18		
External fin	ish			Galvanized	steel sheet		
External di	nension HxWxD		mm	208 x 57	0 x 570		
External un	IIEIISIUII HXWXD		in.	8-1/4x22-1	/2x22-1/2		
Net weight			kg (lbs)	13 (.	29)		
		Model		SLP-2F/	A(L)(E)		
		External finish		MUNSELL (1.	.0Y 9.2/0.2)		
Decoration	panel	Dimensions	mm	10 x 625 x 625			
		DIIIIelisiolis	in.	3/8 x 24-5/	8 x 24-5/8		
	Net weight		kg (lbs)	3 (7)		
Heat excha	Туре			Cross fin (Aluminium	fin and copper tube)		
i ledi exulid	iyei	Water volume	L	0.	5		
	Type $ imes$ Quantity	Type $ imes$ Quantity		Turbo F	an x 1		
	External static p	ressure	Pa	0			
	Motor type			DC Motor			
Fan	Motor output		kW	0.05			
1 all	Driving mechani	ism		Direct-drive			
	Airflow rate (Lov	w Mid Llich)	m³/min	6.0 - 6.5 - 7.0	6.0 - 7.0 - 8.0		
	AITTIOW Tate (LOV	v-ivilu-Higil)	L/s	100 - 108 - 117	100 - 117 - 133		
			cf/m	212 - 230 - 247	212 - 247 - 282		
Sound pres	sure level (Low-Mid	-High)	dB <a>	25 - 26 - 27	25 - 26 - 29		
Insulation r	naterial			PS			
Air filter				PP Hone			
Protection				Fus			
Connectab	e outdoor unit/HBC	Controller		Hybrid City Multi CMB-W	/M-AA, CMB-WM-V-BB		
Water ninin	g diameter *3 *4	Inlet	mm ID	20			
	·	Outlet	mm ID	20			
Field drain			mm (in.)	0.D.32 (1-1/4)			
	Decoration pane			SLP-2FA/SLP-2FAE/S			
Optional	i-See Sensor co			PAC-SF			
parts	Wireless signal	receiver			PAR-SF9FA-E		
	Valve kit *6			PAC-SK	35VK-E		

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

Notes:

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

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.

Compact Ceiling Cassette



Model				PLFY-WL20VFM-E	PLFY-WL25VFM-E		
Power sourc	e			1-phase 220	-240 V 50Hz		
	Oracity (Marrie	-1) *4	kW	2.2	2.8		
0	Capacity (Nomin	iai) " i	BTU/h	7,500	9,600		
Cooling	Power input		kW	0.02	0.03		
	Current input		A	0.26	0.29		
	0 1 01 1	11 *0	kW	2.5	3.2		
Hasting	Capacity (Nomir	iai) "Z	BTU/h	8,500	10,900		
Heating	Power input		kW	0.02	0.03		
	Current input		A	0.20	0.23		
External fini	sh			Galvanized	steel sheet		
Extornal dir	nension HxWxD		mm	208 x 57	'0 x 570		
EXTGUIU UII	IEIISIOII HXWXD		in.	8-1/4x22-1	/2x22-1/2		
Net weight			kg (lbs)	14 (31)		
		Model		SLP-2F	A(L)(E)		
		External finish		MUNSELL (1	.0Y 9.2/0.2)		
Decoration p	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 exchan	aar	Туре		Cross fin (Aluminium	fin and copper tube)		
TIEAL EXUIIAII	iyei	Water volume	L	0.	9		
	Type $ imes$ Quantity	Type $ imes$ Quantity		Turbo I	an x 1		
	External static p	External static pressure Pa		0			
	Motor type			DC Motor			
Fan	Motor output		kW	0.)5		
1 all	Driving mechani	sm		Direct-drive			
	Airflow rate (Low	(Mid High)	m³/min	6.5 - 7.0 - 8.0	6.5 - 7.5 - 9.0		
	AITTOW Tale (LOW	(-iviiu-nigii)	L/s	108 - 117 - 133	108 - 125 - 150		
			cf/m	230 - 247 - 282	230 - 265 - 318		
	sure level (Low-Mid-	-High)	dB <a>	27 - 29 - 31	27 - 30 - 34		
Insulation m	naterial			Р			
Air filter				PP Hon			
Protection d				Fu			
Connectable	e outdoor unit/HBC (Controller		Hybrid City Multi CMB-V			
Water nining	g diameter *3 *4	Inlet	mm ID	2			
		Outlet	mm ID	2			
Field drain p			mm (in.)	0.D.32	. ,		
Optional	Decoration Pane			SLP-2FA/SLP-2FAE/S			
parts	i-See Sensor co			PAC-SF			
·	Wireless Signal	Receiver		PAR-SI			
	Valve kit *6			PAC-SK	PAC-SK35VK-E		

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

Notes:

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

- 4. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.
- 5. PLFY-WL-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.
 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 sou	ce			1-phase 220	-240 V 50Hz		
	0	-1) *4	kW	3.6	4.5		
0	Capacity (Nomin	al) " I	BTU/h	12,300	15,400		
Cooling	Power input		kW	0.04	0.05		
	Current input	Current input		0.38	0.46		
	Our stille (Marsin	-1) *0	kW	4.0	5.0		
Handlern	Capacity (Nomin	al) "2	BTU/h	13,600	17,100		
Heating	Power input		kW	0.04	0.05		
	Current input		A	0.32	0.40		
External fir	ish			Galvanized	steel sheet		
External di	mension HxWxD		mm	208 x 5	70 x 570		
EXTGUIU	IIIEIISIOII HXWXD		in.	8-1/4x22-1	1/2x22-1/2		
Net weight			kg (lbs)	14	(31)		
		Model		SLP-2F	A(L)(E)		
		External finish		MUNSELL (1	.0Y 9.2/0.2)		
Decoration	panel	Dimonoiono	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	naor	Туре		Cross fin (Aluminium	fin and copper tube)		
meat excita	liger	Water volume	L	0	9		
	Type $ imes$ Quantity	Type $ imes$ Quantity		Turbo	Fan x 1		
	External static p	essure	Pa	0			
	Motor type			DC Motor			
Fan	Motor output		kW	0.	05		
I dii	Driving mechani	sm		Direct-drive	en by motor		
	Airflow roto /l.ou	Med Heals	m³/min	6.5 - 9.0 - 12.0	6.5 - 11.5 - 13.0		
	Airflow rate (Low	r-Iviia-Higii)	L/s	108 - 150 - 200	108 - 192 - 217		
			cf/m	230 - 318 - 424	230 - 406 - 459		
Sound pres	sure level (Low-Mid-	High)	dB <a>	27 - 33 - 41	27 - 40 - 43		
Insulation	material			Р			
Air filter				PP Hon	eycomb		
Protection				Fu			
Connectab	le outdoor unit/HBC (Controller		Hybrid City Multi CMB-V	VM-AA, CMB-WM-V-BB		
Water ninii	ıg diameter *3 *4	Inlet	mm ID	2			
		Outlet	mm ID	2	0		
Field drain			mm (in.)		0.D.32 (1-1/4)		
Optional	Decoration Pane			SLP-2FA/SLP-2FAE/S			
parts	i-See Sensor co				PAC-SF1ME-E		
F 10	Wireless Signal	Receiver		PAR-SF9FA-E			
				PAC-SK	35VK-E		

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

Notes:

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

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

5. PLFY-WL-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.
 6. When using the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.
 7. Please group units that operate on 1 branch.

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

Wall Mounted



Model				PKFY-WL10VLM-E	PKFY-WL15VLM-E	PKFY-WL20VLM-E		
Power sour	ce				1-phase 220-240 V 50Hz			
	Capacity (Nomi	aal) *1	kW	1.2	1.7	2.2		
Cooling	Capacity (Noriii	iai) i	BTU/h	4,100	5,800	7,500		
Cooling	Power input		kW	0.	02	0.03		
	Current input		A	0.	20	0.25		
	Canacity (Nami	al) *0	kW	1.4	1.9	2.5		
Lasting	Capacity (Nomi	idi) Z	BTU/h	4,800	6,500	8,500		
Heating	Power input		kW	0.	01	0.02		
	Current input		A	0	.15	0.20		
External fin	iish				Plastic (0.7PB 9.2/0.4)			
Evtornal diu	mension HxWxD		mm		299 x 773 x 237			
.Atëllidi Uli			in.		11-25/32 x 30-7/16 x 9-11/32			
Net weight			kg (lbs)		11 (25)			
Heat exchai	Туре			Cross fin (Aluminium fin and copper tube)				
iteat excitat	liyei	Water volume	L	C	.6	0.7		
	Type × Quantity External static pressure Pa				Line Flow Fan x 1			
	External static p	External static pressure			0			
	Motor type			DC Motor				
Fan	Motor output		kW		0.03			
an	Driving mechan	sm		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 n	material				Polyethylene Sheet			
Air filter					PP Honeycomb			
Protection (Fuse			
Connectabl	le outdoor unit/HBC	Controller			Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Nater ninin	ng diameter *3 *4	Inlet	mm ID		20			
	0	Outlet	mm ID		20			
Field drain			mm (in.)		I.D.16 (5/8)			
Optional	Drain Pump Kit				PAC-SK01DM-E			
Parts	Valve Kit *5				PAC-SK35VK-E			

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

Notes:

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

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

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

meters. * Please group units that operate on 1 branch.

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

Wall Mounted



Model				PKFY-WL25VLM-E	PKFY-WL32VLM-E	PKFY-WL40VLM-E		
Power sour	rce				1-phase 220-240 V 50Hz			
	Capacity (Nomi	nol\ *1	kW	2.8	3.6	4.5		
Cooling	Capacity (NOTII	nai) i	BTU/h	9,600 12,300		15,400		
Cooling	Power input	Power input		0.04	1	0.05		
	Current input		A	0.35	5	0.45		
	Capacity (Nomi	nol) *0	kW	3.2	4.0	5.0		
Heating	Capacity (NOIIII	lidl) Z	BTU/h	10,900	13,600	17,100		
rieating	Power input		kW	0.03	3	0.04		
	Current input		A	0.30)	0.40		
External fir	nish				Plastic (0.7PB 9.2/0.4)			
Evtornal di	mension HxWxD		mm	299 x 773 x 237	299 x 89	8 x 237		
LAIGIIIAI UI			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			kg (lbs)	11 (25)	13 (29)		
Hostovcha	Heat exchanger			Cross fin (Aluminium fin and copper tube)				
TICAL CAUTA	liigei	Water volume	L	0.7	1.0	1.1		
	Type $ imes$ Quantit	Type $ imes$ Quantity			Line Flow Fan x 1			
	External static pressure		Pa	0				
	Motor type			DC Motor				
Fan	Motor output		kW		0.03			
1 un	Driving mechan	ism		Direct-Drive				
	Airflow rate (Lo	w Mid High)	m³/min	4.0 - 5.4 - 7.0 - 8.4	6.3 - 7.6 - 9.0 - 10.4	6.4 - 8.2 - 10.0 - 11.9		
	AITTOW Tale (LU	w-ivilu-riliyil)	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		
	ssure level (Low-Mid	-High)	dB <a>	22 - 30 - 36 - 41	29 - 34 - 38 - 41	30 - 36 - 41 - 45		
Insulation	material				Polyethylene Sheet			
Air filter					PP Honeycomb			
Protection					Fuse			
Connectab	le outdoor unit/HBC				Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Water ninir	Water piping diameter *3 *4				20			
		Outlet	mm ID		20			
Field drain			mm (in.)	I.D.16 (5/8)				
Optional	Drain Pump Kit				PAC-SK01DM-E			
Parts	Valve Kit *5				PAC-SK35VK-E			

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

Notes:

1. Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B./19°CW.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft). 2. Nominal heating conditions – Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0m (0ft).

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

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

5. When using the W-type and the WL-type indoor units in the same system, installed 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.

Wall Mounted



Model				PKFY-WL50VKM-E	PKFY-WL63VKM-E	PKFY-WL80VKM-E		
Power sou	rce				1-phase 220-240 V 50Hz			
	Canacity (Nami	vol\ *1	kW	5.6	7.1	9.0		
) l'	Capacity (Nomi	Ial) 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		
	Canacity (Nami	nal) *0	kW	6.3	8.0	10.0		
leating	Capacity (Nomi	Ial) Z	BTU/h	21,500	27,300	34,100		
eating	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)			
vtornal di	mension HxWxD		mm		365 x 1170 x 295			
			in.	14-3/8 x 46-1/16 x 11-5/8				
√et weight	let weight kg (lbs)		kg (Ibs)		20 (44)			
loat oveh:	Type			Cross fin (Aluminium fin and copper tube)				
ισαι σλοπο	•	Water volume	L	2.0				
	Type $ imes$ Quantity				Line Flow Fan x 1			
		External static pressure			0			
		Motor type		DC Motor				
an	Motor output		kW		0.069			
un	Driving mechan	sm			Direct-Drive			
	Airflow rate (Lov	v_Mid_High)	m³/min	18 - 20	18 - 22	18 - 26		
	AITTOW TALE (LOI	v=iviiu=i iigii)	L/s	300 - 333	300 - 367	300 - 433		
			cf/m	636 - 706	636 - 777	636 - 918		
	ssure level (Low-Mid	-High)	dB <a>	39 - 42	39 - 45	39 - 49		
nsulation	material				Polyethylene Sheet			
ir filter					PP Honeycomb			
rotection					Fuse			
onnectab	le outdoor unit/HBC				Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
later nini	ng diameter *3 *4	Inlet	mm ID	20	30			
		Outlet	mm ID	20	30			
eld drain	pipe size		mm (in.)		I.D.16 (5/8)			
ptional	Drain Pump Kit				PAC-SK19DM-E			
arts	Valve Kit *5				PAC-SK35VK-E			

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

Notes:

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

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

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

* Please group units that operate on 1 branch.

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

Floor Standing Concealed



Model				PFFY-WP20VLRMM-E	PFFY-WP25VLRMM-E	PFFY-WP32VLRMM-E		
Power sourc	e				1-phase 220-230-240 V 50/60 Hz			
	Consoity (Nomin		kW	2.2	2.8	3.6		
Cooling	Capacity (Nomina	11) 1	BTU/h	7,500	9,600	12,300		
Cooling	Power input *2		kW	0.	040	0.050		
	Current input *2		A	0	.35	0.47		
	Capacity (Nomina	1) *0	kW	2.5	3.2	4.0		
Heating	Gapacity (NOTITIN	ii) S	BTU/h	8,500	10,900	13,600		
Heating	Power input *2		kW	0.	040	0.050		
	Current input *2		A	0	.35	0.47		
External fini	sh				Galvanized steel plate			
External dir	nension HxWxD		mm	639 x 886 x 220	639 x 1,0	006 x 220		
EXTERNALOU	IEIISIOII HXWXD		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			kg (lbs)	22 (49)	25	(56)		
Heat exchan	Туре				Cross fin (Aluminium fin and copper tube)			
neal excitati	iyei	Water volume	L	0.9	1	1.3		
	Type $ imes$ Quantity			Sirocco Fan x 1 Sirocco Fan x 2				
	External static pressure *4		Pa	20 - <40> - <60>				
	External static pr	External static pressure ^4		2.0 - <4.1> - <6.1>				
	Motor type			DC Motor				
Fan	Motor output		kW	0.096				
	Driving mechanis	m			Direct-driven by motor			
	Al-flow role (Low	MEL TRUES	m³/min	4.5 - 5.0 - 6.0	6.0 - 7.0 - 8.0	7.5 - 9.0 - 10.5		
	Airflow rate (Low-	-Mia-Hign)	L/s	75 - 83 - 100	100 - 117 - 133	125 - 150 - 175		
			cf/m	159 - 177 - 212	212 - 247 - 282	265 - 318 - 371		
Sound press in anechoic	sure level (measured room)*2	(Low-Mid-High)	dB <a>	31 - 3	33 - 38	31 - 35 - 38		
Insulation m	naterial				Polyethylene foam, Urethane foam			
Air filter					PP Honeycomb fabric			
Protection d	levice				Fuse			
Connectable	e outdoor unit/HBC C	ontroller		Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB				
Water pipier	g diameter *3 *4	Inlet	mm ID	20				
water pipilit	y ulailletei 34	Outlet	mm ID		20			
Field drain p	pipe size		mm (in.)	I.D.26 (1) <accessory (1-3="" (13="" (top="" 0.d.20="" 0.d.27="" 16))="" 32)="" end:="" hose=""></accessory>				
Standard att	tachment Accessor	y		Insulation pipe for wate	r pipe, Drain hose (flexible joint), Screw plate, Level adju	usting screw, Hose band		

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

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: Om (0ft).

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

3. Nominal heating conditions - Indoor: 20°CD.B.(68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 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. 6. Be sure to install a valve on the water outlet.6. Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.

7. Please group units that operate on 1 branch.

Floor Standing Concealed



Model				PFFY-WP40VLRMM-E	PFFY-WP50VLRMM-E		
Power source				1-phase 220-230-240 V 50/60 Hz			
Cooling	Consoity (Nomin	Capacity (Nominal) *1		4.5	5.6		
	Gapacity (NUTITI			15,400	19,100		
Cooling	Power input *2	Power input *2		0.050	0.070		
	Current input *2	Current input *2		0.47	0.65		
Heating	Canacity (Nomin	Capacity (Nominal) *3		5.0	6.3		
	Gapacity (NUTITI			17,100 21,500			
Ticating	Power input *2	Power input *2		0.050	0.070		
	Current input *2	Current input *2		0.47	0.65		
External fi	External finish			Galvanized steel plate			
External dimension HxWxD			mm	639 x 1,246 x 220			
LATELLIAL UITTELISTOLL FIX WXD			in.	25-3/16 x 49-1/16 x 8-11/16			
Net weigh	t		kg (lbs)	29 (64)			
Heat exch	anner	Туре		Cross fin (Aluminium fin and copper tube)			
TTGAL GAUT	angoi	Water volume		1.5			
	Type $ imes$ Quantity	Type $ imes$ Quantity		Sirocco Fan x 2			
	External static nr	External static pressure *4		20 - <40> - <60>			
				2.0 - <4.1> - <6.1>			
	Motor type		kW	DC Motor			
Fan		Motor output		0.096			
	Driving mechanis	m	m³/min		Direct-driven by motor		
	Airflow rate (Low	Airflow rate (Low-Mid-High)		8.0 - 10.0 - 11.5	10.5 - 13.0 - 15.0		
	AITIOW TALE (LOW			133 - 167 - 192	175 - 217 - 250		
				282 - 353 - 406	371 - 459 - 530		
	essure level (measured ic 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				Fuse			
Connectable outdoor unit/HBC Controller				Hybrid City Multi CMB-WM-AA, CMB-WM-V-BB			
Water nining diameter *2 *4 Inlet mm ID			mm ID	20			
Water piping diameter *3 *4		Outlet	mm ID	20	20		
Field drain pipe size mm (in.)			mm (in.)	I.D.26 (1) <accessory (1-3="" (13="" (top="" 0.d.20="" 0.d.27="" 16))="" 32)="" end:="" hose=""></accessory>			
Standard attachment Accessory				Insulation pipe for water pipe, Drain hose (flexible joint), Screw plate, Level adjusting screw, Hose band			
1 /							

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

Notes:

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

3. Nominal beating 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. 6. Be sure to install a value on the water outlet.6. Install a strainer (40 mesh or more) on the pipe next to the value 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 source				1-phase 220-230-240 V 50/60 Hz					
Cooling	0 11 (11	. 1. *4	kW	2.2	2.8	3.6	4.5	5.6	
	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		А	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 mm 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)	29.5	29.5 (67) 30 (67) 35 (78)		(78)		
		Туре		Cross fin (Aluminium fin and copper tube)			be)		
Heat excha	nger	Water volume L		0.8 1.0		1.0	1.3		
	Type $ imes$ 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		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	
		(Low-Mid-High)		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 (measured in anechoic room)		(Low-Mid- High)	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	material			Polyethylene foam, Urethane foam					
Air filter				PP Honeycomb fabric					
Protection device				Fuse					
Connectable outdoor unit/HBC Controller				CMB-WM-V-AA, CMB-WM-FAA, CMB-WM-V-BB					
Water piping diameter *4 *5		Inlet	mm ID	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					

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

Notes:

Nominal cooling conditions – Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
 Nominal heating conditions – Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.).
 The values in () show the height of unit with leg.
 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





Exclusive New Zealand Partner Since 1981



ve New Zealand

PLEASE LOOK AFTER THE ENVIRONMENT AND RECYCLE

PUBLISHED JUN 2024