

# VRF Systems


## Outdoor units

### Air condensed


#### SMALL Y COMPACT LINE

PUMY-SP Y(V)KM (-BS)  42

#### SMALL Y LINE

PUMY-P Y(V)KM (-BS)  48

#### SMALL Y (HIGH CAPACITY) LINE

PUMY P200 YKM (-BS) / PUMY P250/300 YBM (BS)  52


#### Y ZUBADAN LINE

PUHY-HP Y(S)NW-A  58

#### Y NEXT STAGE LINE

PUHY-(E)P Y(S)NW-A2(-BS)  64

#### R2 NEXT STAGE LINE

PURY-(E)P Y(S)NW-A2(-BS)  74



## Water condensed

WY WR2 LINE

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PQH(R)Y-P Y(S)LM-A1 82

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## BC controllers for R2/WR2 lines





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CMB-M V-J1/V-JA1/V-KB1, CMB-P V-KA1 90







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## Refrigerant piping length

96

		Line				
		Model	PUMY-SP-Y(V)KM	PUMY-P-Y(V)KM	PUMY P-YKM/YBM	PUHY-P-Y(S)NW-A2
Technology	Inverter-driven compressor technology	•	•	•	•	
	IH warmer				•	
	Flat tube Heat exchanger					
Function	Operation mode	COP priority mode				•
		Low noise mode	•	•	•	50, 60, 70, 85, 100%
		Auto-shift mode				•
		Dual set point	•	•	•	•
	Energy efficiency control	Evaporating temperature control (Fixed temperature control irrespective of the ΔT)				+6°C, +9°C, +14°C
		Evaporating temperature control (Automatic control shifting according to the ΔT)				4 patterns
		High sensible heat operation (during cooling)				•
		Demand control	4 steps	4 steps	4 steps	12 steps
	Defrosting	Continuous heating operation				•
		Pre-heat defrost				•
	External static pressure	Selectable external static pressure of outdoor unit	30 Pa	30 Pa	30 Pa YBM only	0, 30, 60, 80 Pa
	High ambient temperature	Operation at high outside temperatures	52°C	52°C	52°C	52°C
	Piping length flexibility	Usable in an application with a large vertical separation of up to 90 meters				•
	Maintenance	Rotation control				•
		Emergency operation mode				•
		Pump down function				• Automatic
		M-Net Power	•	•	•	•
		USB Data download				•

\* Power supplied to the heater only for 22HP and 24HP (P550 and P600) single modules

						
	PUHY-EP-Y(S)NW-A2	PUHY-HP Y(S)NW-A	PQHY-P-Y(S)LM-A1	PURY-P-Y(S)NW-A2	PURY-EP-Y(S)NW-A2	PQRY-P-Y(S)LM-A1
	•	•	•	•	•	•
	•	•	• *	•	•	• *
	•	•			•	
	•	•		•	•	
	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 100%	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 100%
	•			•	•	
	•	•	•	•	•	•
	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C
	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns
	•	•	•	•	•	•
	12 steps	12 steps	8 steps	8 steps	8 steps	8 steps
	•			•	•	
	•			•	•	
	0, 30, 60, 80 Pa	0, 30, 60, 80 Pa		0, 30, 60, 80 Pa	0, 30, 60, 80 Pa	
	52°C	52°C	-	52°C	52°C	-
	•	•		•	•	
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	Automatic	•	•	Automatic	Automatic	•
	•	•	•	•	•	•
	•			•	•	

# SMALL Y COMPACT LINE

NEW

OUTDOOR UNITS - PUMY-SP Y(V)KM (-BS)



COMPACT SIZE AND  
LOW WEIGHT

MAXIMUM FLEXIBILITY  
OF CONNECTION  
THROUGH BRANCH  
BOX

TOP OF THE RANGE  
EFFICIENCY






SUPER SILENT MODE

UP TO 30 PA STATIC  
PRESSURE OUTDOOR  
FAN UNIT

FLEXIBLE PIPE  
CONNECTION

## Compact dimensions


The SMALL Y COMPACT (PUMY-SP) delivers the power and performance of a VRF system in residential applications with a significantly smaller footprint than ever before, thanks to its new single-fan design.

<p><u>PUMY-P YKM3(-BS)</u></p> 		<p><u>PUMY-SP Y(V)KM(-BS)</u></p> 
<p>Height <b>1,338mm</b></p> <p>Weight <b>125kg</b></p>		<p><b>27% down</b></p> <p>Height <b>981mm</b></p> <p><b>25% down</b></p> <p>Weight <b>94kg</b></p>


## Easy installation and transport


The compact chassis of the SMALL Y COMPACT (PUMY-SP) and above all its low height (under one metre) make the machine suitable for installation on balconies. The low weight makes the unit easy to transport.

THE OUTDOOR UNIT CAN BE INSTALLED ON BALCONIES




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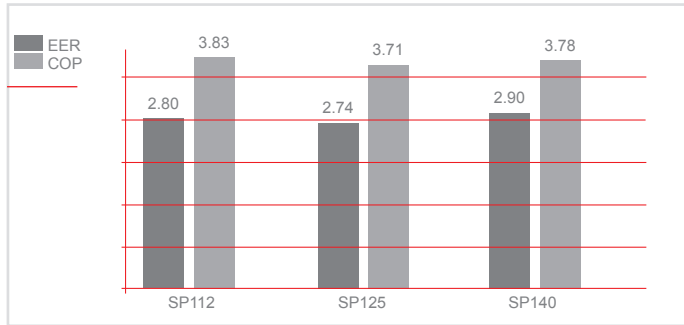


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## Top of the range efficiency

Despite its compact size and low weight, the new SMALL Y COMPACT (PUMY-SP) provides top of the range efficiency. This reduces operating costs.



## Super Silent Mode

The SMALL Y COMPACT (PUMY-SP) is the first model in the range that can operate in the new "Super Silent" mode, which reduces sound emission by -10dB(A). It is therefore possible to install the unit even in particularly sensitive acoustic environments.

\*The optional PAC-SC36NA-E connector is required in order to activate "Super Silent" mode.  
\*System capacity is reduced if "Silent" or "Super Silent" mode is activated.

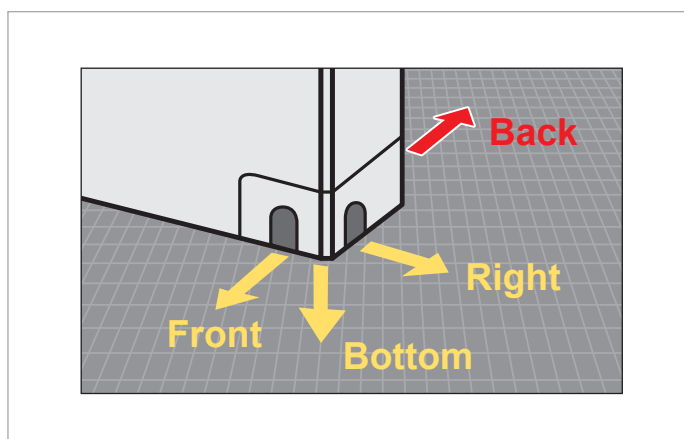
## Geometric limits

The compactness of the new model SMALL Y COMPACT (PUMY-SP) does not affect the system's flexibility, so it is still possible to have extended and capillary pipe development.

GEOMETRIC LIMITS	
	PUMY-SP112/125/140 VKM(-BS)/YKM(-BS)
Total length of pipes	120 m
Total pipe length after branch box/boxes	70 (90) m
Maximum level difference between UI and UE (UE above)	50 m
Maximum height difference between UI and UE (UE below)	30 m

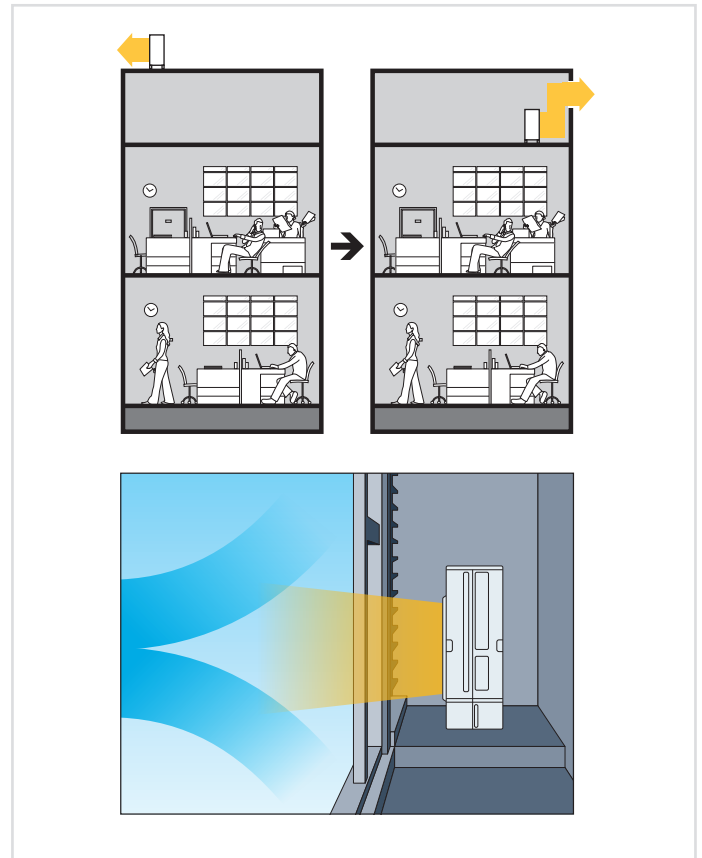
## Flexible connection

The new SMALL Y COMPACT line is equipped with front, side, rear and lower refrigeration connections, making it easier to install.



## Static pressure outdoor fan unit

The 30 Pa static pressure option increases flexibility in the choice of the unit's installation point.



## Connectivity

SMALL Y COMPACT (PUMY-SP) single-fan units can be connected to Residential and Commercial line indoor units by branch-box PAC-MK34/54. It is also possible to create mixed systems with VRF indoor units and residential and commercial units. Thanks to these features, the system has essentially unlimited flexibility, serving every need.

## New Branch Box (3 and 5 connections) - Total flexibility

The new Branch Boxes are designed to give the system the highest possible flexibility of configuration. It is therefore possible to create systems with CITY MULTI VRF units, consisting exclusively of Residential/Commercial Series indoor units or mixed systems in which the two types of units coexist.



## M-NET Branch Box

The new PAC-MK34/54 branch boxes are designed for direct connection to MELANS control and supervision systems. To connect a system composed of internal units of the Residential or Commercial Line to an M-Net centraliser, it is therefore not necessary to provide a dedicated interface. Instead it is sufficient to use Branch Boxes and connect them to the communication bus consisting of a simple two-wire, non-polarised cable. In addition, the new Branch Boxes do not need to be prepared for condensate drainage.

Model	1 Branch Box		2 Branch Box	
	Via Branch Box	CITY MULTI Indoor units	Via Branch box	CITY MULTI Indoor units
PUMY-SP112	Max. 5	Max. 5	Max. 7	Max. 3
			Max. 8	Max. 2
PUMY-SP125	Max. 5	Max. 5	Max. 8	Max. 3
PUMY-SP140				

## Technical specifications

MODEL			PUMY-SP112VKM2 (-BS)	PUMY-SP112YKM2 (-BS)	PUMY-SP125VKM2 (-BS)	PUMY-SP125YKM2 (-BS)	PUMY-SP140VKM2 (-BS)	PUMY-SP140YKM2(-BS)
HP			4.5	4.5	5.0	5.0	6.0	6.0
Power	Phases/Voltage/Freq.	V/Hz/h <sup>°</sup>	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz
Cooling	Nominal capacity <sup>*1</sup>	kW	12.5	12.5	14.0	14.0	15.5	15.5
	Power absorption	kW	4.46	4.46	5.11	5.11	5.34	5.34
	SEER		7,24	7,24	7,31	7,31	7,48	7,48
	Operating temperature range	Indoor WB	°C	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
Outdoor DB		°C	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)
Heating	Nominal capacity <sup>*2</sup>	kW	14.0	14.0	16.0	16.0	16.5	16.5
	Power absorption	kW	3.66	3.66	4.31	4.31	4.36	4.36
	SCOP		5,07	5,07	4,22	4,22	4,48	4,48
	Operating temperature range	Indoor DB	°C	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
Outdoor WB		°C	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)
Sound pressure <sup>*3</sup>	Heating/Cooling	dB(A)	52/54	52/54	53/56	53/56	54/56	54/56
Connectable indoor units	Model/Quantity	CITY MULTI	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
		Branch Box	P10-P140, M20-M140/9	P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/10	P10-P140, M20-M140/12	P10-P140, M20-M140/12
		Mixed System	P15-P100/8	P15-P100/8	P15-P100/8	P15-P100/8	P15-P100/8	P15-P100/8
External diameter of refrigerant connectors	Liquid/Gas	mm	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88
	External dimensions	mm	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)
	Net weight	kg	93	94	93	94	93	94
	Ref Charge R410A <sup>*4</sup> /CO <sub>2</sub> Eq	kg	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31

<sup>\*1</sup> Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

<sup>\*2</sup> Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

<sup>\*3</sup> Values measured in anechoic chamber.

<sup>\*4</sup> GWP value of HFC R410A 2088 according to 517 / 2014.



**PUMY-SP Series Branch Box Connection Compatibility Table for PUMY-SP112/125/140**

Series	Type	Model Name	Capacity											
			15	18	20	22	25	35	42	50	60	71	100	
M Series	Wall-mounted	MSZ-LN-VG2					•	•			•			
		MSZ-RW-VF-E					•	•			•			
		MSZ-AP-VG(K)	•		•		•	•	•		•			
		MSZ-FH-VE2					•	•			•			
		MSZ-EF-VG(K)		•		•	•	•	•		•			
		MSZ-SF-VA	•		•									
		MSZ-AP-VF-E	•		•									
	Floor-Standing	MSZ-SF-VE3					•	•	•		•			
		MSZ-GF-VE2										•	•	
		MFZ-KT-VG					•	•			•			
1-way Cassette	MFZ-KJ-VE-E					•	•			•				
	MLZ-KP-VF					•	•			•				
S Series	Ceiling-Concealed	MLZ-KA-VA-E					•	•			•			
		SEZ-M-DA(L)(2)					•	•			•	•	•	
	2x2 Cassette	SEZ-KD-VA-E					•	•			•	•	•	
		SLZ-M-FA(2)	•				•	•			•			
	P Series	Ceiling-Suspended	SLZ-KF-VA-E					•	•			•		
			PCA-M-KA(2)						•			•	•	•
		4-way Cassette	PCA-RP-KAQ-E						•			•	•	•
			PLA-M-EA(2)						•			•	•	•
		Ceiling-Concealed	PLA-RP-EA-E						•			•	•	•
			PEAD-M-JA(L)(2)									•	•	•
		PEAD-RP-JAQ(L)-E								•	•	•		

**PUMY-SP Series LEV Kit Connection Compatibility Table for PUMY-SP112/125/140**

Series	I/U Type	Model Name	Capacity										
			15	18	20	22	25	35	42	50	60	71	
M Series	Wall-mounted	MSZ-LN-VG2					•	•			•		
		MSZ-AP-VG(K)	•		•		•	•	•		•		
		MSZ-FH-VE2					•	•			•		
		MSZ-EF-VG(K)		•		•	•	•	•		•		
		MSZ-SF-VA	•		•								
		MSZ-AP-VF-E	•		•								
	1-way Cassette	MSZ-SF-VE3					•	•	•		•		
		MFZ-KT-VG					•	•			•		

**PUMY-SP Series CITY MULTI Indoor Unit Compatibility Table for PUMY-SP112/125/140**

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			•	•	•	•								
	2-way cassette	PLFY-P-VLMD-E			•	•	•	•					•	•	•	
	4-way cassette	PLFY-M-VEM-E			•	•	•	•	•				•	•	•	
		PLFY-M-VEM6-E			•	•	•	•	•			•	•	•	•	
		PLFY-P-VBM-E					•	•	•	•			•	•	•	
		PLFY-P-VEM-E					•	•	•	•			•	•	•	
		PLFY-P-VCM-E		•	•	•	•	•					•	•	•	
	Ceiling-concealed	PLFY-P-VFM-E		•	•	•	•	•	•							
		PEFY-P-VMR-E-L/R			•	•	•	•								
		PEFY-P-VMS1-E		•	•	•	•	•	•							
		PLFY-P-VMA-E			•	•	•	•	•			•	•	•	•	
		PEFY-M-VMA-A(1)			•	•	•	•	•			•	•	•	•	
		PEFY-P-VMH(S)-E					•	•	•	•		•	•	•	•	
		PEFY-P-VMH-E-F											•	•	•	
	Ceiling-suspended	PEFY-P-VMHS-E-F											•	•	•	
		PCFY-P-VKM-E	•						•			•		•	•	
	Wall-mounted	PKFY-P-VLM-E		•	•	•	•	•	•							
		PKFY-P-VBM-E		•	•	•										
		PKFY-P-VHM-E					•	•	•							
		PKFY-P-VKM-E										•		•	•	
Built in	PDFY-P-VM-E			•	•	•	•	•		•	•	•	•			
	PFFY-P-VKM-E2			•	•	•	•	•								
Floor-standing	PFFY-P-VLEM-E			•	•	•	•	•		•	•					
	PFFY-P-VLRM-E			•	•	•	•	•		•	•					
	PFFY-P-VLRMM-E			•	•	•	•	•		•	•					
	PFFY-P-VCM-E			•	•	•	•	•		•	•					
	Lossnay *														GUF-50/100RD(H)4	

\* Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)



STADSHUS

# SMALL Y LINE

OUTDOOR UNITS - PUMY-P Y(V)KM(-BS)

NEW



MORE QUIETNESS  
THANKS TO THE NEW  
FAN

CONNECTABLE  
TO **ecodan** ATW  
Renewable Heating Technology  
MODULES FOR HOT  
WATER PRODUCTION  
UP TO 55°C

GEOMETRIC PIPING  
LIMITATIONS  
INCREASED

H.I.C. CIRCUIT (HEAT  
INTER CHARGER)  
FOR THE SUBCOOLING  
CONTROL

HEATING OPERATION  
RANGE EXTENDED UP  
TO -20°C OUTDOOR  
TEMPERATURE

TOP PERFORMANCE  
AND COP > 4 ON THE  
ENTIRE RANGE

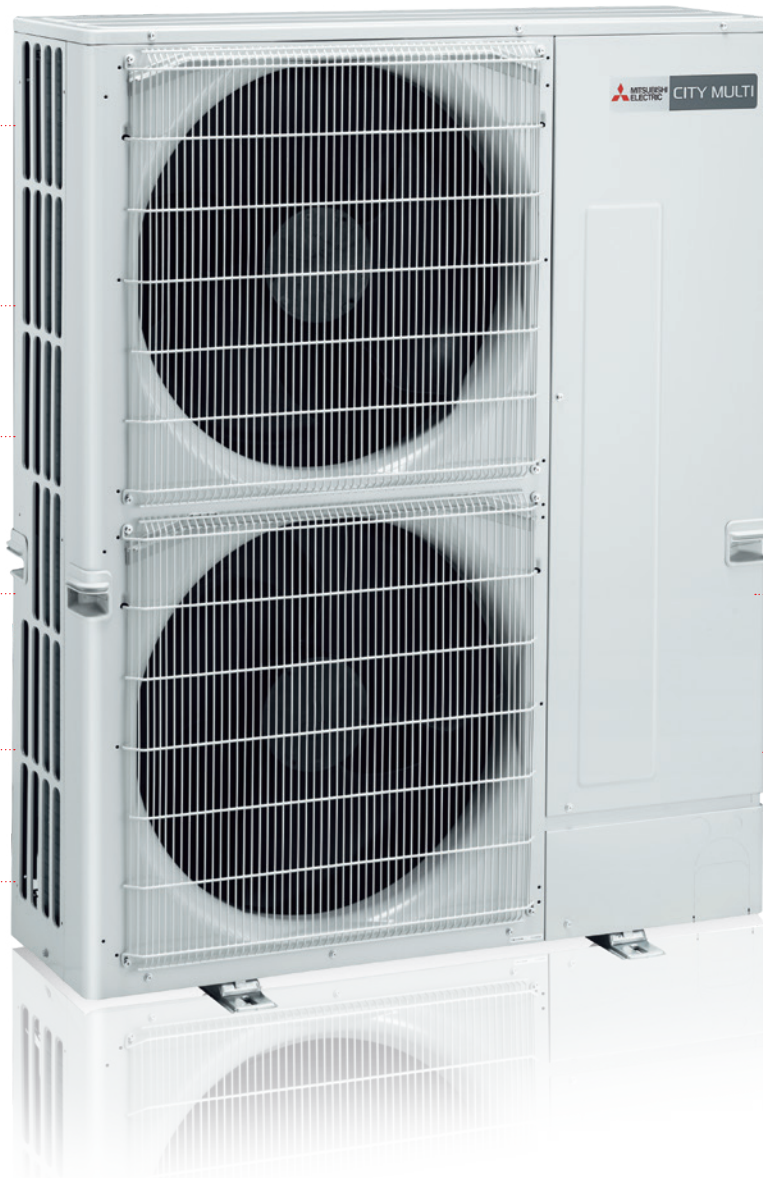
POWER RANGE  
4-5-6 HP  
THREE-PHASE  
AND SINGLE SIZE

NEW CHASSIS WITH  
INCREASED HEAT  
EXCHANGE SURFACE

INCREASED  
RELIABILITY

CONNECTABLE TO  
RESIDENTIAL AND  
COMMERCIAL INDOOR  
UNITS BY LEV-KIT AND  
BRANCH BOX

NATIVE REPLACE  
TECHNOLOGY  
FUNCTION FOR THE  
REPLACEMENT OF R22  
SYSTEMS



## New PUMY Y(V)KM 4(5) - The smallest, but with all the technology and efficiency of our bigger units

The SMALL Y (PUMY) series of outdoor units by Mitsubishi Electric, which now offers 7 different variants (with single and three-phase 4.5, 5 and 6 HP versions and a three-phase 8 HP version), is the ideal solution for large homes and medium-sized offices. These outdoor units may be connected to up to 12 indoor units of different type and power rating. This system offers exceptional savings in operating costs and is suitable for both residential and commercial applications.

## Class-beating energy efficiency

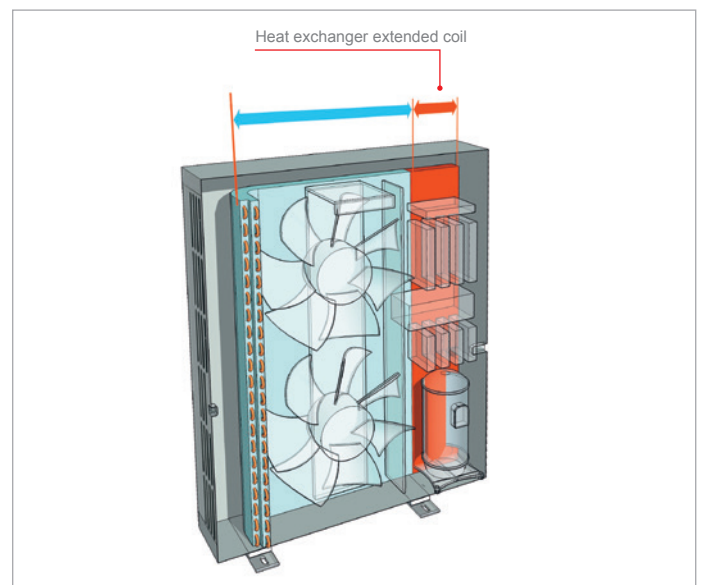
The new SMALL Y (PUMY) series has been designed to offer extraordinary levels of energy efficiency in both summer (EER) and winter (COP) operation. The entire range scores **COP values above 4**, making these units usable even in regions where legislation sets more restrictive performance limitations.

## Total comfort. Even at -20°C

The new SMALL Y (PUMY) series is now capable of operating in heating mode over an even broader temperature range (from -20 to +15 °C).

## New chassis with larger heat exchange surface area

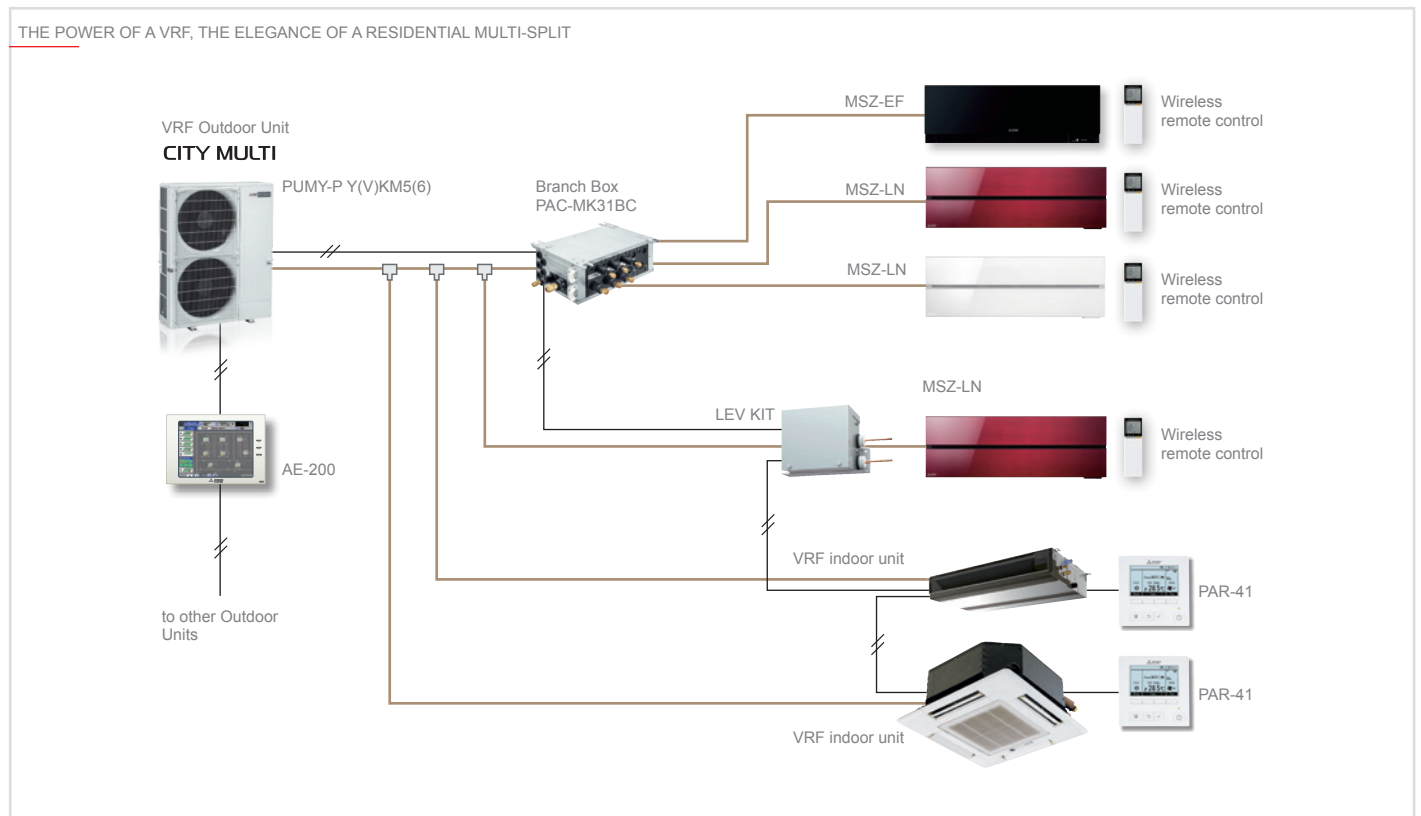
The new design of the SMALL Y (PUMY) series has made it possible to use a direct expansion coil with greater heat exchange surface area and density. Together with the introduction of the **Heat Inter Charger** overcooling circuit – a technological solution now appearing for the first time in units of this series – these improvements ensure superlative performance and extraordinary energy efficiency in cooling mode. The flat fin configuration of the coil and special Blue Fin treatment protect the



coil itself against corrosion, ensuring that the unit continues to function with the same outstanding thermal exchange efficiency and performance over time.

## The power of a VRF, the elegance of a residential Multi-Split

With the **LEV KIT** and the new dedicated **Branch Box** (available as 3 and 5 connection versions), the outdoor units of the Small Y series can now be connected to the entire range of **residential and commercial** indoor units, with looks that are perfectly suited to applications (such as residential buildings and hotels) where design and elegance are decisive factors in the choice of indoor units.



## New Branch Boxes (3 or 5 connections) – Total flexibility

The new Branch Boxes are designed to offer the greatest configuration flexibility possible for the system. This makes it possible to create systems consisting entirely of CITY MULTI VRF units, systems with Residential/ Commercial series indoor units only, or mixed systems with both types of unit.

Model	1 Branch Box		2 Branch Box	
	Branch Box ways	CITY MULTI Indoor units	Branch Box ways	CITY MULTI Indoor units
PUMY-P112	Max. 5	Max. 5	Max. 7	Max. 3
			Max. 8	Max. 2
PUMY-P125	Max. 5	Max. 5	Max. 8	Max. 3
PUMY-P140				

## Mixed systems

SMALL Y series (PUMY) sizes 4.5-5-6 HP can be connected to **Ecodan HYDROBOX and HYDROTANK**, allowing mixed systems (domestic hot water, radiant panels or air heating and air cooling). Thanks to this feature the system can produce **hot water up to 55°C**.

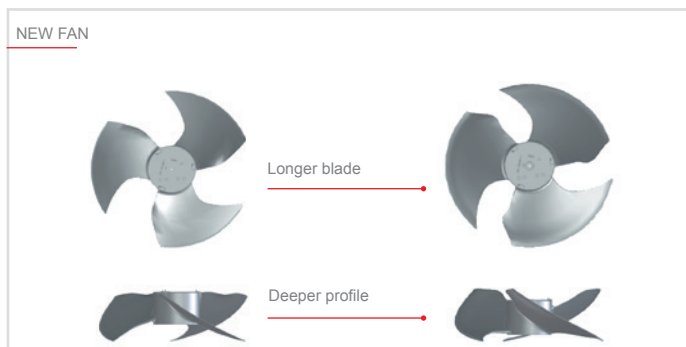
## Unparalleled silence

The new fans cut through the air more effectively and minimise turbulence, for superlative static overpressure with **minimum noise impact**. These fans generate a **10% higher outdoor air flow than the previous version** while operating at the same noise levels. Small Y (PUMY) is also capable of operating in “low noise” mode, reducing sound pressure levels by 2 dB. By connecting an external timer or switch to the fan, this mode can be set for specific time brackets during the day.

## New fan

Diameter increased from 490 mm to 550 mm.

The new fan has longer, differently shaped blades to direct air more effectively, reduce turbulence and increase efficiency.



## Total flexibility for installation and maintenance

With increased geometric limits for piping, the SMALL Y (PUMY) series offers unparalleled flexibility for installation.

INCREASED GEOMETRICAL LIMITS FOR PIPING	
PUMY P112-P125-P140 Y(V)KM4	
Total effective length	300 m
Effective length of a single circuit	150 m
Maximum vertical difference between indoor units	15 m
“Maximum vertical difference between indoor and outdoor units (with outdoor unit in lower position)”	40 m

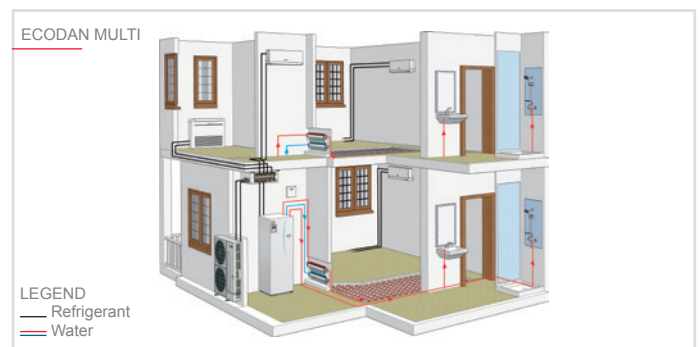
## New PUMY Y(V)KM with Replace Technology

The EU regulation 2037/2000/EC has banned the use of virgin HCFC refrigerants (R22) since 1/1/2010. As a result, in the event of a fault or even just a refrigerant leak in an air conditioning system using R22, it is no longer possible to recharge the system. With small to medium-sized installations in particular, the most cost effective solution is to replace the entire air conditioning system. This is because of the following reasons:

- New generation outdoor units with R410A are much more efficient, with lower electric power consumption;
- They are quieter and offer more effective air filtration;
- Taking advantage of tax rebates offered for replacing winter air conditioning systems will minimise the time necessary to recoup the initial outlay.

The main problem in replacing an existing air conditioner using R22 fluid with a system using new R410A refrigerant is posed by the residue of chlorine and mineral oils remaining in the existing piping onto which the air conditioner system containing R22 was connected. This residue is extremely harmful for the new air conditioner, and unless the circuit is flushed out extremely thoroughly, may degrade the new oil and/or cause obstructions in the refrigerant circuit and, as a result, lead to system malfunctions. Moreover, the diameters and thickness of the existing piping may not be compatible with the new units.

The **SMALL Y (PUMY) Lines** of outdoor units features **Mitsubishi Electric Replace Technology**, which allows the **existing piping to be used** without modification, even with piping with different diameters and wall thicknesses. By using exclusive HAB oil and special low friction technology for the compressor, the majority of our air conditioners may operate with the original piping, cutting installation times and costs and material costs while minimising environmental impact.



## AC PRE-HEATING compressor pre-heating system

**AC pre-heating system** is used for the compressor. The pre-heat routine is based on the temperature of the refrigerant and of the compressor. AC control reduces power absorption in stand-by state, increasing seasonal efficiency.

Technical specifications				PUMY-P112VKM6(-BS)	PUMY-P125VKM6(-BS)	PUMY-P140VKM6(-BS)	
MODEL							
HP				4.5	5.0	6.0	
Power	Phases/Voltage/Freq.			1-phase 220-230-240V 50Hz, 220-230V 60Hz			
Cooling	Nominal capacity* <sup>1</sup>	kW		12.5	14.0	15.5	
	Power absorption	kW		4.34	5.00	5.17	
	SEER			6.40	6.33	7.29	
	Operating temperature range	Indoor WB	°C		15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
Outdoor DB		°C		-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	
Heating	Nominal capacity* <sup>2</sup>	kW		14.0	16.0	18.0	
	Power absorption	kW		3.04	3.74	4.47	
	SCOP			4.25	4.37	4.38	
	Operating temperature range	Indoor DB	°C		15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
Outdoor WB		°C		-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	
Sound pressure* <sup>3</sup>	Heating mode			51	52	53	
	Cooling mode			49	50	51	
Connectable indoor units	Total capacity			50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	
	Model/Quantity	CITY MULTI			P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/12
		Branch Box			P15~P100/8	P15~P100/8	P15~P100/8
		Mixed System			please refer to databook		
External diameter of refrigerant connectors	Liquid	mm		9.52	9.52	9.52	
	Gas	mm		15.88	15.88	15.88	
Fan air flow rate			m <sup>3</sup> /min	110	110	110	
External dimensions (HxLxW)			mm	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	
Net weight			kg	123	123	123	
Ref. Charge R410A*/CO <sub>2</sub> Eq			kg/Tons	4.8/10.02	4.8/10.02	4.8/10.02	

\*<sup>1</sup> Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

\*<sup>2</sup> Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*<sup>3</sup> Values measured in anechoic chamber.

\*<sup>4</sup> GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

Technical specifications				PUMY-P112YKM5(-BS)	PUMY-P125YKM5(-BS)	PUMY-P140YKM5(-BS)	
MODEL							
HP				4.5	5.0	6.0	
Power	Phases/Voltage/Freq.			3-phase 380-400-415V 50Hz, 380V 60Hz			
Cooling	Nominal capacity* <sup>1</sup>	kW		12.5	14.0	15.5	
	Power absorption	kW		4.34	5.00	5.17	
	SEER			6.42	6.36	7.28	
	Operating temperature range	Indoor WB	°C		15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
Outdoor DB		°C		-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	-5.0~52.0°C(23~126°F)	
Heating	Nominal capacity* <sup>2</sup>	kW		14.0	16.0	18.0	
	Power absorption	kW		3.49	4.06	4.63	
	SCOP			4.30	4.40	4.38	
	Operating temperature range	Indoor DB	°C		15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
Outdoor WB		°C		-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	-20.0~15.0°C(-4~59°F)	
Sound pressure* <sup>3</sup>	Heating mode			51	52	53	
	Cooling mode			49	50	51	
Connectable indoor units	Total capacity			50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	
	Model/Quantity	CITY MULTI			P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/12
		Branch Box			P15~P100/8	P15~P100/8	P15~P100/8
		Mixed System			please refer to databook		
External diameter of refrigerant connectors	Liquid	mm		9.52	9.52	9.52	
	Gas	mm		15.88	15.88	15.88	
Fan air flow rate			m <sup>3</sup> /min	110	110	110	
External dimensions (HxLxW)			mm	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	
Net weight			kg	125	125	125	
Ref. Charge R410A*/CO <sub>2</sub> Eq			kg/Tons	4.8/10.02	4.8/10.02	4.8/10.02	

\*<sup>1</sup> Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

\*<sup>2</sup> Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*<sup>3</sup> Values measured in anechoic chamber.

\*<sup>4</sup> GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

# SMALL Y (HIGH CAPACITY) LINE

NEW

OUTDOOR UNITS - PUMY P200 YKM (-BS) / PUMY P250/300 YBM (BS)



\* P200 Model only

MORE QUIETNESS  
THANKS TO THE NEW  
FAN

GEOMETRIC PIPING  
LIMITATIONS  
INCREASED

H.I.C. CIRCUIT (HEAT  
INTER CHARGER)  
FOR THE SUBCOOLING  
CONTROL

HEATING OPERATION  
RANGE EXTENDED UP  
TO -20°C OUTDOOR  
TEMPERATURE

TOP PERFORMANCE  
AND COP > 4



POWER RANGE  
EXTENDED WITH THE  
INTRODUCTION  
OF THE NEW 8, 10, 12 HP  
THREE-PHASE SIZE

NEW CHASSIS WITH  
INCREASED HEAT  
EXCHANGE SURFACE

INCREASED  
RELIABILITY

CONNECTABLE TO  
RESIDENTIAL AND  
COMMERCIAL INDOOR  
UNITS BY LEV-KIT AND  
BRANCH BOX

NATIVE REPLACE  
TECHNOLOGY  
FUNCTION FOR THE  
REPLACEMENT OF R22  
SYSTEMS

## The power and performance of a VRF with the compact dimensions of a multisplit

The new PUMY-P200YKM 8HP is the ideal solution for all applications where there can be no compromise in efficiency, power and installation flexibility – even where installation space is limited.

## The power of a VRF, the elegance of a residential Multi-Split

With the use of the **LEV KIT** and **Branch Box** (available as 3 and 5 connection versions) the outdoor units of the Small Y series in **8 HP** size can now be connected to the entire range of indoor units of the **residential and commercial series**, with looks that are perfectly suited to applications (residential and hotel buildings) where design and elegance are decisive factors in the choice of indoor units.

## Branch Box (3-5 ports) - Total flexibility

New Branch Box grants high flexibility in system design and indoor unit choice. It is possible to connect Residential/Commercial units and/or CITY MULTI VRF units, realizing mixed systems with both types.

Note: PUMY-P200YKM(2)3 to Branch Box connection is **only available in AtA configuration**.

Model	1 Branch Box		2 Branch Box	
	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units
PUMY-P200	Max. 5	Max. 5	Max. 8	Max. 3

\*The maximum total capacity of the units that can be connected to each branch box is 20.2kW

## Technical specifications

MODEL			PUMY-P200YKM3(-BS)
HP			8
Power	Phases/Voltage/Freq.		3-phase 380-400-415V 50Hz
Cooling	Capacity*1	kW	22.4
	Power input	kW	7.18
	SEER		6.67
	Temperature operating field	Indoor WB	°C
Outdoor DB		°C	-5.0~52.0°C(23~126°F)
Heating	Capacity*4	kW	25.0
	Power input	kW	5.85
	SCOP		3.66
	Temperature operating field	Indoor DB	°C
Outdoor WB		°C	-20.0~15.0°C(-4~59°F)
Sound power level*5		dB(A)	57/61
Connectable indoor units	Model/Quantity		50~130 % of outdoor unit capacity
		CITY MULTI	P10~P200, M20-M140/12
		Branch Box	P15~P100/8
		Mixed System	please refer to databook
Ø Ref. piping	Liquid/Gas	mm	9.52/19.05
External dimensions (HxLxW)		mm	1338 x 1050 x 330 (+40)
Net weight		kg	141
Ref. Charge R410A**/CO <sub>2</sub> Eq		kg/Tons	7.3/15.24

\*1 Nominal cooling conditions.: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m., vertical difference 0 m.

\*2 10 to 52.; when connecting following models: PKFY-P15/20/25VBM,

PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, and M series, S series, and P series type indoor unit.

\*3 15.0~52.0 when using accessory PAC-SH95AG-E. Not available when connecting units listed in\*2

\*4 Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m., vertical difference 0 m.

\*5 Values measured in anechoic chamber (Cooling/Heating)

\*6 At least 2 IU connected to Branch Box.

\*7 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard



## The power and performance of a VRF with the compact dimensions of a multisplit

The new PUMY-P250/300 YKB 10-12 HP is the ideal solution for all applications where there can be no compromise in efficiency, power and installation flexibility – even where installation space is limited.

## Branch Box (3-5 ports) - Total flexibility

New Branch Box grants high flexibility in system design and indoor unit choice. It is possible to connect Residential/Commercial units and/or CITY MULTI VRF units, realizing mixed systems with both types.

Note: PUMY-P250/300 YBM to Branch Box connection is **only available in AtA configuration**.

Model	1 Branch Box		2 Branch Box		3 Branch Box	
	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units
PUMY-P250	Max. 5	Max. 25	Max. 10	Max. 23	Max. 12	Max. 22
PUMY-P300	Max. 5	Max. 25	Max. 10	Max. 23	Max. 12	Max. 22

\*The maximum total capacity of the units that can be connected to each branch box is 20.2kW

## The power of a VRF, the elegance of a residential Multi-Split

With the use of the **LEV KIT** and **Branch Box** (available as 3 and 5 connection versions) the outdoor units of the Small Y series in **10/12 HP** size can now be connected to the entire range of indoor units of the **residential and commercial series**, with looks that are perfectly suited to applications (residential and hotel buildings) where design and elegance are decisive factors in the choice of indoor units.

## The new 10 and 12HP models

The SMALL Y Line gets enriched by the addition of new models (10 and 12HP) in response to the increasing market need for a compact machine that covers bigger capacity.

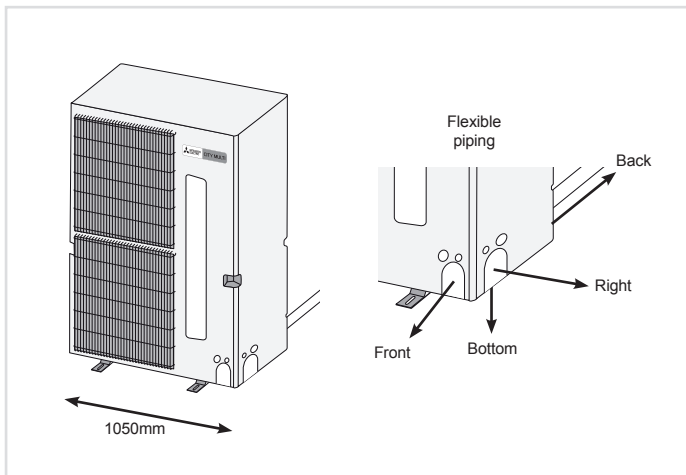
The PUMY P250/300 YBM outdoor units are available in a single version with three-phase power supply, double fan structure, side-flow and with different sizes depending on the model. Also available in -BS version, with anti-saline treatment.

## Installation flexibility

The 10 and 12HP models introduce further installation flexibility by ensuring connection of the refrigerant also from the rear of the unit, making these models adaptable to all application requirements.

## Side Flow vs Top Flow

Side-flow outdoor units have a smaller footprint and volume than Top-flow units.



Technical specifications				
MODEL			PUMY-P250YBM2(-BS)	PUMY-P300YBM2(-BS)
HP			10	12
Power	Phases/Voltage/Freq.		3-phase, 380-400-415V, 50Hz	
Cooling	Capacity*1		kW	28
	Power input		kW	8,21
	SEER			6,28
	Temperature operating field	Indoor WB	°C	15.0 to 24.0°C (59 to 75°F)
		Outdoor DB	°C	-5.0 to 52.0°C (23 to 126°F) *3*4
Heating	Capacity*2		kW	31,5
	Power input		kW	7,91
	SCOP			4,22
	Temperature operating field	Indoor WB	°C	15.0 to 27.0°C (59 to 81°F)
		Outdoor DB	°C	-20.0 to 15.0°C (-4 to 59°F)
Sound power level			dB(A)	55/61
Connectable indoor units			50~130% of kW outdoor unit capacity	
	Model/Quantity	CITY MULTI		P10-P250/30
		Branch Box		P15~P100/12
		Mixed System		please refer to databook
Ø Ref. piping	Liquid/Gas	mm	9.52/22.4*5	12.7/22.4*5
External dimensions (HxLxW)			mm	1662 × 1050 × 460 (+45)
Net weight			kg	192
Ref. Charge R410A/CO <sub>2</sub> Eq			kg/Tons	9.3/19,41

\*1. Nominal cooling conditions (subject to ISO 15042)  
 Indoor: 27°CDB/19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. [95°FDB.], Pipe length: 7.5 m [24-9/16 ft.], Level difference: 0 m [0 ft.]  
 \*2. Nominal heating conditions (subject to ISO 15042)  
 Indoor: 20°CDB. [68°FDB.], Outdoor: 7°CDB./6°CWB. [45°FDB./43°FWB.], Pipe length: 7.5 m [24-9/16 ft.], Level difference: 0 m [0 ft.]  
 \*3. 10 to 52°C, when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PFFY-P20/25/32VLEM, PEFY-P63/71/80V/MA3-E; and M series type indoor unit.  
 \*4. -15 to 52°C, when using an optional air protect guide [PAC-SK21AG-E]. However, this condition does not apply to the indoor unit listed in \*3.  
 \*5. Liquid pipe diameter: 12.7mm, when further piping length is longer than 90m, and when PEFY-P200 or P250 is connected.  
 It is possible to set the External static pressure to 30 Pa by Dip Switch.

- Notes:
- Nominal conditions \*1, \*2 are subject to ISO15042
  - Due to continuing improvement, above specifications may be subject to change without notice.

**PUMY-P Series Branch Box Connection Compatibility Table for PUMY-P112/125/140/200**

Series	Type	Model Name	Capacity										
			15	18	20	22	25	35	42	50	60	71	100
M Series	Wall-Mounted	MSZ-LN+VG2					●	●		●			
		MSZ-AP+VG(K)	●		●		●	●	●	●			
		MSZ-FH+VE2					●	●		●			
		MSZ-EF+VE		●		●	●	●	●	●			
		MSZ-EF+VG(K)		●		●	●	●	●	●			
		MSZ-SF+VA	●		●								
		MSZ-AP+VF	●		●								
	Floor-Standing	MFZ-KT+VG					●	●		●			
		MFZ-KJ+VE-E					●	●		●			
		MLZ-KP+VF					●	●		●			
1-way Cassette	MLZ-KA+VA-E					●	●		●				
	SEZ-M+DA(L)2					●	●		●	●	●		
S Series	Ceiling-Concealed	SEZ-KD+VA-E					●	●		●	●	●	
		SEZ-M+DA(L)2-E *1					●	●		●	●	●	
	2x2 Cassette	SLZ-M+FA(2)	●				●	●		●			
SLZ-KF+VA-E						●	●		●				
P Series	Ceiling-Suspended	PCA-M+KA(2)						●		●	●	●	●
		PCA-RP+KAQ-E						●		●	●	●	●
	4-way Cassette	PLA-M+EA(2)						●		●	●	●	●
		PLA-RP+EA-E						●		●	●	●	●
	Ceiling-Concealed	PEAD-M+JA(L)								●	●	●	●
		PEAD-RP+JA(L)Q-E								●	●	●	●
		PEAD-M+DA(L)2 *1							●	●	●	●	

(1) Connectable outdoor units are PUMY-P112/125/140VKM6(YKM5) only.

**PUMY-P Series LEV Kit Connection Compatibility Table for PUMY-P112/125/140/200**

Series	I/U Type	Model Name	Capacity									
			15	18	20	22	25	35	42	50	60	71
M Series	Wall-mounted	MSZ-LN+VG2					●	●		●		
		MSZ-AP+VG(K)	●		●		●	●	●	●		
		MSZ-FH+VE2					●	●		●		
		MSZ-EF+VG(K)		●		●	●	●	●	●		
		MSZ-SF+VA	●		●							
	MSZ-SF+VE3					●	●	●	●			
Floor-Standing	MFZ-KT+VG					●	●		●			

**PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P112/125/140**

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P+VBM-E			●	●	●	●								
	2-way cassette	PLFY-P+VLM-E			●	●	●	●	●	●		●	●	●		
	4-way cassette	PLFY-M+VEM-E			●	●	●	●	●	●	●		●	●		
		PLFY-P+VFM-E		●	●	●	●	●	●							
	Ceiling-concealed	PEFY-P+VMR-E-L/R			●	●	●									
		PEFY-P+VMS1-E		●	●	●	●	●	●							
		PEFY-M+VMA-A(1)			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P+VMHS-E						●	●	●	●	●	●	●	●	
	Ceiling-suspended	PEFY-P+VMHS-E-F												●		
		PCFY-P+VKM-E							●		●			●	●	
	Wall-mounted	PKFY-P+VLM-E	●	●			●	●	●							
		PKFY-P+VKM-E									●			●		
	Floor-standing	PFFY-P+VKM-E2			●	●	●	●								
		PFFY-P+VLE-E			●	●	●	●		●	●					
		PFFY-P+VLRM-E			●	●	●	●		●	●					
		PFFY-P+VLRMM-E			●	●	●	●		●	●					
		PFFY-P+VCM-E			●	●	●	●		●	●					
	ATW	PWFY-P+VM-E1 *1													●	
	Lossnay *2															GUF-50/100RD(H)4

\*1 Note that connection is not allowed inside EU countries and UK.

PWFY can not connect to PUMY-P200YKM2.

\*2 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

**PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P200**

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			●	●	●	●								
	2-way cassette	PLFY-P-VLMD-E			●	●	●	●	●	●		●	●	●		
		PLFY-M-VEIM-E			●	●	●	●	●	●		●	●	●		
	4-way cassette	PLFY-M-VEIM6-E			●	●	●	●	●	●	●	●	●	●		
		PLFY-P-VFM-E		●	●	●	●	●	●	●						
	Ceiling-concealed	PEFY-P-VMR-E-L/R			●	●	●									
		PEFY-P-VMS1-E		●	●	●	●	●	●	●						
		PEFY-M-VMA-A(1)			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P-VMHS-E							●	●	●	●	●	●	●	●
	Ceiling-suspended	PEFY-P-VMHS-E-F														●
		PCFY-P-VKM-E							●	●		●		●	●	
	Wall-mounted	PKFY-P-VLM-E	●	●	●	●	●	●	●							
		PKFY-P-VKM-E									●			●		
	Floor-standing	PFFY-P-VKM-E2			●	●	●	●								
		PFFY-P-VLEM-E			●	●	●	●	●	●						
		PFFY-P-VLRM-E			●	●	●	●	●	●	●					
		PFFY-P-VLRMM-E			●	●	●	●	●	●	●					
PFFY-P-VCM-E				●	●	●	●	●	●	●						
Lossnay *2		GUF-50/100RD(H)4														

\*1 Note that connection is not allowed inside EU countries and UK.

PWFY can not connect to PUMY-P200YKM2.

\*2 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

**PUMY-P Series Branch Box/LEV Kit Connection Compatibility Table for PUMY-P250/300**

Series	I/U Type	Model Name	Capacity							
			15	18	20	22	25	35	42	50
M Series	Wall-mounted	MSZ-LN-VG2					●	●		●
		MSZ-AP-VG(K)	●		●		●	●	●	
		MSZ-FH-VE2					●	●		●
		MSZ-EF-VG(K)		●		●	●	●	●	
	Floor-Standing	MFZ-KT-VG					●	●		●

**PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P250/300**

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			●	●	●	●								
	2-way cassette	PLFY-P-VLMD-E			●	●	●	●	●	●		●	●	●		
		PLFY-M-VEIM-E			●	●	●	●	●	●		●	●	●		
	4-way cassette	PLFY-M-VEIM6-E			●	●	●	●	●	●	●	●	●	●		
		PLFY-P-VFM-E		●	●	●	●	●	●	●						
	Ceiling-concealed	PEFY-P-VMR-E-L/R			●	●	●									
		PEFY-P-VMS1-E		●	●	●	●	●	●	●						
		PEFY-M-VMA-A			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P-VMA-A1			●	●	●	●	●	●	●	●	●	●	●	●
	Ceiling-suspended	PEFY-P-VMHS-E							●	●	●	●	●	●	●	●
		PEFY-P-VMHS-E-F														●
	Wall-mounted	PCFY-P-VKM-E							●	●		●		●	●	
		PKFY-P-VLM-E	●	●	●	●	●	●	●	●						
	Floor-standing	PKFY-P-VKM-E									●			●		
		PFFY-P-VKM-E2			●	●	●	●								
		PFFY-P-VLEM-E			●	●	●	●	●	●						
	Lossnay *2	PFFY-P-VCM-E			●	●	●	●	●	●	●					
		GUF-50/100RD(H)4														

\*1 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

# Y ZUBADAN LINE

NEW

OUTDOOR UNITS - Heat Pump - PUHY HP Y(S)NW-A



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

CITY MULTI

NEW FAN WITH LOW FRICTION PROFILE



COMPRESSOR OPTIMISED WITH "MULTI-POR" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

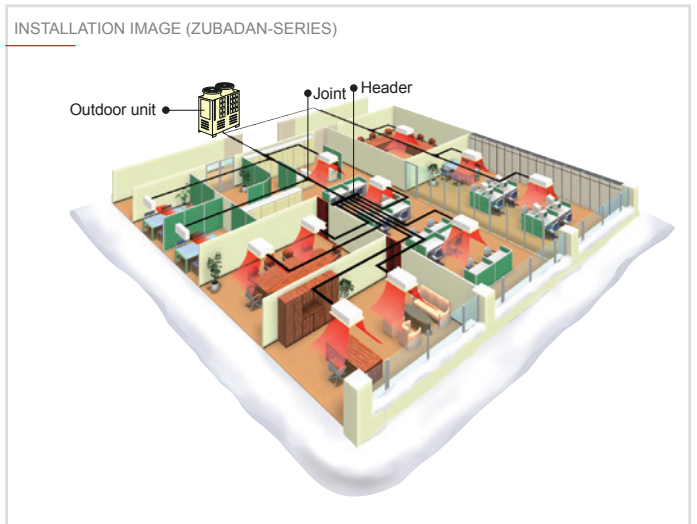
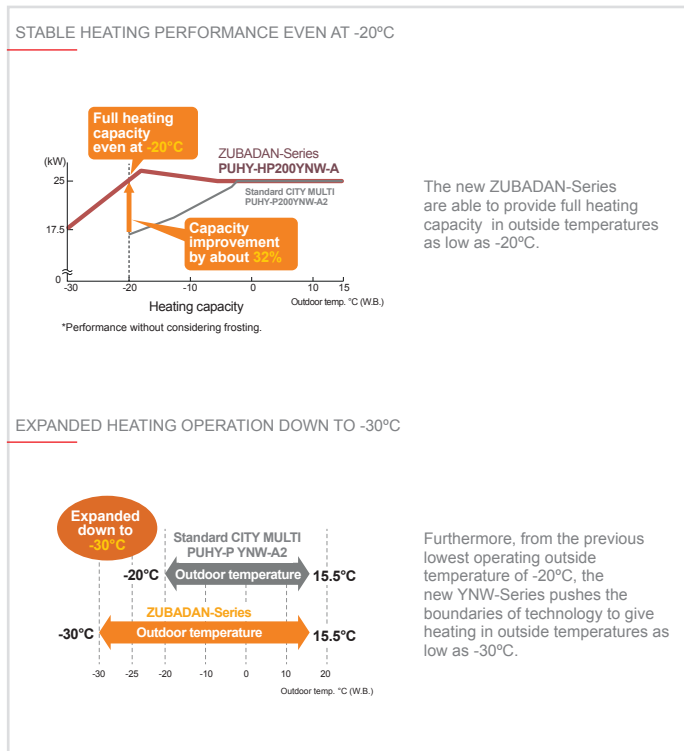
FLEXIBLE NOISE SETTING

## Bringing a year round comfort solutions to extreme climates

CITY MULTI ZUBADAN-Series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -30°C. The new ZUBADAN-Series that has new, larger-capacity compressors with an injection function in the suction chamber is capable of running at the rated heating capacity down to -20°C. In addition, the guaranteed outside temperature range of heating operation is expanded down to -30°C.

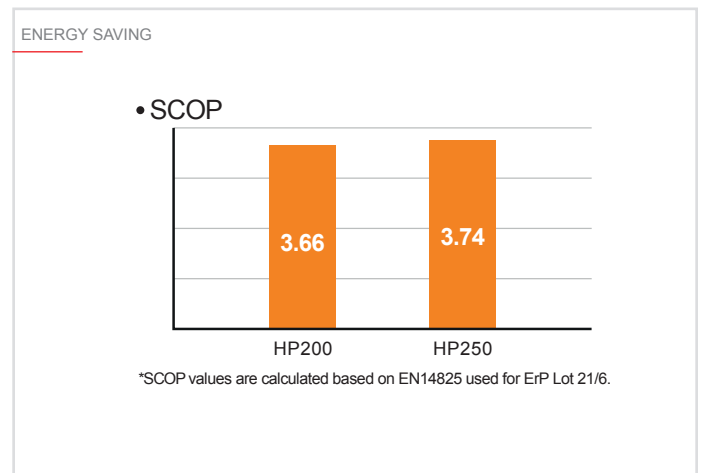
## Reliable heating performance

The improved operating performance in low outside temperatures contributes to comfortable heating in cold weather.



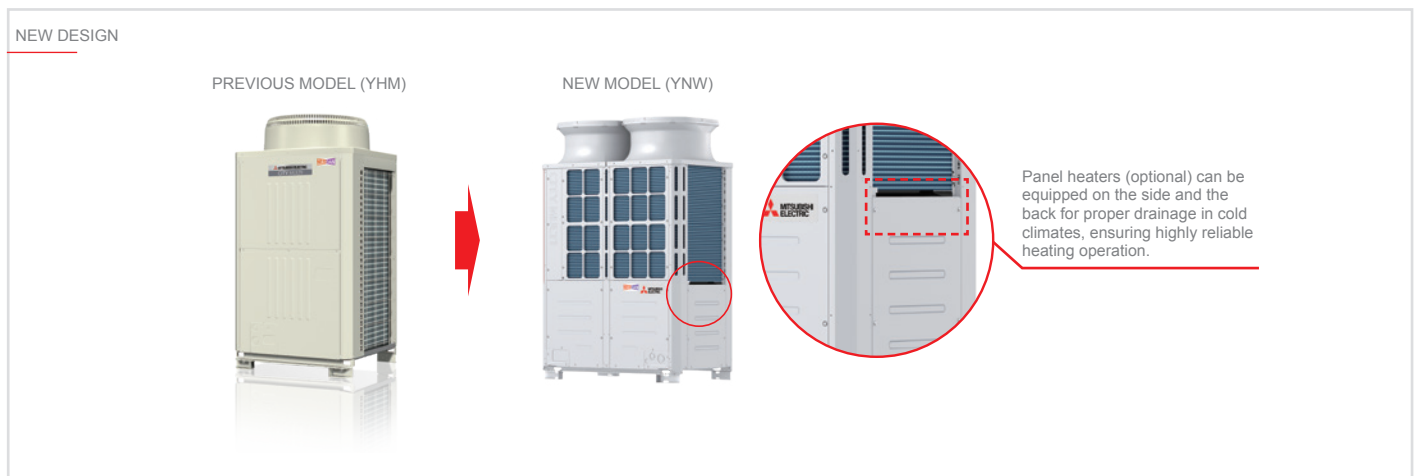
## Energy saving

The ZUBADAN-Series delivers high energy-saving performance throughout the year. The improved compressor with the latest technologies realizes both reliable performance and highly efficient operation. The highest SCOP 3.74 is achieved by the HP250 model.



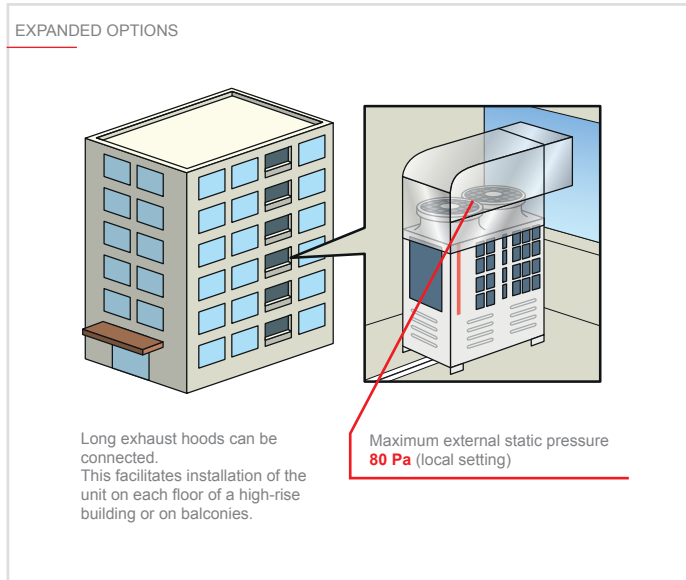
## New design

The structure and design have been revised. The appearance is more sophisticated which can enhance the design of building.



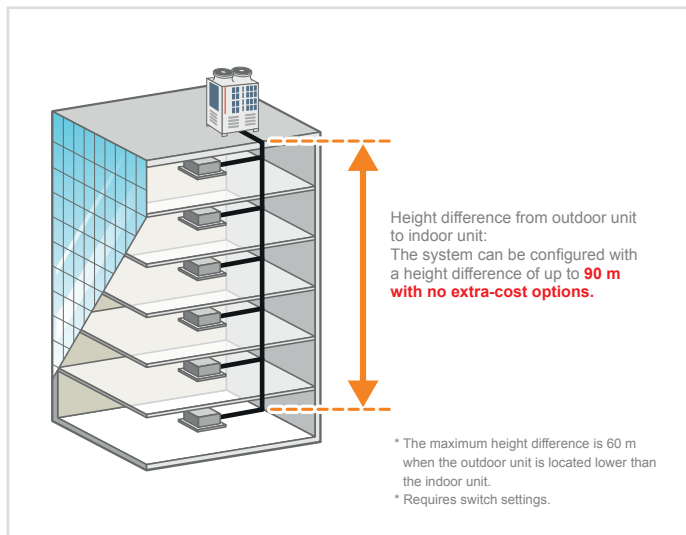
## Expanded options for external static pressure settings

The new models (YNW) offer the static pressure options of 0, 30, 60, and 80 Pa, while previous models (YHM) had maximum external static pressure of 60 Pa. This facilitates installation of the unit on each floor of a high-rise building or on balconies.



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

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



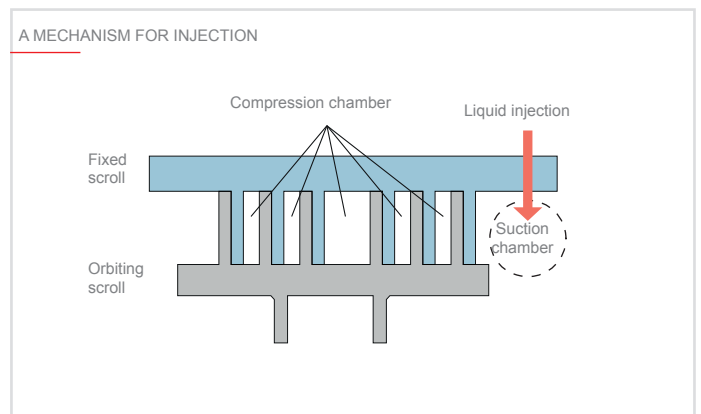
## Change refrigerant oil of compressor

The new ZUBADAN-Series uses MEL46EH refrigerant oil instead of the conventional MEL32, for greater resistance to low temperatures and steady circulation even in cold environments.



## Suction chamber injection mechanism

The reliable heating operation of ZUBADAN-Series is supported by a suction chamber injection mechanism. This mechanism injects liquid refrigerant into the suction chamber and suppresses the temperature rise of the discharge gas. Owing to this technology, the ZUBADAN-Series can perform heating operation even at an outside temperature as low as  $-30^{\circ}\text{C}$ . Furthermore, heating performance at low outside temperatures is improved, because the rated capacity is maintained even at outside temperatures down to  $-20^{\circ}\text{C}$ .



## Multi-port mechanism

Efficient partial load operation is realized by avoiding overcompression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The new compressor is equipped two sub-ports in addition to the conventional discharge port to reduce this over-compression loss

during low loads. In operation conditions having a low compression rate, the distance in the compression process is kept short by that successfully avoiding unnecessary compression, and contributing to efficient partial load operation.

MULTI-PORT MECHANISM

**Conventional structure**  
There was only one discharge port in the center and regardless of the air conditioning loads, the refrigerant was compressed up to the center part of scroll, then discharged with constant pressure. This means that the refrigerant tends to be compressed to higher than necessary pressure during low loads.

There is only one discharge port and refrigerant is discharged with constant pressure regardless of loads.

**Image of refrigerant pressure (medium loads)**

**New structure**  
The new compressor is equipped two sub-ports in addition to the discharge port at the center, and it realizes discharge according to air conditioning loads. The suppression of over-compression contributes to improve the operation efficiency of partial load.

Some discharge ports are equipped and refrigerant is discharged by the pressure according to loads without useless.

**Image of refrigerant pressure**

The new structure, multi-port compressor which newly equipped two sub-ports which open and close according to loads, discharges refrigerant from sub-port during the partial load operation.

**Conventional structure**

**New structure • Multi-port**

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve ①	open	open

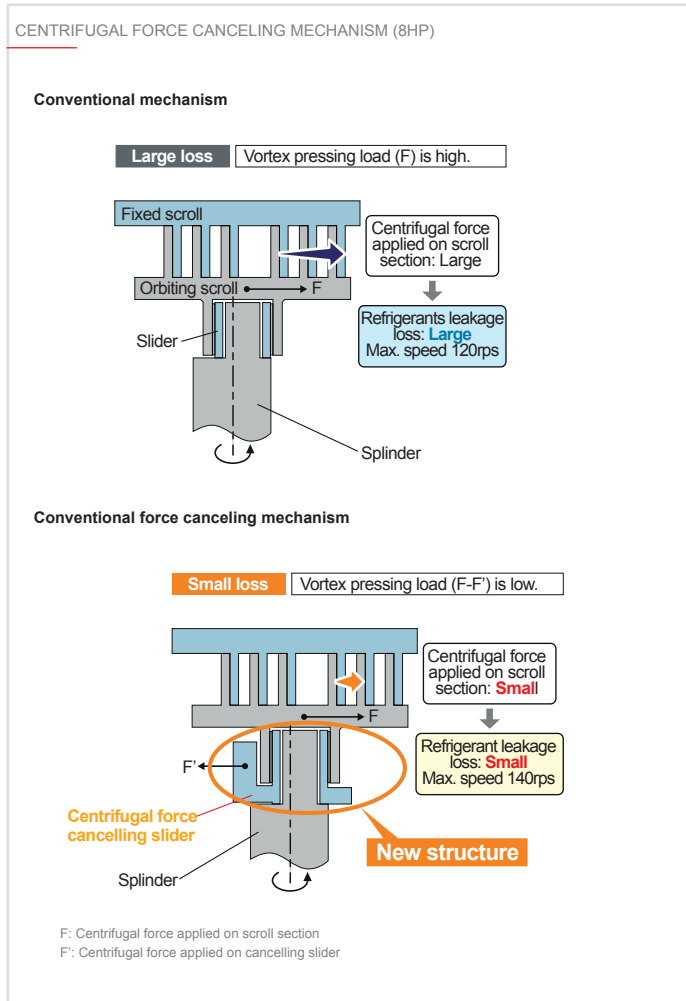
  

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve ①	open	open
Sub port	Valve ②	open	close
Sub port	Valve ③	open	close



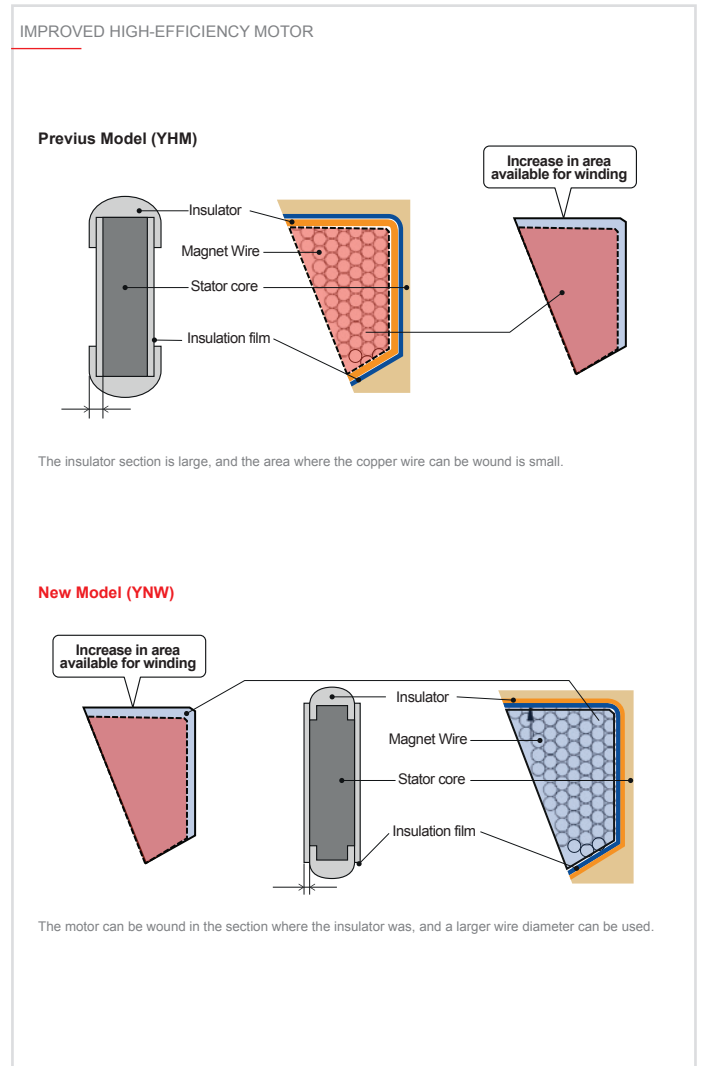
## Centrifugal force canceling mechanism (8HP)

The latest structure has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps. This mechanism also speeds up the start of operation, and enables operations such as preheat defrost and the smooth auto-shift startup mode.



## Improved high-efficiency motor

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



### Key Technologies


### Technical specifications

MODEL			PUHY-HP200YNW-A	PUHY-HP250YNW-A	PUHY-HP400YSNW-A	PUHY-HP500YSNW-A	
HP			8	10	12	14	
Modules			PUHY-HP200YNW-A	PUHY-HP250YNW-A	PUHY-HP(200+200)YNW-A	PUHY-HP(250+250)YNW-A	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **		kW	22,4	28,0	44,8	56,0
	Power input (nominal)		kW	6.45	7.69	13.33	15.86
	SEER			6.52	6.49	6.33	6,7
	Temperature operating field	Indoor WB	°C	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)	+15~+24
Outdoor DB		°C	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)	-5~+52	
Heating	Capacity (nominal) **/ Capacity (max) **3		kW	22,4/25,0	28,0/31,5	44,8/ 50,0	56,0/63,0
	Power input (nominal)/ Power input (max)		kW	5,12/6,11	6,73/8,09	10,59/12,62	13,89/16,71
	SCOP			3.66	3.74	3,55	3,62
	Temperature operating field	Indoor DB	°C	15.0~27.0 °C (59~81 °F)	15.0~27.0 °C (59~81 °F)	15.0~27.0 °C (59~81 °F)	15.0~27.0 °C (59~81 °F)
Outdoor WB		°C	-30.0~15.5 °C (-22~60 °F)	-30.0~15.5 °C (-22~60 °F)	-30.0~15.5 °C (-22~60 °F)	-30.0~15.5 °C (-22~60 °F)	
Sound level **4	Sound pressure (Sound power) level		dB(A)	53.5 / 54.0 (73 / 73)	56.0 / 57.5 (75/77)	57.0 / 57.5 (77/77)	59,5/61,0 (79/81)
Connectable indoor units	Total Capacity			50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity	CITY MULTI		P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid		mm	9,52	9,52	12,7	15,88
	Gas		mm	22,2	22,2	28,58	28,58
Fan	Type x quantity			Propeller fan x 2	Propeller fan x 2	Propeller fan x 4	Propeller fan x 4
	Air flow		m³/min	190	210	190+190	210+210
Compressor	Type			Inverter scroll hermetic			
	Motor output		kW	3.8	4.5	3.8	4.5
External dimensions	H(H*)xWxD		mm	1858(1798)x1240x740	1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight			kg	274	294	274+274	294+294
Refrigerant	Ref. Charge R410		kg	9,8	10,8	19,6	21,6
	CO <sub>2</sub> eq.**5		Tons	20,46	22,55	40,92	45,10

# Y NEXT STAGE LINE

OUTDOOR UNITS - PUHY-(E)P Y(S)NW-A2(-BS)

NEW



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

**CITY MULTI**

NEW FAN WITH LOW FRICTION PROFILE

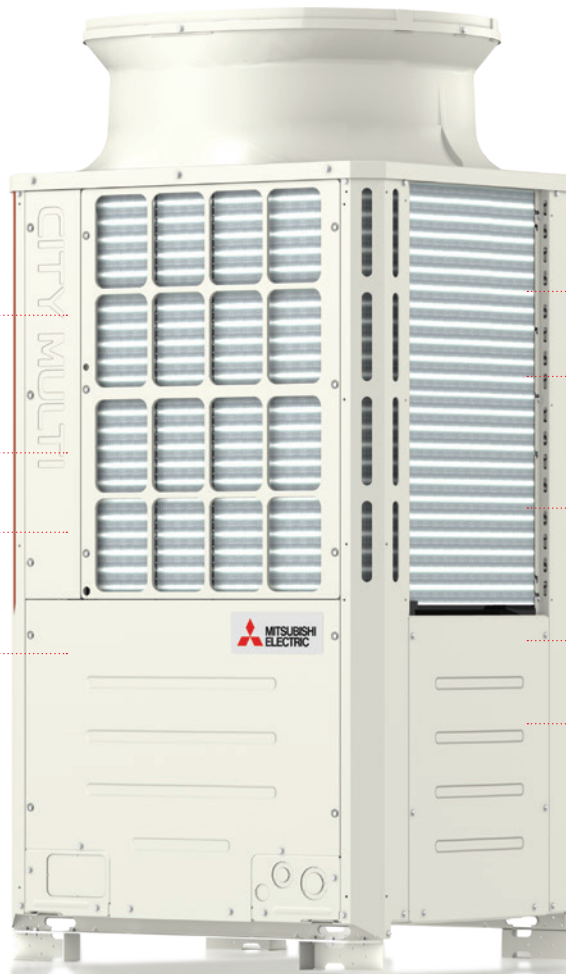
COMPRESSOR OPTIMISED WITH "MULTI-POR" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

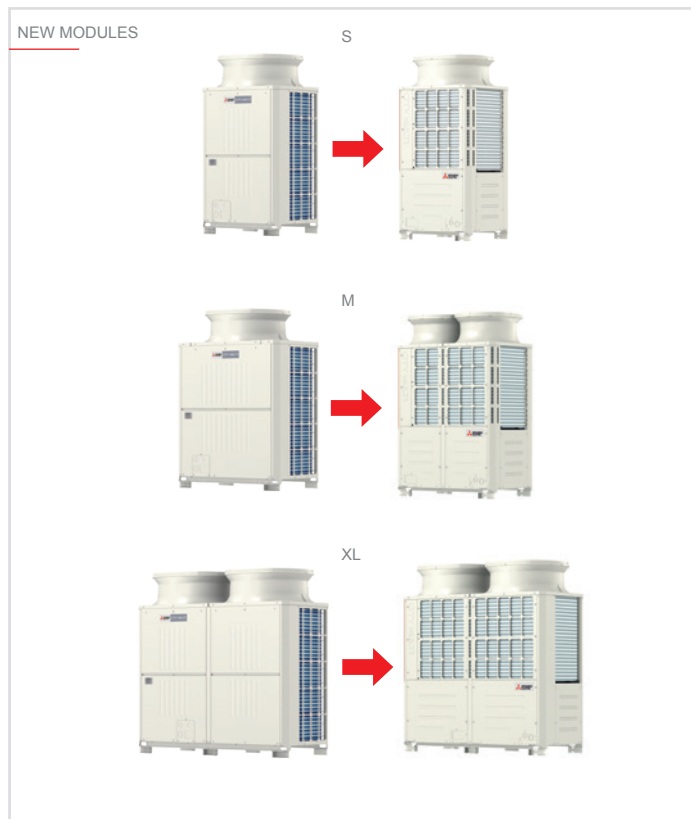
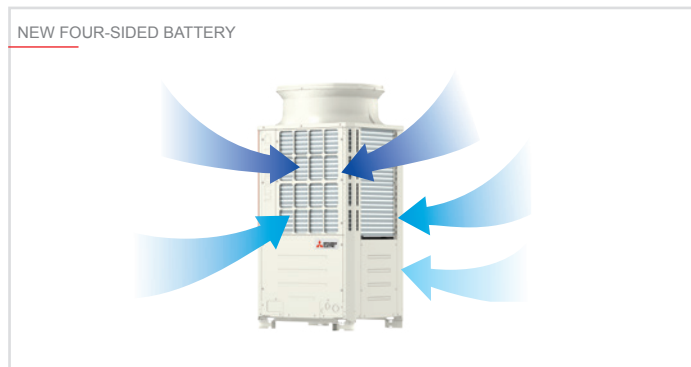
ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

FLEXIBLE NOISE SETTING



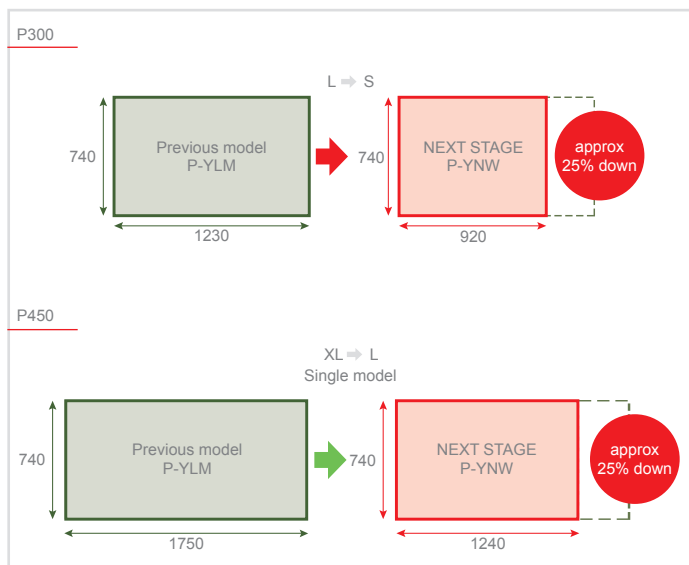
## New design

The new outdoor units of the YNW series use a four-sided heat exchanger close to the top of the case near the fan. This technological and construction choice makes it possible to increase heat exchange efficiency.



## Single module

		Previous model	YNW
8HP	P200	S	S
10HP	P250	S	S
12HP	P300	L	S
14HP	P350	L	L
16HP	P400	L	L
18HP	P450	XL	L
20HP	P500	XL	XL



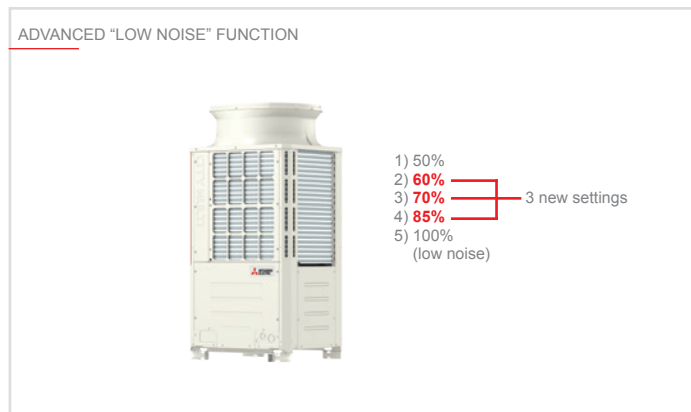
## Energy saving

Energy efficiency has been further improved compared to YLM units and now hits top of the range performance values. SEER values have been raised by 139% (P500) compared to the previous model and SCOP values by 49% (P300 and P500). This allows the new YNW units to consume less energy in both cooling and heating. All year-round saving.



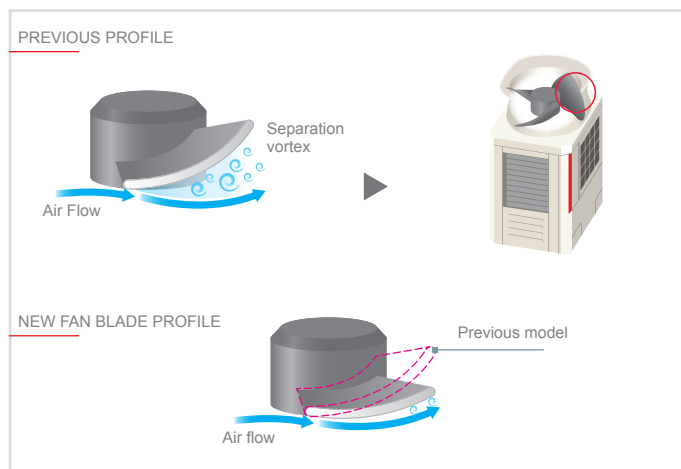
## Advanced “Low Noise” function

“Low noise” mode can now be selected from five different settings: 85%, 70%, 60% and 50% (values referring to fan speed). Noise reduction is directly configurable from the control board of the outdoor unit. Different settings can be selected based on the installation requirements (in applications with special noise constraints).



## Fan blade profile

The YNW series fan has been completely redesigned to match the new four-sided battery. The profile of the fins has been optimised to minimise fluid flow losses.



## Key Technologies


## Technical specifications

MODEL			PUHY-P200YNW-A2(-BS)	PUHY-P250YNW-A2(-BS)	PUHY-P300YNW-A2(-BS)	PUHY-P350YNW-A2(-BS)	PUHY-P400YNW-A2(-BS)
HP			8	10	12	14	16
Modules			PUHY-P200YNW-A2	PUHY-P250YNW-A2	PUHY-P300YNW-A2	PUHY-P350YNW-A2	PUHY-P400YNW-A2
Power supply		V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	6.03	9.62	11.31	13.98	17.57
	SEER		7.65	6.90	6.70	6.35	5.85
Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor DB	°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2 / Capacity (max) **4	kW	22.4/25.0	28.0/31.5	33.5/37.5	40.0/45.0	45.0/50.0
	Power input (nominal) / Power input (max)	kW	5.18/6.08	7.01/8.49	8.74/10.30	10.20/12.32	14.20/12.00
	SCOP		4.35	4.39	4.12	4.33	4.00
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor WB	°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	58/59 (75/77)	60/61 (78/80)	61/64.5 (80/84)	62/64.5 (80/84)	65/67 (82/86)
Connectable indoor units	Total Capacity		50~130% of outdoor unit capacity				
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40
Ø Ref. piping diameter	Liquid	mm	9.52	9.52	9.52	12.7	12.7
	Gas	mm	22.2	22.2	22.2	28.58	28.58
Fan	Type x quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	170	185	240	270	300
Compressor	Type		Inverter scroll hermetic				
	Motor output	kW	3.5	5.3	6.7	8.6	11.4
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	213	213	226	277	277
Refrigerant	Ref. Charge R410	kg	6.5	6.5	6.5	9.8	9.8
	CO <sub>2</sub> eq. <sup>**5</sup>	Tons	13.57	13.57	13.57	20.46	20.46

\*\*1\*\*2\*\*3 Nominal conditions:

Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m

\*\*4 Capacità nominale ( registrata Eurovent - Conto Termico e Detrazioni)

\*\*5 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*6 Without legs

\*\*7 GWP value of HFC R410A 2088 according to 517 / 2014

The SEER and SCOP data are based on the EN14825 measurement standard

### Technical specifications

MODEL			PUHY-P450YNW-A2(-BS)	PUHY-P500YNW-A2(-BS)	PUHY-P400YSNW-A2(-BS)	PUHY-P450YSNW-A2(-BS)	PUHY-P500YSNW-A2(-BS)
HP			18	20	16	18	20
Modules			PUHY-P450YNW-A2	PUHY-P500YNW-A2	PUHY-P(200+200)YNW-A2	PUHY-P(200+250)YNW-A2	PUHY-P(250+250)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	50,0	56,0	44,8	50,4	56,0
	Power input (nominal)	kW	18,86	21,05	12,47	15,94	19,85
	SEER		6,48	6,32	7,42	7,03	6,69
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	50,0/56,0	56,0/63,0	44,8/50,0	50,4/56,5	56,0/63,0
	Power input (nominal)/ Power input (max)	kW	13,77/16,51	14,85/17,89	10,37/12,16	12,20/14,56	14,03/16,98
	SCOP		4,31	4,04	4,35	4,37	4,39
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pression (Sound power) level	dB(A)	65,5/71,0 (84/90)	63,5/66,5 (82/85)	61/62 (78/80)	62/63 (80/82)	63/64 (81/83)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid	mm	15,88	15,88	12,7	15,88	15,88
	Gas	mm	28,58	28,58	28,58	28,58	28,58
Fan	Type x quantity	Propeller fan x 2		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	305	365	170+170	170+185	185+185
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	11,7	13,3	3,5+3,5	3,5+5,3	5,3+5,3
External dimentions	H(H*5)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
Net weight		kg	293	334	213+213	213+213	213+213
Refrigerant	Ref. Charge R410	kg	10,8	10,8	13	13	13
	CO <sub>2</sub> eq. *5	Tons	22,55	22,55	27,14	27,14	27,14

### Technical specifications

MODEL			PUHY-P550YSNW-A2(-BS)	PUHY-P600YSNW-A2(-BS)	PUHY-P650YSNW-A2(-BS)	PUHY-P700YSNW-A2(-BS)	PUHY-P750YSNW-A2(-BS)
HP			22	24	26	28	30
Modules			PUHY-P(250+300)YNW-A2	PUHY-P(300+300)YNW-A2	PUHY-P(250+400)YNW-A2	PUHY-P(350+350)YNW-A2	PUHY-P(350+400)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	61,5	67,0	73,0	80,0	85,0
	Power input (nominal)	kW	21,65	23,34	27,96	28,88	32,56
	SEER		6,59	6,50	6,08	6,15	5,90
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	61,5/69,0	67,0/75,0	73,0/81,5	80,0/90,0	85,0/95,0
	Power input (nominal)/ Power input (max)	kW	15,76/18,80	17,49/20,60	19,01/22,70	20,40/24,65	22,25/26,53
	SCOP		4,24	4,12	4,14	4,33	4,14
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pression (Sound power) level	dB(A)	63,5/66 (82/85)	64/67,5 (83/87)	66,5/68 (83/87)	65/67,5 (83/87)	67/69 (84/88)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	15,88	15,88	15,88	19,05	19,05
	Gas	mm	28,58	28,58	28,58	34,93	34,93
Fan	Type x quantity	Propeller fan x 2		Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	Propeller fan x 4
	Air flow	m³/min	185+240	240+240	185+300	270+270	270+300
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	5,3+6,7	6,7 + 6,7	5,3 + 11,4	8,6+8,6	8,6+11,4
External dimentions	H(H*5)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	213+226	226+226	213+277	277+277	277+277
Refrigerant	Ref. Charge R410	kg	13	13	16,3	19,6	19,6
	CO <sub>2</sub> eq. *5	Tons	27,14	27,14	34,03	40,92	40,92

\*1~\*3 Nominal conditions:

Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m

\*2 Capacità nominale ( registrata Eurovent - Conto Termico e Detrazioni)

\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*5 Without legs

\*6 GWP value of HFC R410A 2088 according to 517 / 2014

The SEER and SCOP data are based on the EN14825 measurement standard

### Technical specifications

MODEL			PUHY-P800YSNW-A2(-BS)	PUHY-P850YSNW-A2(-BS)	PUHY-P900YSNW-A2(-BS)	PUHY-P950YSNW-A2(-BS)	PUHY-P1000YSNW-A2(-BS)
HP			32	34	36	38	40
Modules			PUHY-P(350+450)YNNW-A2	PUHY-P(400+450)YNNW-A2	PUHY-P(450+450)YNNW-A2	PUHY-P (250+350+350)YNNW-A2	PUHY-P (250+350+400)YNNW-A2
Power supply	V/Hz/n*		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	90	95,0	100,0	108,0	113,0
	Power input (nominal)	kW	33,96	37,69	38,91	38,84	42,48
	SEER		6,22	5,99	6,28	6,30	6,10
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	90,0/101,0	95,0/106,0	100,0/112,0	108,0/121,5	113,0/126,5
	Power input (nominal)/ Power input (max)	kW	24,00/28,85	25,81/30,72	27,54/33,03	27,48/33,19	29,27/35,04
	SCOP		4,32	4,16	4,32	4,34	4,21
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	67,5/71 (85/91)	68,5/73 (86/91)	68,5/74 (87/93)	66,5/68,5 (84/88)	68/70 (85/89)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	19,05	19,05	19,05	19,05	19,05
	Gas	mm	34,93	41,28	41,28	41,28	41,28
Fan	Type x quantity	Propeller fan x 4		Propeller fan x 4	Propeller fan x 4	Propeller fan x 5	Propeller fan x 5
	Air flow	m³/min	270+305	300+305	305+305	185+270+270	185+270+300
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	8,6+11,7	11,4+11,7	11,7+11,7	5,3+8,6+8,6	5,3+8,6+11,4
External dimensions	H(H*)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740
	Net weight	kg	277+293	277+293	293+293	213+277+277	213+277+277
Refrigerant	Ref. Charge R410	kg	20,6	20,6	21,6	26,1	26,1
	CO <sub>2</sub> eq.**5	Tons	43,01	43,01	45,10	54,49	54,49

### Technical specifications

MODEL			PUHY-P1050YSNW-A2(-BS)	PUHY-P1100YSNW-A2(-BS)	PUHY-P1150YSNW-A2(-BS)	PUHY-P1200YSNW-A2(-BS)	PUHY-P1250YSNW-A2(-BS)
HP			42	44	46	48	50
Modules			PUHY-P (250+400+400)YNNW-A2	PUHY-P (350+350+400)YNNW-A2	PUHY-P (350+400+400)YNNW-A2	PUHY-P (400+400+400)YNNW-A2	PUHY-P (400+400+450)YNNW-A2
Power supply	V/Hz/n*		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	118,0	125,0	130,0	135,0	140,0
	Power input (nominal)	kW	46,09	46,99	50,58	54,43	55,77
	SEER		5,93	5,98	5,82	5,66	5,89
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	118,0/131,5	125,0/140,0	130,0/145,0	135,0/150,0	140,0/156,0
	Power input (nominal)/ Power input (max)	kW	31,05/36,93	32,46/38,88	34,21/40,84	36,00/42,61	37,83/44,95
	SCOP		4,09	4,20	4,09	4,00	4,11
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	69,0/70,5 (86/90)	68,5/70,5 (86/90)	69,5/71,5 (86/90)	70/72 (87/91)	70/74 (88/93)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19,05	19,05	19,05	19,05	19,05
	Gas	mm	41,28	41,28	41,28	41,28	41,28
Fan	Type x quantity	Propeller fan x 5		Propeller fan x 6	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6
	Air flow	m³/min	185+300+300	270+270+300	270+300+300	300+300+300	300+300+305
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	5,3+11,4+11,4	8,6+8,6+11,4	8,6+11,4+11,4	11,4+11,4+11,4	11,4+11,4+11,7
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740
	Net weight	kg	213+277+277	277+277+277	277+277+277	277+277+277	277+277+293
Refrigerant	Ref. Charge R410	kg	26,1	29,4	29,4	29,4	30,4
	CO <sub>2</sub> eq.**5	Tons	54,49	61,38	61,38	61,38	63,47

\*\*1\*\*2\*\*3 Nominal conditions:

Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m

\*\* Capacità nominale (registrata Eurovent - Conto Termico e Detrazioni)

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 Without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014

The SEER and SCOP data are based on the EN14825 measurement standard

### Technical specifications

MODEL			PUHY-P1300YSNW-A2(-BS)		PUHY-P1350YSNW-A2(-BS)	
HP			52		54	
Modules			PUHY-P (400+450+450)YNW-A2		PUHY-P (450+450+450)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling	Capacity (nominal) *1	kW	145,0		150,0	
	Power input (nominal)	kW	57,08		58,36	
	SEER		6,09		6,28	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	145,0/162,0		150,0/168,0	
	Power input (nominal)/ Power input (max)	kW	39,61/47,23		41,32/49,55	
	SCOP		4,21		4,32	
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Sound level *4	Sound pressure (Sound power) level	dB(A)	70/75 (88/94)		70,5/76 (89/95)	
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity				
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50		P10~P250, M20~M140/3~50	
Ø Ref. piping diameter	Liquid	mm	19,05		19,05	
	Gas	mm	41,28		41,28	
Fan	Type x quantity	Propeller fan x 6		Propeller fan x 6		
	Air flow	m³/min	300+305+305		305+305+305	
Compressor	Type	Inverter scroll hermetic				
	Motor output	kW	11,4+11,7+11,7		11,7+11,7+11,7	
External dimentions	H(H*5)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740		1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	
Net weight		kg	277+293+293		293+293+293	
Refrigerant	Ref. Charge R410	kg	31,4		32,4	
	CO <sub>2</sub> eq.*6	Tons	65,56		67,65	

### Technical specifications

MODEL			PUHY-EP200YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP300YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP400YNW-A2 (-BS)
HP			8	10	12	14	16
Modules			PUHY-EP200YNW-A2	PUHY-EP250YNW-A2	PUHY-EP300YNW-A2	PUHY-EP350YNW-A2	PUHY-EP400YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	5,51	8,21	9,68	12,42	14,65
	SEER		7,76	7,51	7,26	7,03	6,83
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	22.4 / 25.0	28.0 / 31.5	33.5 / 37.5	40.0 / 45.0	45.0 / 50.0
	Power input (nominal)/ Power input (max)	kW	5,01 / 5,93	6,84 / 8,13	8,27 / 9,84	9,77 / 11,81	11,65 / 13,85
	SCOP		4,36	4,40	4,12	4,35	4,25
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pressure (Sound power) level	dB(A)	58.0/59.0 (75/78)	60.0/61.0 (78/80)	61.0/64.5 (80/84)	62.0/64.0 (80/83)	65.0/65.5 (82/85)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40
Ø Ref. piping diameter	Liquid	mm	9.52	9.52	9.52	12.7	12.7
	Gas	mm	22.2	22.2	28.58	28.58	28.58
Fan	Type x quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	
	Air flow	m³/min	170	185	240	270	270
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	3.4	5.1	6.1	7.7	9.8
External dimentions	H(H*5)xWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	228	228	231	282	303
Refrigerant	Ref. Charge R410	kg	6,5	6,5	6,5	9,8	10,8
	CO <sub>2</sub> eq.*6	Tons	13,57	13,57	13,57	20,46	22,55

\*1\*2\*3 Nominal conditions:

Nominal heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m

\*2 Capacità nominale ( registrata Eurotest - Conto Termico e Detrazioni)

\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*5 Without legs

\*6 GWP value of HFC R410A 2088 according to 517 / 2014

The SEER and SCOP data are based on the EN14825 measurement standard



### Technical specifications

MODEL			PUHY-EP450YNW-A2 (-BS)	PUHY-EP500YNW-A2 (-BS)	PUHY-EP400YSNW-A2 (-BS)	PUHY-EP450YSNW-A2 (-BS)	PUHY-EP500YSNW-A2 (-BS)
HP			18	20	16	18	20
Modules			PUHY-EP450YNW-A2	PUHY-EP500YNW-A2	PUHY-EP(200+200)YNW-A2	PUHY-EP(200+250)YNW-A2	PUHY-EP(250+250)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	50.0	56.0	44.8	50.4	56.0
	Power input (nominal)	kW	17.73	20.51	11.39	14.07	16.96
	SEER		6.94	6.55	7.53	7.40	7.29
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	50.0 / 56.0	56.0 / 63.0	44.8 / 50.0	50.4 / 56.5	56.0 / 63.0
	Power input (nominal)/ Power input (max)	kW	12.85 / 16.18	14.73 / 17.74	10.02 / 11.87	11.85 / 14.05	13.69 / 16.27
	SCOP		4.32	4.10	4.36	4.37	4.40
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **	Sound pressure (Sound power) level	dB(A)	65.5/70.5 (84/90)	63.5/66.5 (82/85)	61.0/62.0 (78/81)	62.5/63.5 (80/82)	63.5/64.0 (81/83)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid	mm	15.88	15.88	12.7	15.88	15.88
	Gas	mm	28.58	28.58	28.58	28.58	28.58
Fan	Type x quantity	Propeller fan x 2					
	Air flow	m³/min	305	365	170 + 170	170 + 185	185 + 185
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	11.1	12.5	3.4 + 3.4	3.4 + 5.1	5.1 + 5.1
External dimensions	H(H*)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
Net weight		kg	303	342	228 + 228	228 + 228	228 + 228
Refrigerant	Ref. Charge R410	kg	10.8	10.8	13	13	13
	CO <sub>2</sub> eq.*5	Tons	22.55	22.55	27.14	27.14	27.14

### Technical specifications

MODEL			PUHY-EP550YSNW-A2 (-BS)	PUHY-EP600YSNW-A2 (-BS)	PUHY-EP650YSNW-A2 (-BS)	PUHY-EP700YSNW-A2 (-BS)	PUHY-EP750YSNW-A2 (-BS)
HP			22	24	26	28	30
Modules			PUHY-EP(250+300)YNW-A2	PUHY-EP(300+300)YNW-A2	PUHY-EP(250+400)YNW-A2	PUHY-EP(350+350)YNW-A2	PUHY-EP(350+400)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	61.5	67.0	73.0	80.0	85.0
	Power input (nominal)	kW	18.46	20.00	23.54	25.64	27.96
	SEER		7.16	7.04	6.89	6.82	6.72
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	61.5 / 69.0	67.0 / 75.0	73.0 / 81.5	80.0 / 90.0	85.0 / 95.0
	Power input (nominal)/ Power input (max)	kW	15.14 / 18.01	16.54 / 19.68	18.52 / 21.96	19.55 / 23.62	21.46 / 25.67
	SCOP		4.24	4.12	4.30	4.35	4.29
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **	Sound pressure (Sound power) level	dB(A)	64.0/66.5 (82/85)	64.0/67.5 (83/87)	66.5/67.0 (83/86)	65.0/67.0 (83/86)	67.0/68.0 (84/87)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	15.88	15.88	15.88	19.05	19.05
	Gas	mm	28.58	28.58	28.58	34.93	34.93
Fan	Type x quantity	Propeller fan x 2					
	Air flow	m³/min	185 + 240	240 + 240	185 + 270	270 + 270	270 + 270
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	5.1 + 6.1	6.1 + 6.1	5.1 + 9.8	7.7 + 7.7	7.7 + 9.8
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	228 + 231	231 + 231	228 + 303	282 + 282	282 + 303
Refrigerant	Ref. Charge R410	kg	13	13	17.3	19.6	20.6
	CO <sub>2</sub> eq.*5	Tons	27.14	27.14	36.12	40.92	43.01

\*1~\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\* Eurovent registered

\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*5 without legs

\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

## Technical specifications

MODEL			PUHY-EP800YSNW-A2 (-BS)	PUHY-EP850YSNW-A2 (-BS)	PUHY-EP900YSNW-A2 (-BS)	PUHY-EP950YSNW-A2 (-BS)	PUHY-EP1000YSNW-A2 (-BS)
HP			32	34	36	38	40
Modules			PUHY-EP(350+450)YNW-A2	PUHY-EP(400+450)YNW-A2	PUHY-EP(450+450)YNW-A2	PUHY-EP(250+350+350)YNW-A2	PUHY-EP(250+350+400)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	90.0	95.0	100.0	108.0	113.0
	Power input (nominal)	kW	31.03	33.45	36.63	34.06	36.33
	SEER		6.77	6.68	6.73	6.95	6.87
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	90.0 / 101.0	95.0 / 106.0	100.0 / 112.0	108.0 / 121.5	113.0 / 126.5
	Power input (nominal)/ Power input (max)	kW	22.67 / 27.97	24.54 / 30.02	25.70 / 32.36	26.40 / 31.80	28.32 / 33.82
	SCOP		4.33	4.28	4.32	4.36	4.32
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pressure (Sound power) level	dB(A)	67.5/70.5 (85/91)	68.5/72.0 (86/91)	69.0/73.5 (87/93)	66.5/68.0 (84/87)	68.0/68.5 (85/88)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05	19.05	19.05	19.05
	Gas	mm	34.93	41.28	41.28	41.28	41.28
Fan	Type x quantity	Propeller fan x 4		Propeller fan x 4	Propeller fan x 4	Propeller fan x 5	Propeller fan x 5
	Air flow	m³/min	270 + 305	270 + 305	305 + 305	185 + 270 + 270	185 + 270 + 270
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	7.7 + 11.1	9.8 + 11.1	11.1 + 11.1	5.1 + 7.7 + 7.7	5.1 + 7.7 + 9.8
External dimensions	H(H*5)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	282 + 303	303 + 303	303 + 303	228 + 282 + 282	228 + 282 + 303
Refrigerant	Ref. Charge R410	kg	20.6	21.6	21.6	26.1	27.1
	CO <sub>2</sub> eq.*6	Tons	43.01	45.1	45.1	54.49	56.58

## Technical specifications

MODEL			PUHY-EP1050YSNW-A2 (-BS)	PUHY-EP1100YSNW-A2 (-BS)	PUHY-EP1150YSNW-A2 (-BS)	PUHY-EP1200YSNW-A2 (-BS)	PUHY-EP1250YSNW-A2 (-BS)
HP			42	44	46	48	50
Modules			PUHY-EP(250+400+400)YNW-A2	PUHY-EP(350+350+400)YNW-A2	PUHY-EP(350+400+400)YNW-A2	PUHY-EP(400+400+400)YNW-A2	PUHY-EP(400+400+450)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	118.0	125.0	130.0	135.0	140.0
	Power input (nominal)	kW	38.68	40.71	43.04	45.45	48.44
	SEER		6.79	6.75	6.69	6.62	6.66
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	118.0 / 131.5	125.0 / 140.0	130.0 / 145.0	135.0 / 150.0	140.0 / 156.0
	Power input (nominal)/ Power input (max)	kW	30.17 / 35.83	31.25 / 37.53	33.07 / 39.50	34.97 / 41.55	36.17 / 43.94
	SCOP		4.28	4.31	4.27	4.25	4.27
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pressure (Sound power) level	dB(A)	68.5/69.0 (86/89)	68.0/69.5 (86/89)	69.0/70.0 (86/89)	70.0/70.5 (87/90)	70.0/73.0 (88/92)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05	19.05	19.05	19.05
	Gas	mm	41.28	41.28	41.28	41.28	41.28
Fan	Type x quantity	Propeller fan x 5		Propeller fan x 6	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6
	Air flow	m³/min	185 + 270 + 270	270 + 270 + 270	270 + 270 + 270	270 + 270 + 270	270 + 270 + 305
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	5.1 + 9.8 + 9.8	7.7 + 7.7 + 9.8	7.7 + 9.8 + 9.8	9.8 + 9.8 + 9.8	9.8 + 9.8 + 11.1
External dimensions	H(H*5)xWxD	mm	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	282 + 303 + 303	282 + 282 + 303	282 + 303 + 303	303 + 303 + 303	303 + 303 + 303
Refrigerant	Ref. Charge R410	kg	28.1	30.4	31.4	32.4	32.4
	CO <sub>2</sub> eq.*6	Tons	58.67	63.47	63.47	67.65	67.65

\*1~\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*2 Eurovent registered

\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*5 without legs

\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

## Technical specifications

MODEL			PUHY-EP1300YSNW-A2 (-BS)	PUHY-EP1350YSNW-A2 (-BS)
HP			52	54
Modules			PUHY-EP(400+450+450)YNW-A2	PUHY-EP(450+450+450)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling	Capacity (nominal) **1	kW	145.0	150.0
	Power input (nominal)	kW	51,60	54,94
	SEER		6,70	6,73
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	145.0 / 162.0	150.0 / 168.0
	Power input (nominal)/ Power input (max)	kW	37,37 / 46,28	38,56 / 48,55
	SCOP		4,29	4,32
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pression (Sound power) level	dB(A)	70/74,0 (88/94)	70.5/75.5 (89/95)
Connectable indoor units	Total Capacity		50~130% of outdoor unit capacity	
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05
	Gas	mm	41.28	41.28
Fan	Type x quantity		Propeller fan x 6	Propeller fan x 6
	Air flow	m³/min	270 + 305 + 305	305 + 305 + 305
Compressor	Type		Inverter scroll hermetic compressor	
	Motor output	kW	9.8 + 11.1 + 11.1	11.1 + 11.1 + 11.1
External dimensions	H(H*)xWxD	mm	1858(1798)x1240x740	1858(1798)x1240x740
			1858(1798)x1240x740	1858(1798)x1240x740
			1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	303 + 303 + 303	303 + 303 + 303
Refrigerant	Ref. Charge R410	kg	32,4	32,4
	CO <sub>2</sub> eq.**5	Tons	67,65	67,65

\*\*1\*\*2\*\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\*2 Eurovent registered

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

office



# R2 NEXT STAGE LINE

NEW

OUTDOOR UNITS - PURY-(E)P Y(S)NW-A2(-BS)



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

**CITY MULTI**

NEW FAN WITH LOW FRICTION PROFILE

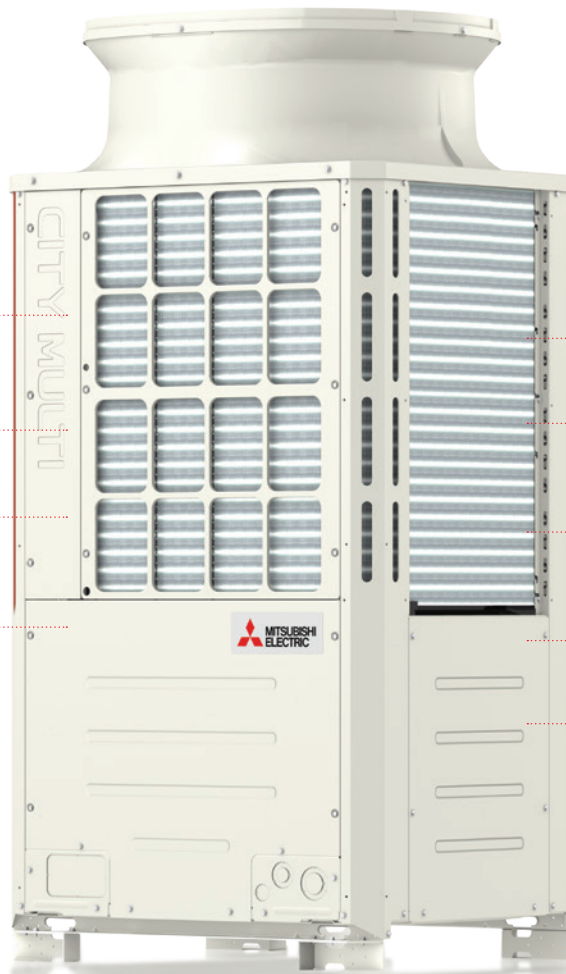
COMPRESSOR OPTIMISED WITH "MULTI-PORT" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

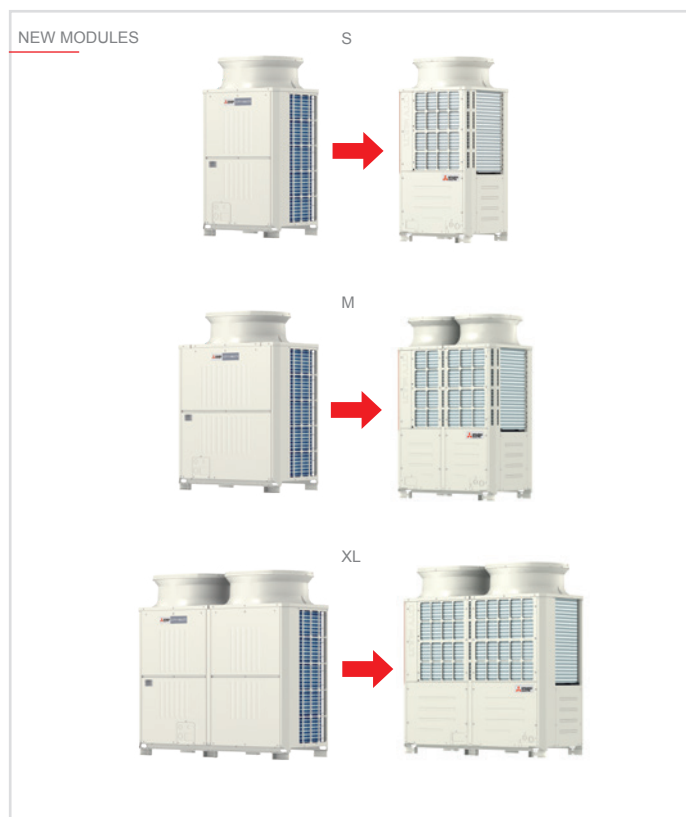
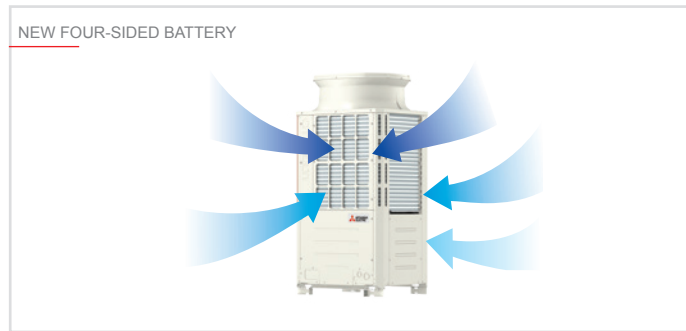
ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

FLEXIBLE NOISE SETTING



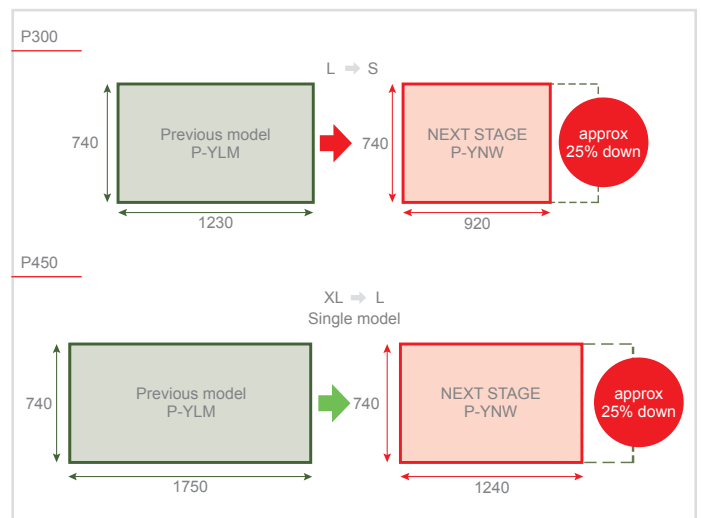
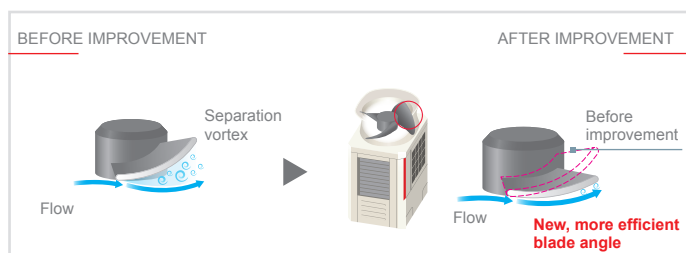
## New design

The new outdoor units of the YNW series use a four-sided heat exchanger close to the top of the case near the fan. This technological and construction choice makes it possible to increase heat exchange efficiency.



## New fan with new blade profile

The fan of the new YNW series has been completely redesigned to fit with the new four-sided battery. The profile of the fins has been optimised to minimise fluid flow losses.



## Energy saving

Energy efficiency has been further improved compared to YLM units and now hits top of the range performance values. SEER values have been raised by 139% (P500) compared to the previous model and SCOP values by 49% (P300 and P500). This allows the new YNW units to consume less energy in both cooling and heating. All year-round saving.

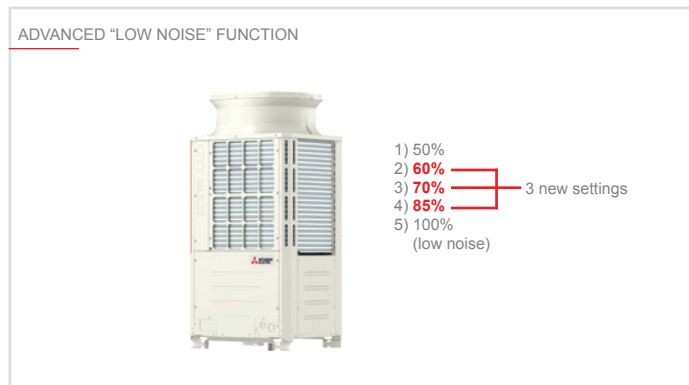


## Single module

		Previous model	YNW
8HP	P200	S	S
10HP	P250	S	S
12HP	P300	L	S
14HP	P350	L	L
16HP	P400	L	L
18HP	P450	XL	L
20HP	P500	XL	XL

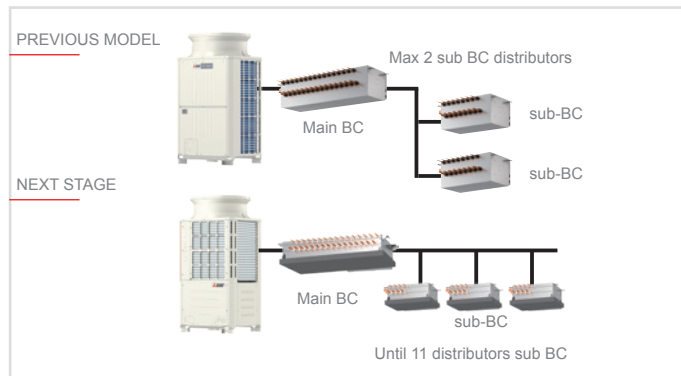
## Advanced “Low Noise” function

Low noise” mode can now be selected using five different settings: 85%, 70%, 60% and 50% (values referring to ventilation speed). Noise reduction is directly configurable from the control board of the outdoor unit. Different settings can be selected depending on the installation requirements (in applications with special noise constraints).



## New BC distributor

Increased number of connections (for systems with BC SUB distributor) and increased geometric limits. In the R2 heat recovery systems of the new YNW line, up to 11 BC SUB distributors can be connected to the BC Main distributor, thus allowing greater flexibility of configuration. The adoption of the new architecture allows a reduction of the refrigerant charge in the system.



## Key Technologies


## Technical specifications

MODEL			PURY-P200YNW-A2(-BS)	PURY-P250YNW-A2(-BS)	PURY-P300YNW-A2(-BS)	PURY-P350YNW-A2(-BS)	PURY-P400YNW-A2(-BS)
HP			8	10	12	14	16
Modules			PURY-P200YNW-A2	PURY-P250YNW-A2	PURY-P300YNW-A2	PURY-P350YNW-A2	PURY-P400YNW-A2
Power supply		V/Hz/n*	3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	6.68	10.25	11.75	14.92	19.65
	SEER		7.27	6.85	6.34	5.98	5.82
Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor DB	°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **/ Capacity (max) **3	kW	22.4/25.0	28.0/31.5	33.5/33.5	40.0/45.0	45.0/50.0
	Power input (nominal)/ Power input (max)	kW	5.38/6.79	7.36/9.57	9.62/9.62	10.89/13.88	13.39/16.66
	SCOP		4.01	4.01	4.01	3.53	3.51
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	59/59 (76/76)	60.5/64 (78/83)	61/67 (80/86)	62.5/64 (81/83)	65/69 (83/88)
Connectable indoor units	Total Capacity		50~150% of outdoor unit capacity				
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40
Ø Ref. piping diameter	Liquid	mm	15.88	19.05	19.05	19.05	22.2
	Gas	mm	19.05	22.2	22.2	28.58	28.58
Fan	Type x quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	170	220	240	250	315
Compressor	Type		Inverter scroll hermetic				
	Motor output	kW	5.0	8.0	9.2	12.0	16.1
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	214	223	225	269	269
Refrigerant	Ref. Charge R410	kg	5.2	5.2	5.2	8.0	8.0
	CO <sub>2</sub> eq.**6	Tons	10.85	10.85	10.85	16.70	16.70

\*\*1\*\*2\*\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\*2 Eurovent registered

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

## Technical specifications

MODEL			PURY-P450YNW-A2(-BS)	PURY-P500YNW-A2(-BS)	PURY-P550YNW-A2(-BS)	PURY-P400YSNW-A2(-BS)	PURY-P450YSNW-A2(-BS)	PURY-P500YSNW-A2(-BS)
HP			18	20	22	16	18	20
Modules			PURY-P450YNW-A2	PURY-P500YNW-A2	PURY-P550YNW-A2	PURY-P(200+200)YNW-A2	PURY-P(200+250)YNW-A2	PURY-P(250+250)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling	Capacity (nominal) *1	kW	50.0	56.0	60.0	44.8	50.4	56.0
	Power input (nominal)	kW	19.84	22.22	25.86	13.78	17.08	21.13
	SEER		6.38	6.24	6.25	7.05	6.85	6.64
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	50.0/56.0	56.0/63.0	63.0/69.0	44.8/50.0	50.4/56.5	56.0/63.0
	Power input (nominal)/ Power input (max)	kW	15.33/18.79	16.76/21.14	20.00/24.55	11.08/14.00	13.05/16.71	15.17/19.74
	SCOP		3.51	3.51	3.51	4.01	4.01	4.01
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pression (Sound power) level	dB(A)	65.5/70 (83/89)	63.5/64.5 (82/84)	70.0/70.0 (89/89)	62/62 (79/79)	63/65.5 (81/84)	63.5/67 (81/86)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10-P250, M20-M140/1-45	P10-P250, M20-M140/1-50	P10-P250, M20-M140/2-50	P10-P250, M20-M140/1-40	P10-P250, M20-M140/1-45	P10-P250, M20-M140/1-50
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	22.2	22.2	22.2
	Gas	mm	28.58	28.58	28.58	28.58	28.58	28.58
Fan	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	315	295	410	170+170	170+220	220+220
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	16.2	17.4	20.5	5.0+5.0	5.0+8.0	8.0+8.0
External dimentions	H(H*5)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
	Net weight	kg	289	335	335	214+214	214+223	223+223
Refrigerant	Ref. Charge R410	kg	10.8	10.8	10.8	10.4	10.4	10.4
	CO <sub>2</sub> eq.*6	Tons	22.55	22.55	22.55	21.71	21.71	21.71

## Technical specifications

MODEL			PURY-P550YSNW-A2(-BS)	PURY-P600YSNW-A2(-BS)	PURY-P650YSNW-A2(-BS)	PURY-P700YSNW-A2(-BS)	PURY-P750YSNW-A2(-BS)
HP			22	24	26	28	30
Modules			PURY-P(250+300)YNW-A2	PURY-P(300+300)YNW-A2	PURY-P(300+350)YNW-A2	PURY-P(350+350)YNW-A2	PURY-P(350+400)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	61.5	67.0	73.5	80.0	85.0
	Power input (nominal)	kW	22.69	24.27	27.42	30.76	35.26
	SEER		6.40	6.15	5.98	5.80	5.72
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) *2/ Capacity (max) *3	kW	61.5/65.0	67.0/67.0	73.5/78.5	80.0/90.0	85.0/95.0
	Power input (nominal)/ Power input (max)	kW	17.42/19.81	19.82/19.81	21.18/24.07	22.47/28.66	24.92/31.35
	SCOP		4.01	4.01	3.53	3.53	3.51
	Temperature operating field	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor WB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level *4	Sound pression (Sound power) level	dB(A)	64/69 (83/88)	64/70 (83/89)	65/69 (84/88)	65.5/67 (84/86)	67/70.5 (86/90)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10-P250, M20-M140/2-50	P10-P250, M20-M140/2-50	P10-P250, M20-M140/2-50	P10-P250, M20-M140/2-50	P10-P250, M20-M140/2-50
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	28.58	28.58	28.58
	Gas	mm	28.58	28.58	28.58	34.93	34.93
Fan	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	Propeller fan x 4
	Air flow	m³/min	220+240	240+240	240+250	250+250	250+315
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	8.0+9.2	9.2+9.2	9.2+12.0	12.0+12.0	12.0+16.1
External dimentions	H(H*5)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
	Net weight	kg	223+225	225+225	225+269	269+269	269+269
Refrigerant	Ref. Charge R410	kg	10.4	10.4	13.2	16	16
	CO <sub>2</sub> eq.*6	Tons	21.71	21.71	27.56	33.40	33.40

\*1~\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*2 Eurovent registered

\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*5 without legs

\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard



## Technical specifications

MODEL			PURY-P800YSNW-A2(-BS)	PURY-P850YSNW-A2(-BS)	PURY-P900YSNW-A2(-BS)	PURY-P950YSNW-A2(-BS)	PURY-P1000YSNW-A2(-BS)	
HP			32	34	36	38	40	
Modules			PURY-P(400+400)YNW-A2	PURY-P(400+450)YNW-A2	PURY-P(450+450)YNW-A2	PURY-P(450+500)YNW-A2	PURY-P(500+500)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) **1	kW	90.0	95.0	100.0	106.0	112.0	
	Power input (nominal)	kW	40.54	40.77	40.98	43.44	45.90	
	SEER		5.65	5.92	6.19	6.12	6.05	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	90.0/100.0	95.0/106.0	100.0/112.0	106.0/119.0	112.0/126.0	
	Power input (nominal)/ Power input (max)	kW	27.60/34.36	29.59/36.55	31.64/38.75	33.12/41.17	34.56/43.59	
	SCOP		3.51	3.51	3.51	3.51	3.51	
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor DB	°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pression (Sound power) level	dB(A)	68/72 (86/91)	68.5/72.5 (86/92)	68.5/73.0 (86/92)	68/71.5 (86/91)	66.5/67.5 (85/87)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Ø Ref. piping diameter	Liquid	mm	28.58	28.58	28.58	28.58	28.58	
	Gas	mm	34.93	41.28	41.28	41.28	41.28	
Fan	Type x quantity	Propeller fan x 4		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	315+315	315+315	315+315	315+295	295+295	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	16.1+16.1	16.1+16.2	16.2+16.2	16.2+17.4	17.4+17.4	
External dimensions	H(H*5)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1750x740	1858(1798)x1750x740 1858(1798)x1750x740	
Net weight		kg	269+269	269+289	289+289	289+335	335+335	
Refrigerant	Ref. Charge R410	kg	16	18.8	21.6	21.6	21.6	
	CO <sub>2</sub> eq.**6	Tons	33.40	39.25	45.1	45.1	45.1	

## Technical specifications

MODEL			PURY-P1050YSNW-A2(-BS)	PURY-P1100YSNW-A2(-BS)	
HP			42	44	
Modules			PURY-P(500+550)YNW-A2	PURY-P(550+550)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling	Capacity (nominal) **1	kW	116.0	120.0	
	Power input (nominal)	kW	49.36	53.32	
	SEER		6.06	6.06	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	119.0/132.0	126.0/138.0	
	Power input (nominal)/ Power input (max)	kW	37.77/46.97	41.17/50.54	
	SCOP		3.51	3.51	
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor DB	°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pression (Sound power) level	dB(A)	71.0/71.5 (90/91)	73.0/73.0 (92/92)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity		50~150% of outdoor unit capacity	
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	
Ø Ref. piping diameter	Liquid	mm	34.93	34.93	
	Gas	mm	41.28	41.28	
Fan	Type x quantity	Propeller fan x 4		Propeller fan x 4	
	Air flow	m³/min	295+410	410+410	
Compressor	Type	Inverter scroll hermetic			
	Motor output	kW	17.4+20.5	20.5+20.5	
External dimensions	H(H*5)xWxD	mm	1858(1798)x1750x740 1858(1798)x1750x740	1858(1798)x1750x740 1858(1798)x1750x740	
Net weight		kg	335+335	335+335	
Refrigerant	Ref. Charge R410	kg	21.6	21.6	
	CO <sub>2</sub> eq.**6	Tons	45.1	45.1	

\*\*1\*\*2\*\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\*2 Eurovent registered

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

## Technical specifications

MODEL			PURY-EP200YNW-A2(-BS)	PURY-EP250YNW-A2(-BS)	PURY-EP300YNW-A2(-BS)	PURY-EP350YNW-A2(-BS)	PURY-EP400YNW-A2(-BS)
HP			8	10	12	14	16
Modules			PURY-EP200YNW-A2	PURY-EP250YNW-A2	PURY-EP300YNW-A2	PURY-EP350YNW-A2	PURY-EP400YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	6.38	9.75	11.20	14.23	18.75
	SEER		7.45	7.05	6.48	6.03	6.10
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	22.4 / 25.0	28.0 / 31.5	33.5 / 37.5	40.0 / 45.0	45.0 / 50.0
	Power input (nominal)/ Power input (max)	kW	5.37 / 6.72	7.31 / 9.51	9.59 / 10.90	10.63 / 13.39	13.15 / 16.33
	SCOP		3.51	3.51	3.54	3.56	3.57
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor DB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	59.0/59.0 (76/76)	60.5/61.0 (78/80)	61.0/67.0 (80/86)	62.5/64.0 (81/83)	65.0/69.0 (83/88)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10-P250, M20-M140/1~20	P10-P250, M20-M140/1~25	P10-P250, M20-M140/1~30	P10-P250, M20-M140/1~35	P10-P250, M20-M140/1~40
Ø Ref. piping diameter	Liquid	mm	15.88	19.05	19.05	19.05	22.2
	Gas	mm	19.05	22.2	22.2	28.58	28.58
Fan	Type x quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	170	185	240	250	315
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	4.9	7.5	8.8	11.4	15.3
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	219	228	230	275	276
Refrigerant	Ref. Charge R410	kg	5.2	5.2	5.2	8.0	8.0
	CO <sub>2</sub> eq.**6	Tons	10.85	10.85	10.85	16.70	16.70

## Technical specifications

MODEL			PURY-EP450YNW-A2(-BS)	PURY-EP500YNW-A2(-BS)	PURY-EP550YNW-A2(-BS)	PURY-EP400YSNW-A2(-BS)	PURY-EP450YSNW-A2(-BS)
HP			18	20	22	16	18
Modules			PURY-EP450YNW-A2	PURY-EP500YNW-A2	PURY-EP550YNW-A2	PURY-EP(200+200)YNW-A2	PURY-EP(200+250)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	50.0	56.0	60.0	44.8	50.4
	Power input (nominal)	kW	18.93	21.78	25.70	13.17	16.31
	SEER		6.58	6.38	6.40	7.23	7.03
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	50.0 / 56.0	56.0 / 63.0	63.0 / 69.0	44.8 / 50.0	50.4 / 56.5
	Power input (nominal)/ Power input (max)	kW	14.61 / 18.36	16.66 / 21.00	19.81 / 23.87	11.08 / 13.85	12.98 / 16.56
	SCOP		3.56	3.54	3.51	3.51	3.51
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor DB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pressure (Sound power) level	dB(A)	65.5/70.0 (83/89)	63.5/64.5 (82/84)	70.0/70.0 (89/89)	62.0/62.0 (79/79)	63.0/63.5 (81/82)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10-P250, M20-M140/1~45	P10-P250, M20-M140/1~50	P10-P250, M20-M140/2~50	P10-P250, M20-M140/1~40	P10-P250, M20-M140/1~45
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	22.2	22.2
	Gas	mm	28.58	28.58	28.58	28.58	28.58
Fan	Type x quantity	Propeller fan x 2		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	315	295	410	170 + 170	170 + 185
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	15.5	17.0	20.4	4.9 + 4.9	4.9 + 7.5
External dimensions	H(H*)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
Net weight		kg	301	346	346	219 + 219	219 + 228
Refrigerant	Ref. Charge R410	kg	10.8	10.8	10.8	10.4	10.4
	CO <sub>2</sub> eq.**6	Tons	22.55	22.55	22.55	21.71	21.71

\*\*1\*\*2\*\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\* Eurovent registered

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

### Technical specifications

MODEL			PURY-EP500YSNW-A2(-BS)	PURY-EP550YSNW-A2(-BS)	PURY-EP600YSNW-A2(-BS)	PURY-EP650YSNW-A2(-BS)	PURY-EP700YSNW-A2(-BS)
HP			20	22	24	26	28
Modules			PURY-EP(250+250)YNW-A2	PURY-EP(250+300)YNW-A2	PURY-EP(300+300)YNW-A2	PURY-EP(300+350)YNW-A2	PURY-EP(350+350)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	56.0	61.5	67.0	73.5	80.0
	Power input (nominal)	kW	20.14	21.65	23.10	26.15	29.30
	SEER		6.84	6.56	6.29	6.07	5.85
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	56.0 / 63.0	61.5 / 69.0	67.0 / 75.0	73.5 / 82.5	80.0 / 90.0
	Power input (nominal)/ Power input (max)	kW	15.05 / 19.62	17.32 / 21.10	19.76 / 22.45	20.88 / 25.00	21.91 / 27.60
	SCOP		3.51	3.51	3.54	3.54	3.56
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor DB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pression (Sound power) level	dB(A)	63.5/64.0 (81/83)	64.0/68.0 (83/87)	64.0/70.0 (83/89)	65.0/69.0 (84/88)	65.5/67.0 (84/86)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	28.58	28.58
	Gas	mm	28.58	28.58	28.58	28.58	34.93
Fan	Type x quantity	Propeller fan x 2		Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4
	Air flow	m³/min	185 + 185	185 + 240	240 + 240	240 + 250	250 + 250
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	7.5 + 7.5	7.5 + 8.8	8.8 + 8.8	8.8 + 11.4	11.4 + 11.4
External dimentions	H(H*5)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
	Net weight	kg	228 + 228	228 + 230	230 + 230	230 + 275	275 + 275
Refrigerant	Ref. Charge R410	kg	10.4	10.4	10.4	13.2	16
	CO <sub>2</sub> eq.**6	Tons	21.71	21.71	21.71	27.56	33.40

### Technical specifications

MODEL			PURY-EP750YSNW-A2(-BS)	PURY-EP800YSNW-A2(-BS)	PURY-EP850YSNW-A2(-BS)	PURY-EP900YSNW-A2(-BS)	PURY-EP950YSNW-A2(-BS)
HP			30	32	34	36	38
Modules			PURY-EP(350+400)YNW-A2	PURY-EP(400+400)YNW-A2	PURY-EP(400+450)YNW-A2	PURY-EP(450+450)YNW-A2	PURY-EP(450+500)YNW-A2
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **1	kW	85.0	90.0	95.0	100.0	106.0
	Power input (nominal)	kW	33.59	38.62	38.93	39.06	41.89
	SEER		5.88	5.92	6.15	6.38	6.29
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating	Capacity (nominal) **2/ Capacity (max) **3	kW	85.0 / 95.0	90.0 / 100.0	95.0 / 106.0	100.0 / 112.0	106.0 / 119.0
	Power input (nominal)/ Power input (max)	kW	24.42 / 30.54	27.10 / 33.67	28.61 / 35.81	30.12 / 37.83	32.21 / 40.61
	SCOP		3.56	3.57	3.56	3.56	3.54
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor DB		°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level **4	Sound pression (Sound power) level	dB(A)	67.0/70.5 (86/90)	68.0/72.0 (86/91)	68.5/72.5 (86/92)	68.5/73.0 (86/92)	68.0/71.5 (86/91)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	28.58	28.58	28.58	28.58	28.58
	Gas	mm	34.93	34.93	41.28	41.28	41.28
Fan	Type x quantity	Propeller fan x 4		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4
	Air flow	m³/min	250 + 315	315 + 315	315 + 315	315 + 315	315 + 295
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	11.4 + 15.3	15.3 + 15.3	15.3 + 15.5	15.5 + 15.5	15.5 + 17.0
External dimentions	H(H*5)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1750x740
	Net weight	kg	275 + 276	276 + 276	276 + 301	301 + 301	301 + 346
Refrigerant	Ref. Charge R410	kg	16	16	18.8	21.6	21.6
	CO <sub>2</sub> eq.**6	Tons	33.40	37.58	39.25	45.1	45.1

\*\*1\*\*2\*\*3 Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

\*\*2 Eurovent registered

\*\*4 Values measured in anechoic chamber (Cooling mode/Heating mode)

\*\*5 without legs

\*\*6 GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

## Technical specifications

MODEL			PURY-EP1000YSNW-A2(-BS)	PURY-EP1050YSNW-A2(-BS)	PURY-EP1100YSNW-A2(-BS)	
HP			40	42	44	
Modules			PURY-EP(500+500)YNW-A2	PURY-EP(500+550)YNW-A2	PURY-EP(550+550)YNW-A2	
Power supply		V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling	Capacity (nominal) <sup>*1</sup>	kW	112.0	116.0	120.0	
	Power input (nominal)	kW	44.97	48.73	53.08	
	SEER		6.19	6.20	6.21	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor DB		°C	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	
Heating	Capacity (nominal) <sup>*2</sup> / Capacity (max) <sup>*3</sup>	kW	112.0 / 126.0	119.0 / 132.0	126.0 / 138.0	
	Power input (nominal)/ Power input (max)	kW	34.35 / 43.29	37.53 / 46.15	40.90 / 49.28	
	SCOP		3.54	3.51	3.51	
	Temperature operating field	Indoor WB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
		Outdoor DB	°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Sound level <sup>*4</sup>	Sound pressure (Sound power) level	dB(A)	66.5/67.5 (85/87)	71.0/71.5 (90/91)	73.0/73.0 (92/92)	
Connectable indoor units	Total Capacity		50~150% of outdoor unit capacity			
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	
Ø Ref. piping diameter	Liquid	mm	28.58	34.93	34.93	
	Gas	mm	41.28	41.28	41.28	
Fan	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	295 + 295	295 + 410	410 + 410	
Compressor	Type		Inverter scroll hermetic			
	Motor output	kW	17.0 + 17.0	17.0 + 20.4	20.4 + 20.4	
External dimensions	H(H*5)xWxD	mm	1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x1750x740	
			1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x1750x740	
Net weight		kg	346 + 346	346 + 346	346 + 346	
Refrigerant	Ref. Charge R410	kg	21.6	21.6	21.6	
	CO <sub>2</sub> eq. <sup>*6</sup>	Tons	45.1	45.1	45.1	

<sup>\*1</sup><sup>\*2</sup><sup>\*3</sup> Nominal Conditions:

Cooling conditions: Indoor: 27°C DB / 19°C WB. Outdoor 35°C DB. Piping length 7.5 m, vertical difference 0 m.

Heating conditions: Indoor 20°C DB. Outdoor 7°C DB / 6°C WB. Piping length 7.5 m, vertical difference 0 m.

<sup>\*2</sup> Eurovent registered

<sup>\*4</sup> Values measured in anechoic chamber (Cooling mode/Heating mode)

<sup>\*5</sup> without legs

<sup>\*6</sup> GWP value of HFC R410A 2088 according to 517 / 2014.

The SEER and SCOP data are based on the EN14825 measurement standard

# WY WR2 LINE

OUTDOOR UNITS - Water condensed Heat pump and Heat recovery PQH(R)Y-P Y(S)LM-A1



WEIGHT REDUCED UP TO -44% COMPARED TO PREVIOUS MODEL

WIDER LINEUP INTRODUCING 14HP SIZE

SINGLE MODULE UP TO SIZE 24HP FOR EASIER INSTALLATION AND LESS ENCUMBRANCE

HIGHER EFFICIENCY THAN PREVIOUS MODEL (UP TO +20% EER AND +34% COP)

NEW CASE IN SMALL AND LARGE VERSIONS

EVAPORATING TEMPERATURE CONTROL (ETC) FEATURE AVAILABLE

WATER FLOW AUTOMATIC CONTROL WITH 0-10V INPUT

FOR SIZES P700-P900 (28-36HP) REDUCED OCCUPIED SURFACE.



\*1 Values referring to the model PQHY-P600 YSLM-A compared to the same size as the previous series  
\*2 Value referred to the model P400 compared with the same size as the previous model

## New Small and Large case

New water condensed outdoor units WY and WR2 are available in two module types: Small and Large. Large module allows capacity up to 24HP (69 kW in Cooling and 76,5 kW in Heating) with just one module, reducing occupied surface in installation site up to 50% compared to previous model. For double module configuration room saving can be up to 33%.

## Weight reduction

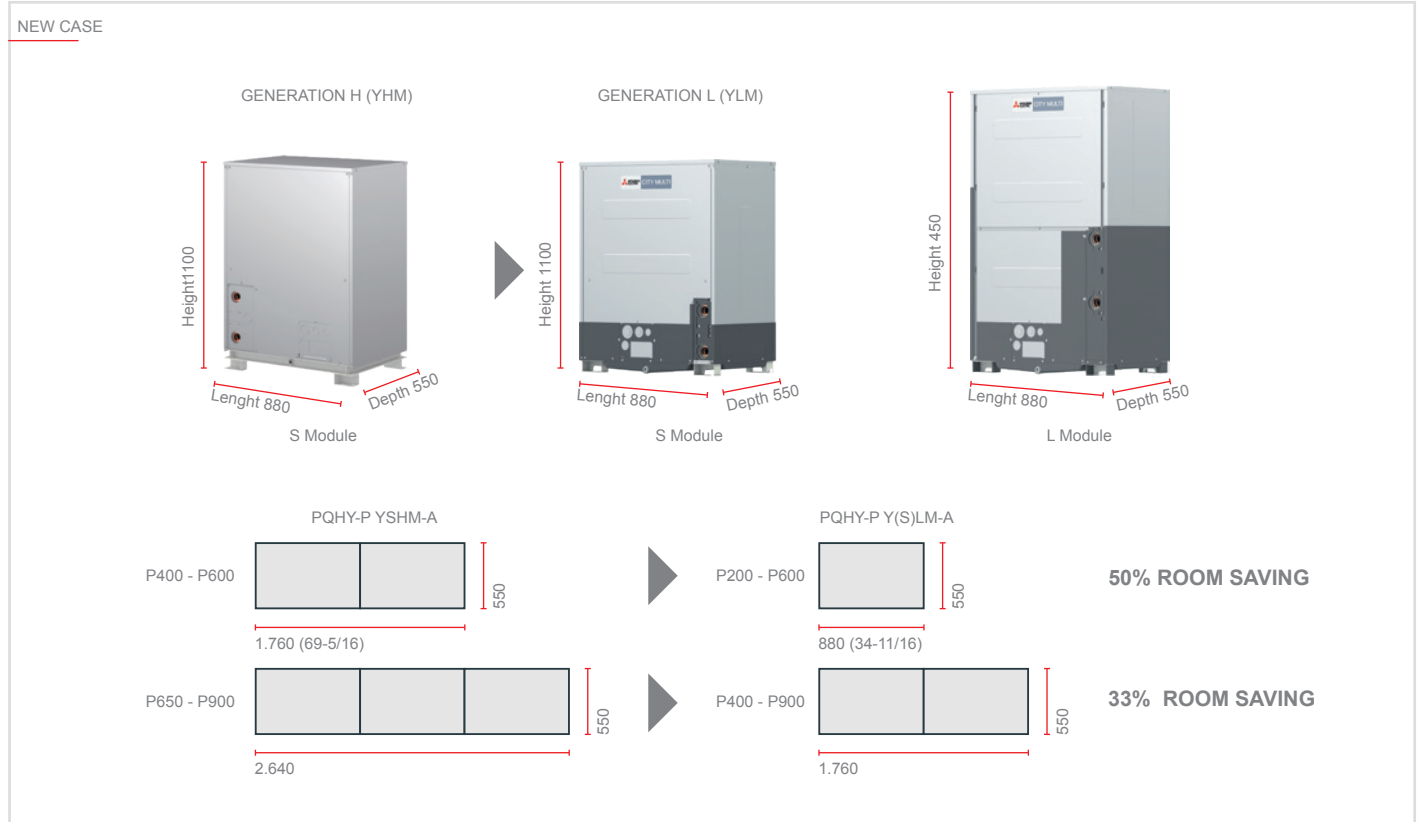
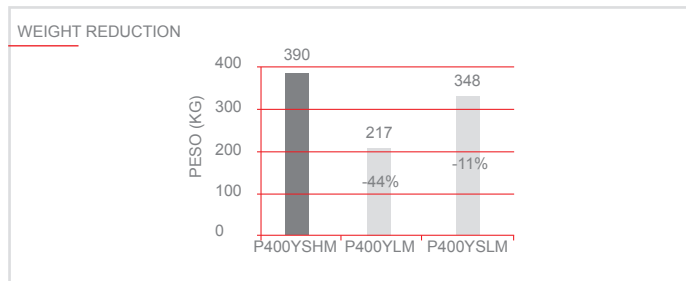
A significant weight reduction compared to previous model, up to 44% with Large module, allows an easier installation and transportation of the unit.

## Higher energy efficiency

New WY and WR2 model grants top of the class EER and COP performances. Energy efficiency has been improved for both single and double module, in Cooling and Heating, up to +34%. This type of systems are among the most efficient in the world, thanks to high performances and constant temperature attributes of geothermal application.

	PQHY		PQRY	
	Y(S)HM	Y(S)LM	Y(S)HM	Y(S)LM
P200	195	174	181	172
P250	195	174	181	172
P300	195	174	181	172
P350	-	217	-	216
P400	390	217 <sup>*1</sup>	362	216 <sup>*1</sup>
		348		344 <sup>*2</sup>
P450	390	217 <sup>*1</sup>	362	216 <sup>*1</sup>
		348		344 <sup>*2</sup>
P500	390	217 <sup>*1</sup>	362	216 <sup>*1</sup>
		348		344 <sup>*2</sup>
P550	390	246 <sup>*1</sup>	362	246 <sup>*1</sup>
		348 <sup>*2</sup>		344 <sup>*2</sup>
P600	390	246 <sup>*1</sup>	362	246 <sup>*1</sup>
		348 <sup>*2</sup>		344 <sup>*2</sup>
P700	585	434	-	432
P750	585	434	-	432
P800	585	434	-	432
P850	585	434	-	432
P900	585	434	-	432

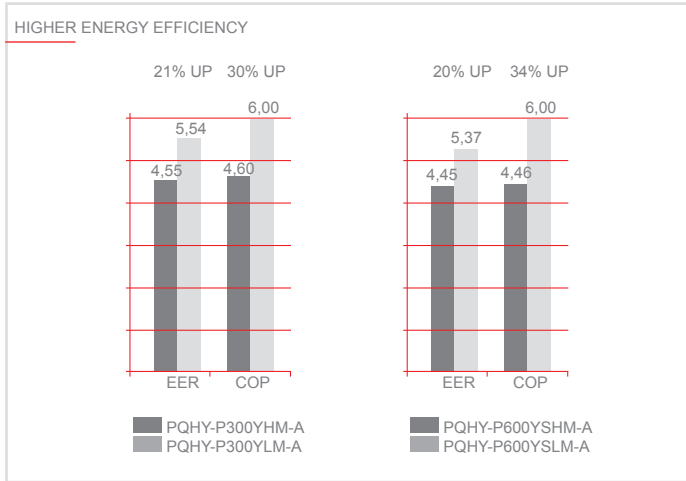
\*1 Single module  
\*2 Double module



## Water flow rate control

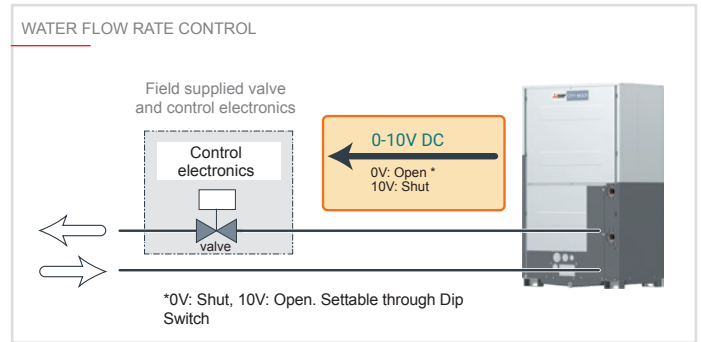
New YLM water condensed outdoor units are equipped with an automatic flow rate control system, which allows reduction of pumping consumption when the system works in partial load conditions. Flow rate control is performed by a 0-10V signal, which controls the regulation valve by shutting or opening it (field supplied).

Thanks to factory setting water circulation pumping is performed even during temporary blackout.



## Advantages

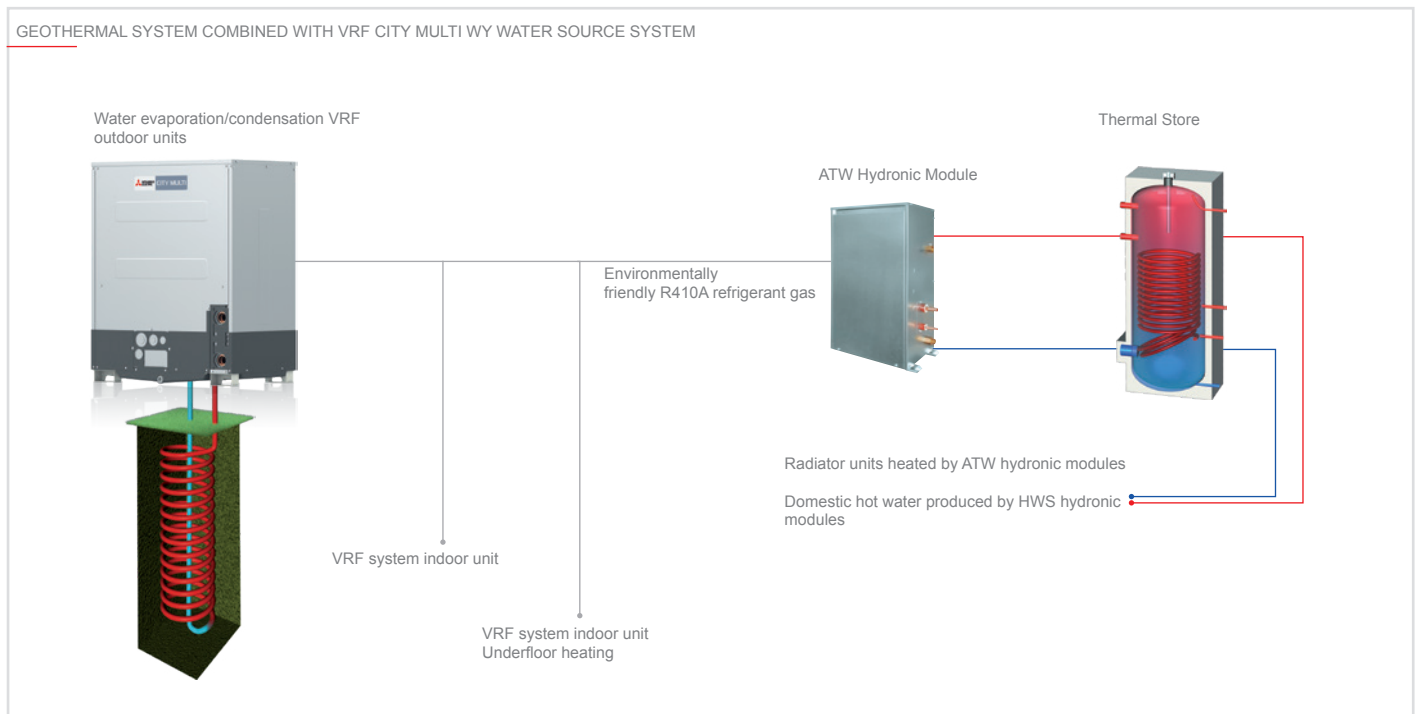
WY and WR2 lines VRF CITY MULTI systems have all the benefits of the Y series, using water evaporation condensing units. Water heat source condensing units offer the advantage of being installable inside the building, for even greater installation flexibility with practically no limitations for the dimensions of the infrastructure. Depending on the capacity of the outdoor unit, up to 26 indoor units can be connected to a single condensing unit, while up to 50 indoor units can be connected to a modular system with individual user and/or centralized control. The two-pipe system allows the system to transition from heating to cooling mode and vice versa, for superior comfort in all zones.











## Geothermal applications

WY and WR2 lines outdoor units are perfectly suited for geothermal applications as they use water as the thermal medium fluid which, at depths from 10 m below ground, maintains a practically constant temperature with no significant excursions all year round.

A geothermal installation uses the ground as a heat source in winter and as a heat sink in summer. Using geothermal probes (heat exchangers) together with VRF CITY MULTI WY and WR2 systems, heat may be extracted from the ground to warm in winter, and dissipated into the ground to cool in summer.



## Key Technologies

									
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## Technical specifications WY LINE

MODEL Single			PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P300YLM-A1
HP			8	10	12
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz		
Cooling	Capacity*1	kW	22.4	28.0	33.5
	Power input	kW	3.71	4.90	6.04
	SEER		8.12	8.16	7.42
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	25.0	31.5	37.5
	Power input	kW	3.97	5.08	6.25
	SCOP		4.90	4.61	4.55
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			46	48	54
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/1~17	P15~P250/1~21	P15~P250/1~26
Ø Ref. piping	Liquid	mm	9.52	9.52	9.52
	Gas		19.05	22.2	22.2
Circulating Water	Flow rate	m³/h	5.76	5.76	5.76
	Operating volume range		3.0~7.2	3.0~7.2	3.0~7.2
	Pressure drop	kPa	24	24	24
	Heat exchanger volume	l	5	5.0	5.0
External dimensions			1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550
Net weight			174	174	174
Ref. Charge R410*/CO <sub>2</sub> Eq			5.0 / 10.44	5.0 / 10.44	5.0 / 10.44

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

\*3 Values measured in anechoic chamber.

\*\* GWP value of HFC R410A 2088 according to 517 / 2014.

## Technical specifications WY LINE

MODEL Single			PQHY-P350YLM-A1	PQHY-P400YLM-A1	PQHY-P450YLM-A1	PQHY-P500YLM-A1	PQHY-P550YLM-A1	PQHY-P600YLM-A1
HP			14	16	18	20	22	24
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz					
Cooling	Capacity*1	kW	40.0	45.0	50.0	56.0	63.0	69.0
	Power input	kW	7.14	8.03	9.29	11.17	12.54	14.49
	SEER		7.44	7.40	6.62	6.30	6.89	6.89
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	45.0	50.0	56	63.0	69.0	76.5
	Power input	kW	7.53	8.37	9.79	11.43	12.27	14.51
	SCOP		4.29	4.25	4.17	4.04	3.77	3.51
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			52	52	54	54	56.5	56.5
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/1~30	P15~P250/1~34	P15~P250/1~39	P15~P250/1~43	P15~P250/2~47	P15~P250/2~50
Ø Ref. piping	Liquid	mm	12.7	15.88	15.88	15.88	15.88	15.88
	Gas		28.58	28.58	28.58	28.58	28.58	28.58
Circulating Water	Flow rate	m³/h	7.20	7.20	7.20	7.20	11.52	11.52
	Operating volume range		4.5~11.6	4.5~11.6	4.5~11.6	4.5~11.6	6.0~14.4	6.0~14.4
	Pressure drop	kPa	44	44	44	44	45	45
	Heat exchanger volume	l	5.0	5.0	5.0	5.0	5.0	5.0
External dimensions			1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550
Net weight			217	217	217	217	246	246
Ref. Charge R410*/CO <sub>2</sub> Eq			6.0 / 12.53	6.0 / 12.53	6.0 / 12.53	6.0 / 12.53	11.7 / 24.43	11.7 / 24.43



### Technical specifications WY LINE

MODEL Double			PQHY-P400YSLM-A1	PQHY-P450YSLM-A1	PQHY-P500YSLM-A1	PQHY-P550YSLM-A1	PQHY-P600YSLM-A1
HP			16	18	20	22	24
Modules			PQHY-P200YLM-A PQHY-P200YLM-A	PQHY-P250YLM-A PQHY-P200YLM-A	PQHY-P250YLM-A PQHY-P250YLM-A	PQHY-P300YLM-A PQHY-P250YLM-A	PQHY-P300YLM-A PQHY-P300YLM-A
Twinning joint			CMY-Y100VBK3				
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	45.0	50.0	56.0	63.0	69.0
	Power input	kW	7.70	8.78	10.12	11.55	12.84
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	50.0	56.0	63.0	69.0	76.5
	Power input	kW	7.94	8.97	10.16	11.31	12.75
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			49	50	51	55	57
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/1~34	P15~P250/1~39	P15~P250/1~43	P15~P250/2~47	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	15.88/28.58	15.88/28.58	15.88/28.58	15.88/28.58	15.88/28.58
Circulating Water	Flow rate	m³/h	5.76+5.76	5.76+5.76	5.76+5.76	5.76+5.76	5.76+5.76
	Operating volume range		3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2
	Pressure drop	kPa	24+24	24+24	24+24	24+24	24+24
	Heat exchanger volume	l	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0
External dimentions			1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550
Net weight			174+174	174+174	174+174	174+174	174+174
Ref. Charge R410**/CO <sub>2</sub> Eq			5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

\*3 Values measured in anechoic chamber.

\*\* GWP value of HFC R410A 2088 according to 517 / 2014.

### Technical specifications WY LINE

MODEL Double			PQHY-P700YSLM-A1	PQHY-P750YSLM-A1	PQHY-P800YSLM-A1	PQHY-P850YSLM-A1	PQHY-P900YSLM-A1
HP			28	30	32	34	36
Modules			PQHY-P350YLM-A PQHY-P350YLM-A	PQHY-P400YLM-A PQHY-P350YLM-A	PQHY-P400YLM-A PQHY-P400YLM-A	PQHY-P450YLM-A PQHY-P400YLM-A	PQHY-P450YLM-A PQHY-P450YLM-A
Twinning joint			CMY-Y200VBK2				
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	80.0	85.0	90.0	96.0	101.0
	Power input	kW	14.73	15.64	16.57	18.03	19.38
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	50.0	56.0	63.0	69.0	76.5
	Power input	kW	7.94	8.97	10.16	11.31	12.75
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			55	55	55	56	57
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	19.05/34.93	19.05/34.93	19.05/34.93	19.05/41.28	19.05/41.28
Circulating Water	Flow Rate	m³/h	7.20+7.20	7.20+7.20	7.20+7.20	7.20+7.20	7.20+7.20
	Operating volume range		4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6
	Pressure drop	kPa	44+44	44+44	44+44	44+44	44+44
	Heat exchanger volume	l	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0
External dimentions			1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550
Net weight			217+217	217+217	217+217	217+217	217+217
Ref. Charge R410**/CO <sub>2</sub> Eq			6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

\*3 Values measured in anechoic chamber.

\*\* GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WR2 LINE				PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1
MODEL Single				8	10	12
HP				8	10	12
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz			
Cooling	Capacity*1	kW	22.4	28.0	33.5	
	Power input	kW	3.71	4.90	6.04	
	SEER		7.91	7.99	7.30	
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	
Heating	Capacity*2	kW	25.0	31.5	37.5	
	Power input	kW	3.97	5.08	6.25	
	SCOP		4.90	4.61	4.55	
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	
Sound power level*3			46	48	54	
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity				
	Model/Quantity	P15~P250/1~20		P15~P250/1~25		P15~P250/1~30
Ø Ref. piping	Liquid	mm	15.88	19.05	19.05	
	Gas	mm	19.05	22.2	22.2	
Circulating Water	Flow Rate	m³/h	5.76	5.76	5.76	
	Operating volume range		3.0~7.2	3.0~7.2	3.0~7.2	
	Pressure drop	kPa	24	24	24	
	Heat exchanger volume	l	5.0	5.0	5.0	
External dimentions			1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	
Net weight			172	172	172	
Ref. Charge R410**/CO <sub>2</sub> Eq			5.0/10.44	5.0/10.44	5.0/10.44	

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

\*3 Values measured in anechoic chamber.

\*\* GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WR2 LINE				PQRY-P350YLM-A1	PQRY-P400YLM-A1	PQRY-P450YLM-A1	PQRY-P500YLM-A1	PQRY-P550YLM-A1	PQRY-P600YLM-A1
MODEL Single				14	16	18	20	22	24
HP				14	16	18	20	22	24
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz						
Cooling	Capacity*1	kW	40.0	45.0	50.0	56.0	63.0	69.0	
	Power input	kW	7.14	8.03	9.29	11.17	12.54	14.49	
	SEER		7.34	7.31	6.56	6.25	6.84	6.84	
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	
Heating	Capacity*2	kW	45.0	50.0	56.0	63.0	69.0	76.5	
	Power input	kW	7.53	8.37	9.79	11.43	12.27	14.51	
	SCOP		4.29	4.25	4.17	4.04	3.77	3.51	
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	
Sound power level*3			52	52	54	54	56.5	56.5	
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity							
	Model/Quantity	P15~P250/1~35		P15~P250/1~40		P15~P250/1~45		P15~P250/1~50	
Ø Ref. piping	Liquid	mm	22.2	22.2	22.2	22.2	22.2	22.2	
	Gas	mm	28.58	28.58	28.58	28.58	28.58	34.93	
Circulating Water	Flow Rate	m³/h	7.20	7.20	7.20	7.20	11.52	11.52	
	Operating volume range		4.5~11.6	4.5~11.6	4.5~11.6	4.5~11.6	6.0~14.4	6.0~14.4	
	Pressure drop	kPa	44	44	44	44	45	45	
	Heat exchanger volume	l	5	5	5	5	10	10	
External dimentions			1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	
Net weight			216	216	216	216	246	246	
Ref. Charge R410**/CO <sub>2</sub> Eq			6.0/12.53	6.0/12.53	6.0/12.53	6.0/12.53	11.7/24.43	11.7/24.43	

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

\*3 Values measured in anechoic chamber.

\*\* GWP value of HFC R410A 2088 according to 517 / 2014

### Technical specifications WR2 LINE

MODEL Double			PQRY-P400YSLM-A1	PQRY-P450YSLM-A1	PQRY-P500YSLM-A1	PQRY-P550YSLM-A1	PQRY-P600YSLM-A1
HP			16	18	20	22	24
Modules			PQRY-P200YLM-A PQRY-P200YLM-A	PQRY-P250YLM-A PQRY-P200YLM-A	PQRY-P250YLM-A PQRY-P250YLM-A	PQRY-P300YLM-A PQRY-P250YLM-A	PQRY-P300YLM-A PQRY-P300YLM-A
Twinning joint			CMY-Q100VBK				
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	45.0	50.0	56.0	63.0	69.0
	Power input	kW	7.70	8.78	10.12	11.55	12.84
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB Water	°C °C	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0
Heating	Capacity*2	kW	50.0	56.0	63.0	69.0	76.5
	Power input	kW	7.94	8.97	10.16	11.31	12.75
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB Water	°C °C	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0
Sound power level*3			49	50	51	55	57
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity		50 to 150% of O.U. capacity	50 to 150% of O.U. capacity	50 to 150% of O.U. capacity	50 to 150% of O.U. capacity
	Model/Quantity	P15~P250/1~40		P15~P250/1~45	P15~P250/1~50	P15~P250/1~50	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	22.2/28.58	22.2/28.58	22.2/28.58	22.2/28.58	22.2/34.93
	Flow Rate	m³/h	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76
Circulating Water	Operating volume range	3+3 ~ 7.2+7.2		3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2
	Pressure drop	kPa	24 + 24	24 + 24	24 + 24	24 + 24	24 + 24
	Heat exchanger volume	l	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0
	External dimentions			1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550
Net weight			172+172	172+172	172+172	172+172	172+172
Ref. Charge R410*/CO <sub>2</sub> Eq			5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88

### Technical specifications WR2 LINE

MODEL Double			PQRY-P700YSLM-A1	PQRY-P750YSLM-A1	PQRY-P800YSLM-A1	PQRY-P850YSLM-A1	PQRY-P900YSLM-A1
HP			28	30	32	34	36
Modules			PQRY-P350YLM-A PQRY-P350YLM-A	PQRY-P400YLM-A PQRY-P350YLM-A	PQRY-P400YLM-A PQRY-P400YLM-A	PQRY-P450YLM-A PQRY-P400YLM-A	PQRY-P450YLM-A PQRY-P450YLM-A
Twinning joint			CMY-Q100VBK				
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	80.0	85.0	90.0	96.0	101.0
	Power input	kW	14.73	15.64	16.57	18.03	19.38
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB Water	°C °C	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0	15.0~24.0 10.0~45.0
Heating	Capacity*2	kW	88	95.0	100.0	108.0	113.0
	Power input	kW	14.73	15.90	16.75	18.49	19.74
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB Water	°C °C	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0	15.0~27.0 10.0~45.0
Sound power level*3			55	55	55	56	57
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity		50 to 150% of O.U. capacity	50 to 150% of O.U. capacity	50 to 150% of O.U. capacity	50 to 150% of O.U. capacity
	Model/Quantity	P15~P250/2~50		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	28.58/34.93	28.58/34.93	28.58/34.93	28.58/41.28	28.58/41.28
	Flow Rate	m³/h	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20
Circulating Water	Operating volume range	4.5+4.5 ~ 11.6+11.6		4.5+4.5 ~ 11.6+11.6	4.5+4.5 ~ 11.6+11.6	4.5+4.5 ~ 11.6+11.6	4.5+4.5 ~ 11.6+11.6
	Pressure drop	kPa	44 + 44	44 + 44	44 + 44	44 + 44	44 + 44
	Heat exchanger volume	l	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0
	External dimentions			1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550
Net weight			216 + 216	216 + 216	216 + 216	216 + 216	216 + 216
Ref. Charge R410*/CO <sub>2</sub> Eq			6.0+6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06

\*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

\*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

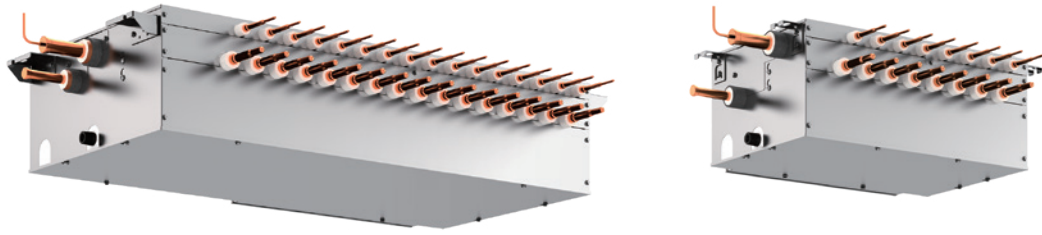
\*3 Values measured in anechoic chamber.

\*4 GWP value of HFC R410A 2088 according to 517 / 2014



# BC CONTROLLERS FOR R2 LINES

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



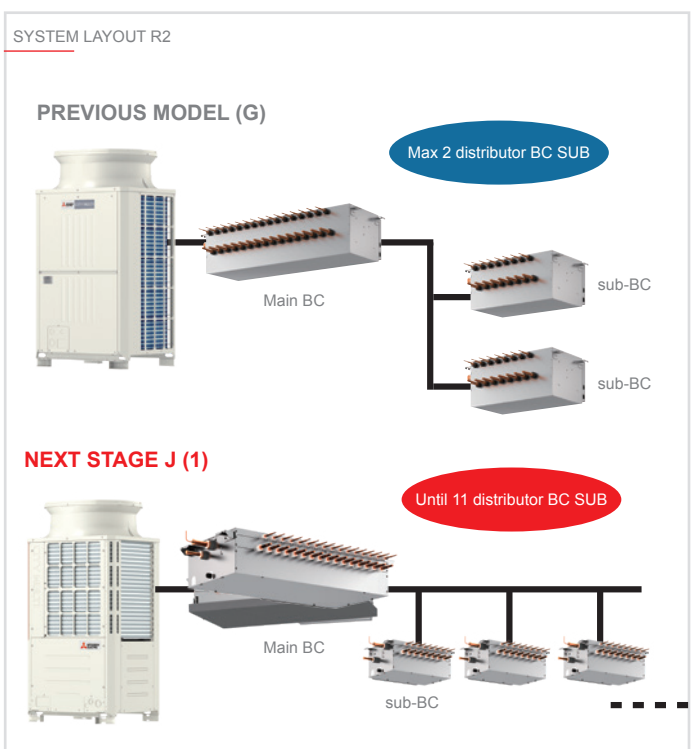
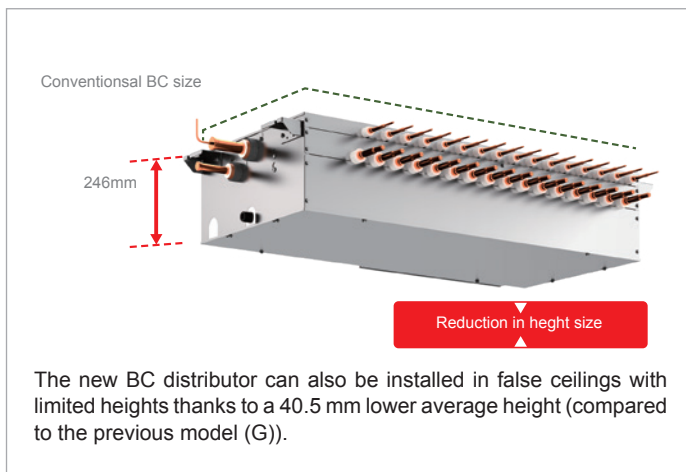
## BC Distributors

The new BC distributor of the CMB-P(M)-V-J(1) series effectively distributes the refrigerant depending on the operating mode of the indoor units (heating or cooling). It contains the highly efficient gas/liquid separator developed by Mitsubishi Electric and carefully separates the gas for heating from the cooling liquid. For a greater height difference and an increase in the maximum pipe length, it uses a subcooling heat exchanger that further chills the coolant destined for the indoor units in cooling mode.

## New BC controller

Increased number of connections (for systems with BC SUB distributor) and increase of geometric limits. In the R2 heat recovery systems of the new YNW-A1 line it is possible to connect up to 11 BC SUB distributors to the BC MAIN distributor thus allowing greater configuration flexibility. The adoption of the new architecture allows a reduction of the refrigerant charge adopted in the system.

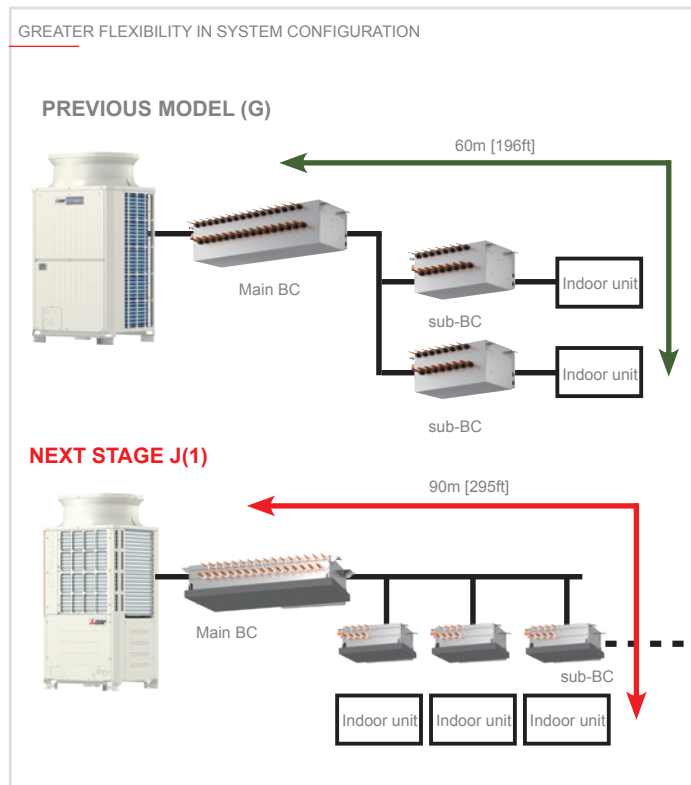
## Reduced height



### Greater flexibility in system configuration

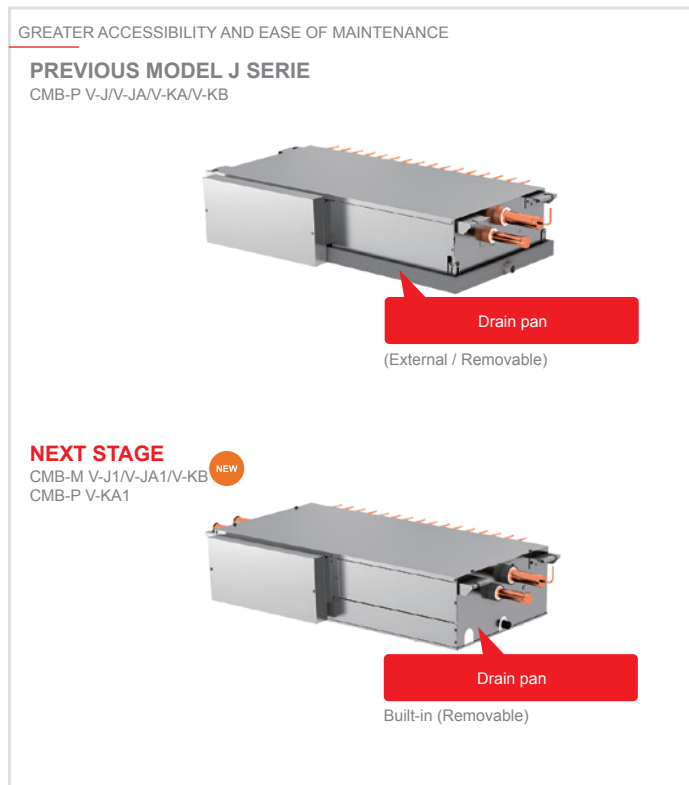
The maximum length of the refrigeration line between the BC MAIN distributor unit and the indoor unit has been increased to 90 metres\* (compared to 60 metres for the previous model) for greater flexibility of system design.

\*If the indoor unit is connected to an SUB BC Controller unit



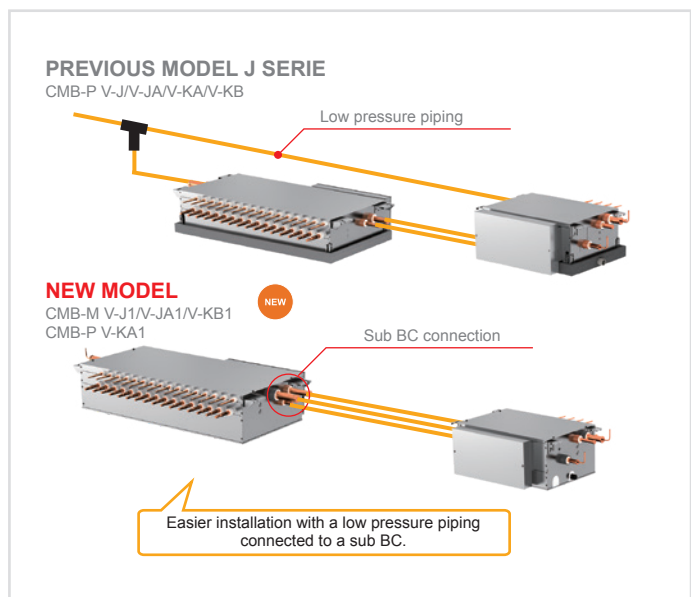
### Greater accessibility and ease of maintenance

In the previous model, the drainage panel was on the lower side of the distributor. In the new model it is instead installed on the lower side of the structure, making it easy to remove from the lower part for maintenance access.



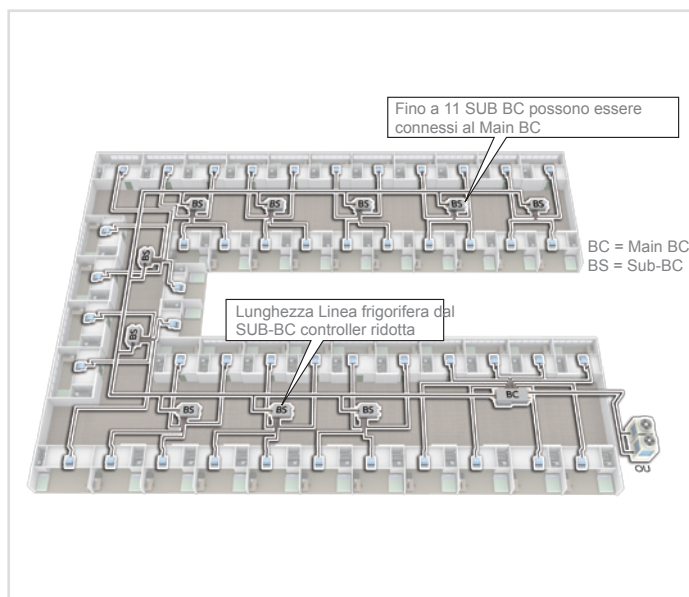
### Sub-BC controller connections increased

Only two sub-BC controllers could be connected to a main BC controller in previous models. Up to 11 sub-BC controllers can now be connected to the new BC controller, allowing for more flexibility in system design. The line-branching method enables the creation of system designs that use less refrigerant.



### The line-branching method with a main BC controller and sub-BC controllers

The sub-BC controller can be installed near the indoor units, so the branch piping can be greatly reduced. This also reduces the length of system piping, enabling using less refrigerant design.



### Technical specifications

MODEL Single				CMB-M104V-J1	CMB-M106V-J1	CMB-M108V-J1	CMB-M1012V-J1	CMB-M1016V-J1	
Number of branch				4	6	8	12	16	
Power source				1-phase 220-230-240 V					
Power input	kW	50Hz	Cooling	0.067/0.076/0.085	0.097/0.110/0.123	0.127/0.144/0.161	0.186/0.211/0.236	0.246/0.279/0.312	
			Heating	0.030/0.034/0.038	0.045/0.051/0.057	0.060/0.068/0.076	0.090/0.102/0.114	0.119/0.135/0.151	
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)					
Connectable outdoor/heat source unit capacity				P200 to P350					
Height	mm			250	250	250	252	252	
Width	mm			596	596	596	911	1,135	
Depth	mm			476	476	476	622	622	
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity					
				P200		P250/P300		P350	
	High press. pipe			15.88 (5/8) Brazed		19.05 (3/4) Brazed		19.05 (3/4) Brazed or 22.2 (7/8) Brazed	
	Low press. pipe			19.05 (3/4) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed	
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed				
Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2(7/8) with optional joint pipe used.)						
Drain pipe	mm (in.)			O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	
Net weight	kg (lbs)			26 (58)	29 (64)	33 (73)	49 (109)	59 (131)	

### Technical specifications

MODEL Main				CMB-M108V-JA1			CMB-M1012V-JA1			CMB-M1016V-JA1			
Number of branch				8			12			16			
Power source				1-phase 220-230-240 V									
Power input	kW	50Hz	Cooling	0.127/0.144/0.161			0.186/0.211/0.236			0.246/0.279/0.312			
			Heating	0.060/0.068/0.076			0.090/0.102/0.114			0.119/0.135/0.151			
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)									
Connectable outdoor/heat source unit capacity				P200 to P900									
Height	mm			252			252			252			
Width	mm			911			1,135			1,135			
Depth	mm			622			622			622			
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity									
				P200	P250/P300	P350	P400 to P500	P550	P600	P650	P700 to P800	P850 to P900	
	High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
	Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed								
		Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)								
	To other BC controller			Total down-stream Indoor unit capacity									
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above	
	High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
	Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed	
Liquid pipe			9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)			O.D. 32 (1-1/4)			O.D. 32 (1-1/4)			
Net weight	kg (lbs)			48 (106)			60 (133)			68 (150)			

★ Combination chart of BC Controller for R2 series (YNW)

	P200-P350	P400-P900	P950-P1100
CMB-M V-J1	•	N/A	N/A
CMB-M V-JA1	•	•	N/A
CMB-P V-KA1	•	•	•
CMB-M V-KB1 (Sub)	CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1		

### Technical specifications

MODEL Main				CMB-P1016V-KA1								
Number of branch				16								
Power source				1-phase 220-230-240 V								
Power input	kW	50Hz	Cooling	0.246/0.279/0.312								
			Heating	0.119/0.135/0.151								
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)								
The maximum number of connectable Sub BC controllers				-								
The maximum connectable capacity of indoor units				-								
Connectable outdoor/heat source unit capacity				P200 to P1100								
Connectable Main BC controller				-								
Height	mm			250								
Width	mm			1,135								
Depth	mm			622								
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity								
				P200	P250/P300	P350	P400 to P500	P550	P600	P650	P700 to P800	P850 to P1000
	High press. pipe			15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze or 28.58 (1-1/8) Braze	22.2 (7/8) Braze or 28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
	Low press. pipe			19.05 (3/4) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze or 34.93 (1-3/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze	41.28(1-5/8) Braze
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze								
		Gas pipe		Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)								
	To other BC controller			Total down-stream Indoor unit capacity								
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above
	High press. pipe			15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze
	Low press. pipe			19.05 (3/4) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze	41.28(1-5/8) Braze	41.28(1-5/8) Braze
Liquid pipe			9.52 (3/8) Braze	9.52 (3/8) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	
Drain pipe	mm (in.)			O.D. 32 (1-1/4)								
Net weight	kg (lbs)			69 (153)								



### Technical specifications

MODEL Sub				CMB-M104V-KB1										
Number of branch				4										
Power source				1-phase 220-230-240 V										
Power input	kW	50Hz	Cooling	0.060/0.068/0.076										
			Heating	0.030/0.034/0.038										
The maximum number of connectable Sub BC controllers				11										
The maximum connectable capacity of indoor units				P350 for each										
Connectable Main BC controller				CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1										
Height	mm			250										
Width	mm			596										
Depth	mm			476										
Refrigerant piping diameter	To outdoor/heat source unit			-										
	High press. pipe			-										
	Low press. pipe			-										
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed									
		Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)									
	To other BC controller			Total down-stream Indoor unit capacity										
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above		
	High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed		
	Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28(1-5/8) Brazed	41.28(1-5/8) Brazed		
	Liquid pipe			9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)										
Net weight	kg (lbs)			23 (51)										

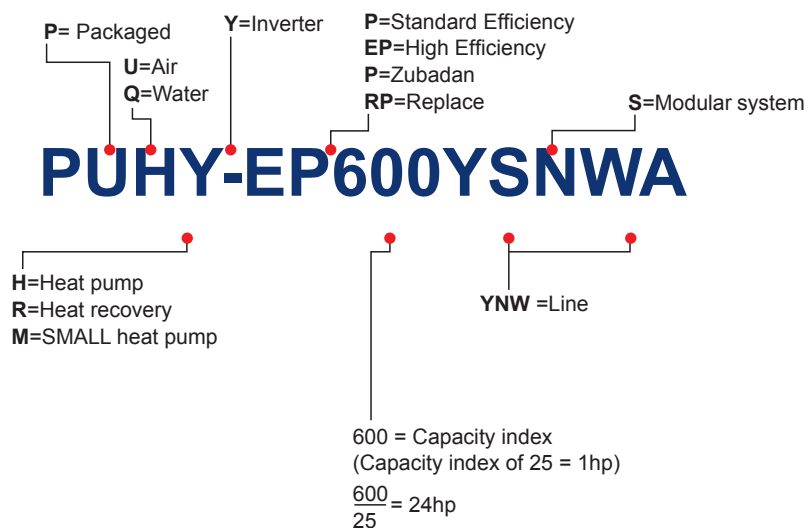
### Technical specifications

MODEL Sub				CMB-M108V-KB1										
Number of branch				8										
Power source				1-phase 220-230-240 V										
Power input	kW	50Hz	Cooling	0.119/0.135/0.151										
			Heating	0.060/0.068/0.076										
The maximum number of connectable Sub BC controllers				11										
The maximum connectable capacity of indoor units				P350 for each										
Connectable Main BC controller				CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1										
Height	mm			246										
Width	mm			596										
Depth	mm			495										
Refrigerant piping diameter	To outdoor/heat source unit			-										
	High press. pipe			-										
	Low press. pipe			-										
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed									
		Gas pipe			Gas pipe Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed(19.05 (3/4) with optional joint pipe used.)									
	To other BC controller			Total down-stream Indoor unit capacity										
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above		
	High press. pipe			15.88	19.05	19.05	22.2	22.2	28.58	28.58	28.58	34.93		
	Low press. pipe			19.05	22.2	28.58	28.58	28.58	28.58	34.93	41.28	41.28		
	Liquid pipe			9.52	9.52	12.7	12.7	15.88	15.88	19.05	19.05	19.05		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)										
Net weight	kg (lbs)			31 (69)										

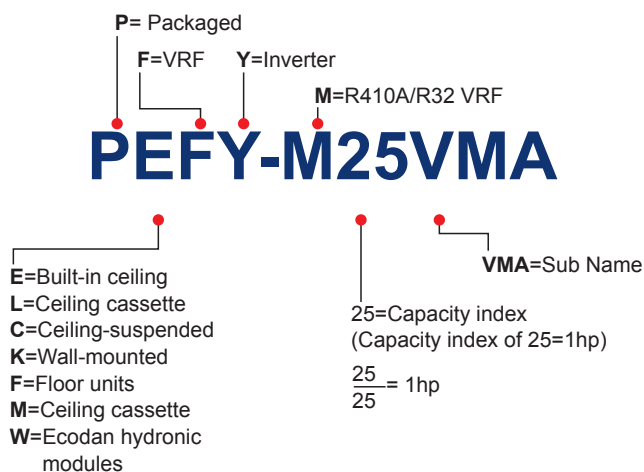


# Model code

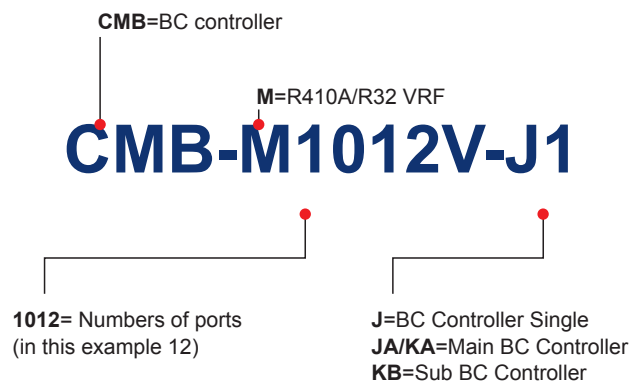
## CITY MULTI outdoor units



## CITY MULTI indoor units

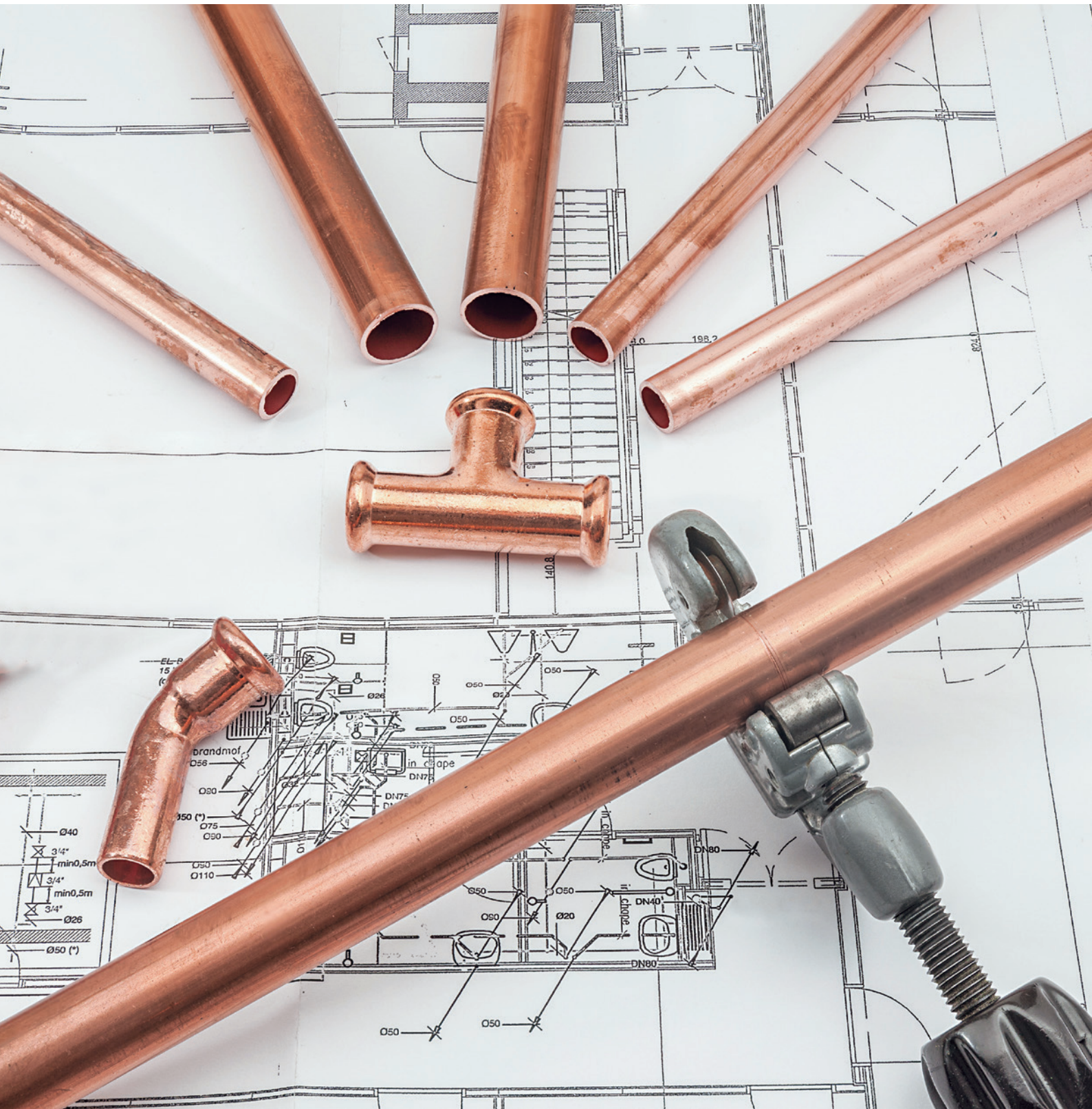


## BC Controller





# Refrigerant piping lenght

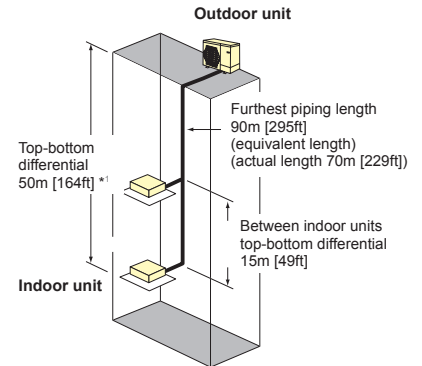


## PUMY-SP112~140 Y(V)KM2

### SMALL Y COMPACT LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	120 m max.
Effective length of a single circuit	70 m (90 m equivalent) max.
Effective length after first branch	50 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	30 m max.
Indoor/Indoor	15 m max.

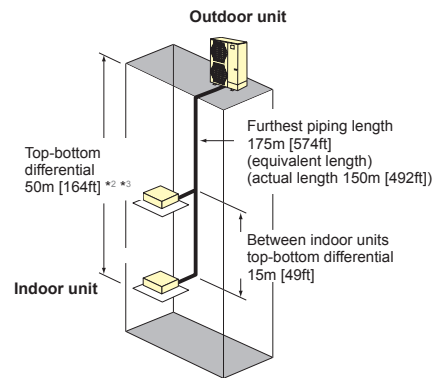


## PUMY-P112~140 Y(V)KM5(6)

### SMALL Y LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	300 m max.
Effective length of a single circuit	150 m (175 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

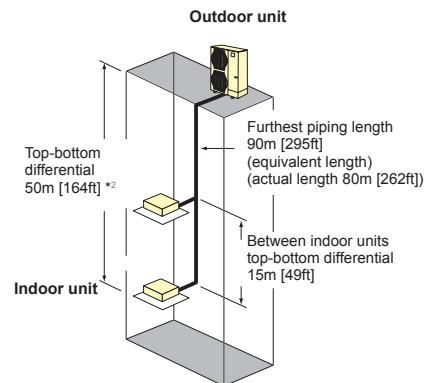


## PUMY-P200 YKM3

### SMALL Y (HIGH CAPACITY) LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	150 m max.
Effective length of a single circuit	80 m (90 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.



Indicative values only – See technical handbook for installation details.

\*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 30m [98ft].

\*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

\*3 30m [98ft] or less if PKFY-P10/15/20/25/32/VLM, PFFY-P\*VKM, PFFY-P\*VCM, PFFY-P\*VL\* type of indoor units are included.

# PUMY-P250/300 YBM2

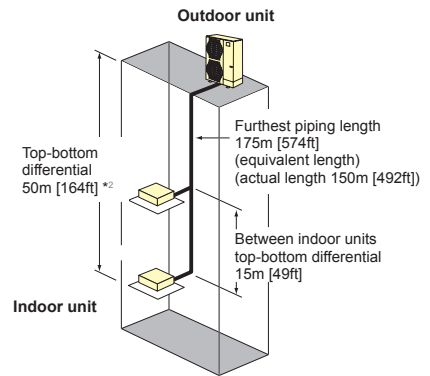
## SMALL Y (HIGH CAPACITY) LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	310 m max.
Effective length of a single circuit	150 m (175 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.

\*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].



# PUHY-P200-1350Y(S)NW-A2

# PUHY-EP200-1350Y(S)NW-A2

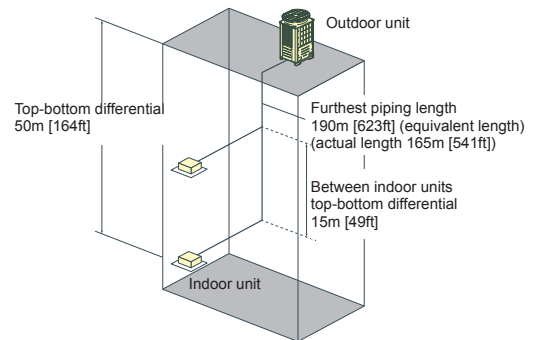
## Y NEXT STAGE LINE

## Y NEXT STAGE HIGH EFFICIENCY LINE

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	1000 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length after first branch	90 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	30 m max.

Indicative values only – See technical handbook for installation details.



# PUHY-HP200-500Y(S)NW-A

## Y ZUBADAN LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	1000 m max.
Effective length of a single circuit	165 m (190 m equivalent) max.
Effective length after first branch	40 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.

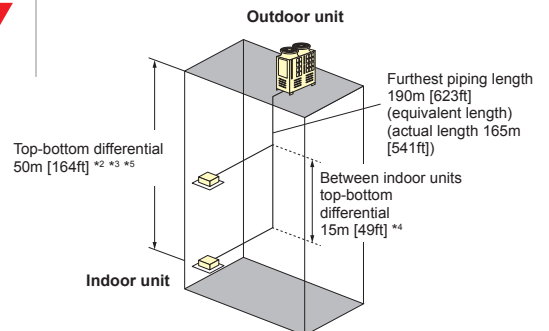
\*1 90m is available. When the piping length exceeds 40m, use one size larger liquid pipe starting with the section of piping where 40m is exceeded and all piping after that point.

\*2 90m is available depending on installation conditions. For more detailed information, contact your local distributor.

\*3 60m is available depending on installation conditions. For more detailed information, contact your local distributor.

\*4 30m is available. If the height difference between indoor units exceeds 15m (but does not exceed 30m), use one size larger pipes for indoor unit liquid pipes.

\*5 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m.



# PURY-P200-1100Y(S)NW-A2

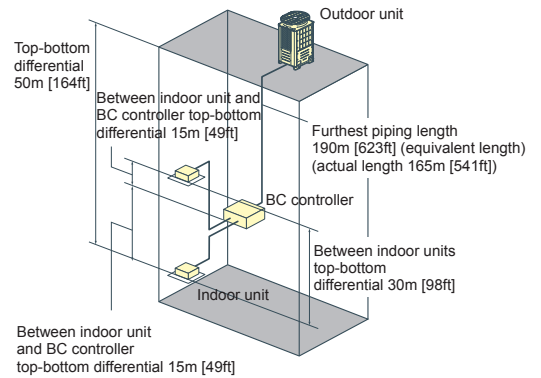
# PURY-EP200-1100Y(S)NW-A2

**R2 NEXT STAGE LINE**  
**R2 NEXT STAGE HIGH EFFICIENCY LINE**

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	500-1000 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length between outdoor unit and BC controller	110 m max.
Effective length between BC controller and indoor unit	60 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/BC Controller	15 m max.
Indoor/Indoor	30 m max.
Effective length between outdoor unit and BC controller	15 m max.

Indicative values only – See technical handbook for installation details.



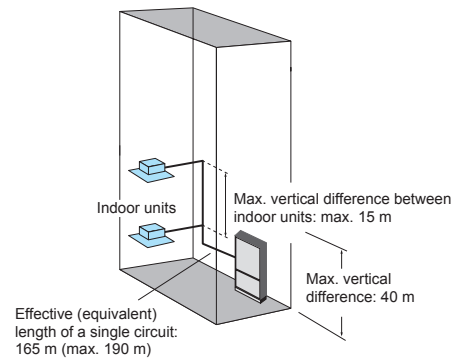
# PQHY-P200-900Y(S)LM-A1

**WY LINE**

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	300-500 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length after first branch	40 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.  
\*500 m max per PQHY-P350-600YLM



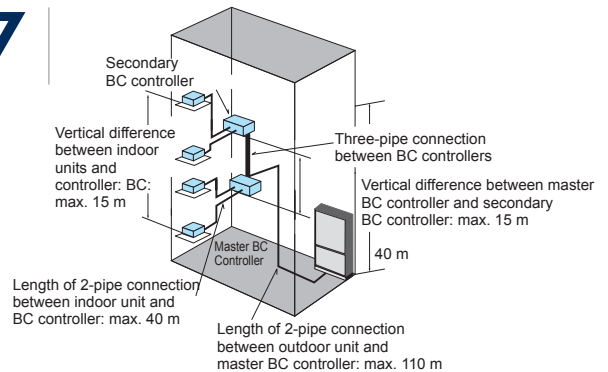
# PQRY-P200~900Y(S)LM-A1

**WR2 LINE**

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	300-750 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length between outdoor unit and BC controller	110 m max.
Effective length between BC controller and indoor unit	40-60 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/BC Controller	15 m max.
Indoor/Indoor	30 m max.
BC Controller and SUB BC Controller	15 m max.

Indicative values only – See technical handbook for installation details.









# VRF Systems

## Indoor units

### Ceiling cassette

PLFY-P VFM-E1 4-way cassette 600x600	110
PLFY-M VEM6-E 4 way cassette 900x900	112
PLFY-P VLMD-E 2 way cassette	118
PMFY-P VBM-E 1 way cassette	122

### Ceiling concealed

PEFY-P VMS1-E Medium to low static pressure	124
PEFY-M VMA-A1 Medium to high static pressure	126
PEFY-P VMHS-E High static pressure	130
PEFY-P VMHS-E High static pressure	132

### Ceiling suspended

PCFY-P VKM-E	134
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### Wall mounted

PKFY-P VLM-E	136
PKFY-P VKM-E	138
PAC-LV11-E Wall mounted design indoor unit LEV-KIT	140



## Floor standing

PFFY-P VKM-E Design unit	142
PFFY-P VLEM-E Exposed	144
PFFY-P VCM-E Concealed type	146

Type		Model		P10	P15	P20	P25	P32		
				1.2 kW <sup>1</sup>	1.7 kW <sup>1</sup>	2.2 kW <sup>1</sup>	2.8 kW <sup>1</sup>	3.6 kW <sup>1</sup>		
Ceiling cassette	4 way flow	PLFY-P VFM-E1			•	•	•	•		
		PLFY-M VEM6-E				•	•	•		
	2 way cassette	PLFY-P VLMD-E				•	•	•		
	1 way cassette	PMFY-P VBM-E				•	•	•		
Ceiling concealed indoor units	Middle-high static pressure	PEFY-P VMS1-E			•	•	•	•		
	Middle-high static pressure	PEFY-M VMA-A1				•	•	•		
	High static pressure	PEFY-P VMHS-E								
	High static pressure	PEFY-P VMHS-E								
Ceiling Suspended indoor units		PCFY-P VKM-E								
Wall mounted indoor units		PKFY-P VLM		•	•	•	•	•		
		PKFY-P VKM								
	Wall mounted design with LEV-KIT	LEV KIT MSZ-EF			•	•	•	•	•	
		LEV KIT MSZ-LN					•	•	•	
Floor standing indoor units		PFFY-P VKM-E				•	•	•		
		PFFY-P VLEM-E				•	•	•		
	Concealed type	PFFY-P VCM-E				•	•	•		

\*Nominal cooling capacity

	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
	4.5 kW <sup>-1</sup>	5.6 kW <sup>-1</sup>	7.1 kW <sup>-1</sup>	8.0 kW <sup>-1</sup>	9.0 kW <sup>-1</sup>	11.2 kW <sup>-1</sup>	14.0 kW <sup>-1</sup>	16.0 kW <sup>-1</sup>	22.4 kW <sup>-1</sup>	28.0 kW <sup>-1</sup>
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# Key Technologies

Mitsubishi Electric innovation allowed the development of functions and technologies at the service of comfort and energy efficiency.

## Style



### “Pure white” colour

This is the colour adopted by Mitsubishi Electric for many of its indoor units. It is a colour suitable for virtually all interior spaces.



### Automatic vane

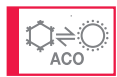
The vane adjusts automatically to the optimum angle in relation to operating mode and output air temperature.

## Functions



### Timer

Annual, weekly, daily or simplified timer functions may be used to switch the unit on and off as desired.



### Automatic mode switching

The indoor unit automatically (AUTO) switches operating mode (COOL/HEAT) in relation to the temperature setting.



### Ultra silent

These indoor units produce extraordinarily low sound pressure levels.

## Air quality



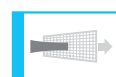
### Deodorizing filter

The bad smells present in the environment are captured from the deodorizing filter and then be eliminated by the technology plasma. Extremely low deodorization time makes this function even more effective against the odors of animals or of cooking.



### Outdoor air intake

The air quality in the indoor space may be improved using the outdoor fresh air intake.



### Standard filter

A honeycomb or synthetic fibre filter with high dust holding capacity.



### Long-life filter

The special surface of the long-life filter requires less maintenance than a conventional filter.



### “Dirty filters” indicator signal

Filter usage is monitored to indicate when maintenance is necessary.



### Air purifying filter

The filter has a large capture area and deodorise the circulating air.

## Air distribution



### Vane positions

Number of possible positions for the air deflector vane.



### Swing vane

A continuous swinging motion of the vane ensures that air is distributed ideally throughout the room.



### Fan speed

Number of fan speeds available.



### Automatic fan

La velocità del ventilatore viene regolata in automatico per soddisfare il grado di comfort richiesto.



### High ceiling

For installations on high ceilings, the air flow may be augmented to improve air distribution.



### Low ceiling

For installations on low ceilings, the air flow may be reduced to prevent unpleasant draughts.



### Air intake on underside

As an option during installation, the unit may be configured with the air intake on the underside.

## Installation and maintenance



### Condensate drain pump

The condensate drain pump facilitates installation.



### Self-diagnostic

A self-diagnostic system makes troubleshooting and correcting malfunctions easier by recording a log of faults.

## Special functions



### Auto-restart

The auto restart function may be used to configure the indoor units to restart automatically after a power outage, minimising interruptions in the operation of the system to maintain thermal comfort levels in the air conditioned spaces. This function must be enabled as an option as it is not enabled by default. A choice of two automatic start configurations is available:

- restart only the indoor units which were on before the power outage;
- restart all indoor units, irrespective of on/off state before the power outage.



### Stratification compensation

The automatic heat stratification compensation function in HEAT mode is implemented by adjusting the ambient temperature read by a probe on the indoor unit, to obtain a value that more closely reflects the true temperature of the air conditioned space.

An offset of -4°C is applied, so that, for instance, if the inlet temperature measured is 24°C, the system automatically displays an adjusted value of 20°C, which should more closely reflect the true ambient temperature. The Mitsubishi Electric CITY MULTI VRF system bases the thermal power actually delivered on this value.

The stratification compensation function is available on all Mitsubishi Electric indoor unit types with the exception of floor-standing units and certain specific cases (such as with units with underside air intakes), and may be disabled on request.


































### Low temperature cooling









This function extends the operating temperature range in cooling mode to offer a lowest settable temperature of 14°C. Where the ability to cool to temperatures lower than the standard lowest comfort value of 19°C (typically for sports centres, laboratories etc.) is necessary, the settable temperature range in cooling mode may be extended to offer a lowest temperature of 14°C.

Contact your local distributor for more details on the types of compatible Indoor units.

The indoor unit fan is run at a higher speed in this configuration (except with the SMALL Y model outdoor unit of the PUMY series).

		Cassette							
									
		PLFY-P VFM-E1	PLFY-M VEM6-E	PLFY-P VLMD-E	PMFY-P VBM-E	PEFY-P VMS1-E	PEFY-M VMA-A1	PEFY-P VMHS-E	
Style	 Pure White	•	•	•	•				
	 AUTO VANE	•	•	•	•				
Functions	 Clock	•	•		•	•	•	•	
	 ACO	•	•	•	•	•	•	•	
	 Ultra Silent	•	•	•		•			
Air quality	 Fresh-air Intake	•	•	•					
	 Long life	•	•	•					
	 Catechin								
	 Check!	•	•	•	•				
	 Air Purifying								
	 Air Purifying								
	 Air Purifying								
Air distribution	 Fan	5	5	4	4				
	 SWING	•	•	•	•				
	 Fan speed	3	4	3 4(P125)	4	3	3	2	
	 AUTO	•	•			•			
	 High Ceiling	•	•						
	 Low Ceiling	•	•						
	 Keyboard						•		
Install. and mainten.	 Drain Lift Up	•	•	•	•	•*	•	•*	
	 Self Diagnosis	•	•	•	•	•	•	•	
Special functions	 Auto Restart	•	•	•	•	•	•	•	
	 Offset -4°	•	•		•	•	•	•	
	 Low Temp Cooling			•		•	•	•	

\* Optional

							Floor standing	
								
PEFY-P VMHS-E	PCFY-P VKM-E	PKFY-P VKM-E	PKFY-P VLM	LEV KIT MSZ-EF	LEV KIT MSZ-LN	PFFY-P VLEM-E	PFFY-P VCM-E	
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# PLFY-P VFM-E1

INDOOR UNITS - 4-way cassette 600x600



CITY MULTI

## Ideal for...

The **straight-line shape** introduced has resulted in a stylish and modern square design. Its high affinity ensures the ability to blend in seamlessly with any interior. The indoor unit is an ideal match for office or store use.



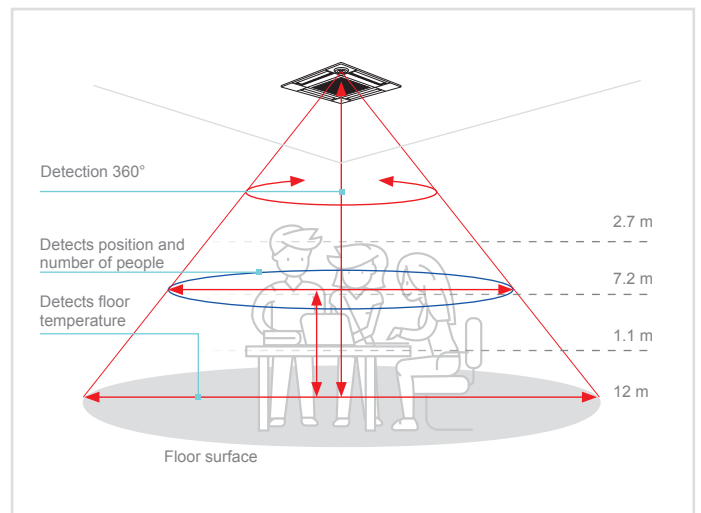
## 3D i-see Sensor

New advanced 3D i-see sensor detects people's position and number. Once a person is detected, the angle of the vane is automatically adjusted. Each vane can be independently set to "Direct Airflow" or "Indirect Airflow" according to taste.

The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced power-saving mode. Depending on the setting, it can also stop the operation.

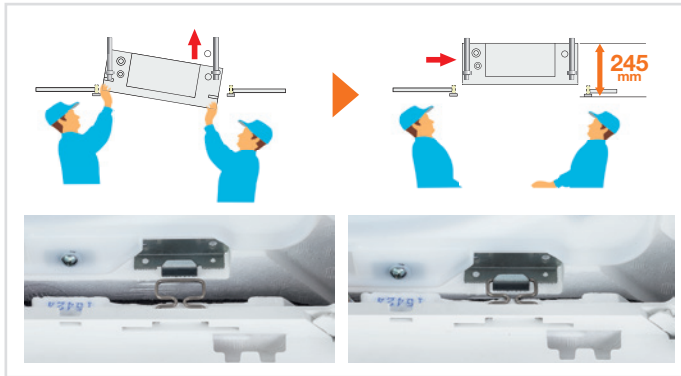
## Horizontal flow

The new airflow control completely eliminates that uncomfortable drafty-feeling with the introduction of a **horizontal airflow** that spreads across the ceiling, maximizing the Coanda effect. Furthermore, 5 patterns for vane position (on previous VCM was 4) and individual settable vane and ways ensure higher comfort. The ideal airflow for offices and restaurants.



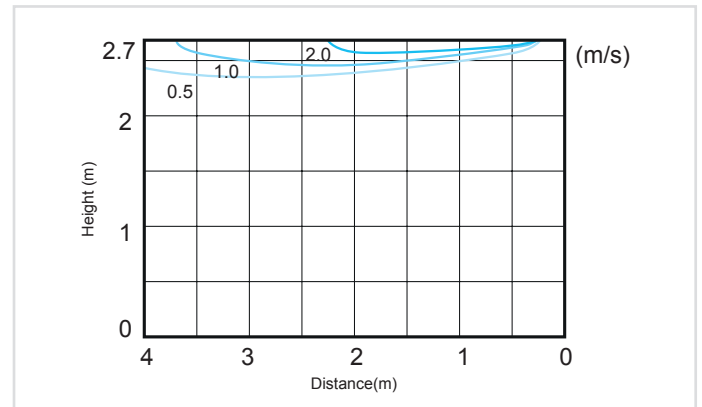
## Simplified installation

The height above ceiling of 245 mm is top class in the industry. The height above ceiling of 245 mm enables fitting into narrow ceiling space. Installation is simple, even when the ceiling spaces are narrow to make the ceilings higher. Light weight (max 15kg) and temporary hanging hooks for grille allow to make installation easier and quicker.



## Panel and control

The unit is supplied with SLP-2FAL panel which includes signal receiver. Is available as optional the SLP-2FALM panel combined with the new PAR-SL101A-E wireless remote control with weekly timer, backlight, temperature setting in 0.5 °C steps and individual control of the 4 deflectors.



## Key Technologies


## Technical specifications

MODEL			PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Default panel			SLP-2FAL					
Power			Single phase, 220-240V 50Hz					
Capacity in cooling mode*1		kW	1.7	2.2	2.8	3.6	4.5	5.6
		Btu/h	5800	7500	9600	12300	15400	19100
Capacity in heating mode*1		kW	1.9	2.5	3.2	4	5	6.3
		Btu/h	6500	8500	10900	13600	17100	21500
Power consumption	Cooling	kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating	kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling	A	0.19	0.21	0.22	0.23	0.28	0.4
	Heating	A	0.14	0.16	0.17	0.18	0.23	0.35
External finish	Unit		Galvanized steel sheet with uncoated thermal insulation					
	Grille		Pure White					
Dimensions A x L x P	Unit	mm	245x570x570	245x570x570	245x570x570	245x570x570	245x570x570	245x570x570
	Grille	mm	10x625x625	10x625x625	10x625x625	10x625x625	10x625x625	10x625x625
Net weight	Unit	kg	14	14	14	15	15	15
	Grille	kg	3	3	3	3	3	3
Heat exchanger			Cross fins					
Fan	Type x Quantity		3D Turbo fan x 1					
	Air flow*2	m³/min	6.5 - 7.5 - 8	6.5 - 7.5 - 8.5	6.5 - 8 - 9	7 - 8 - 9.5	7.5 - 9 - 11	9 - 11 - 13
	Ext. Static pressure	Pa	0	0	0	0	0	0
Air filter			Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	12.7	12.7	12.7	12.7	12.7	12.7
	Liquid (swaged)	mm	6.35	6.35	6.35	6.35	6.35	6.35
Sound pressure*2*3		dB(A)	26 - 28 - 30	26 - 29 - 31	26 - 30 - 33	26 - 30 - 34	28 - 33 - 39	33 - 39 - 43

\* Default panel. SLP-2FAL panel is equipped by Signal receiver

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 Air flow/noise levels given for operation in low-medium-high modes.

\*3 Measured in anechoic chamber with 230V mains power.

Optional parts	DESCRIPTION
PAC-SF1ME-E	Corner 3D I-see Sensor for PLFY-P VFM-E1

# PLFY-M VEM6-E

NEW

INDOOR UNITS - 4-way cassette 900x900



CITY MULTI

## Ideal for...

New design of 4-way cassette VEM model suits most commercial applications thanks to its elegance and style. Its peculiar features are horizontal flow function, individually settable vanes and possibility to install 3D i-see sensor for top environment comfort control.

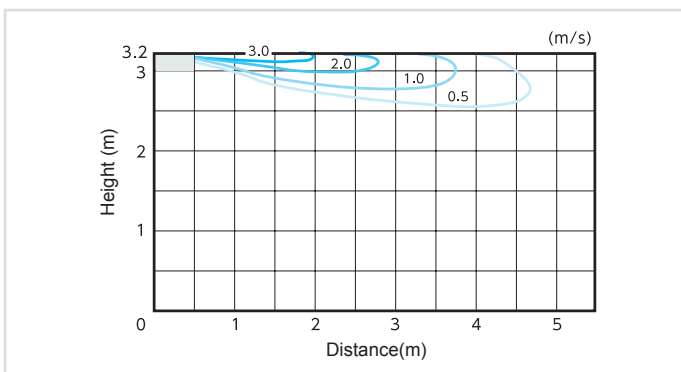
## 3D i-see sensor: Temperature sensor

3D i-see sensor is able to detect temperature distribution inside the room, making it possible to direct airflow to those areas which generally receive less air, making them more uncomfortable (too cold or too hot) for users.



## Horizontal flow

This new indoor unit is capable of handling five vane positions, making it possible to achieve horizontal flow that spreads across the ceiling, maximizing the Coanda effect. This allows to avoid, if needed, direct airflow to users in the room, which can sometimes be uncomfortable.

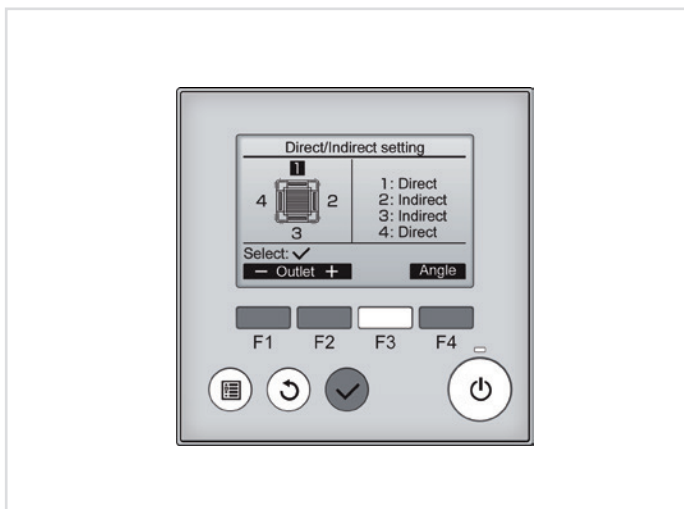




### Key Technologies

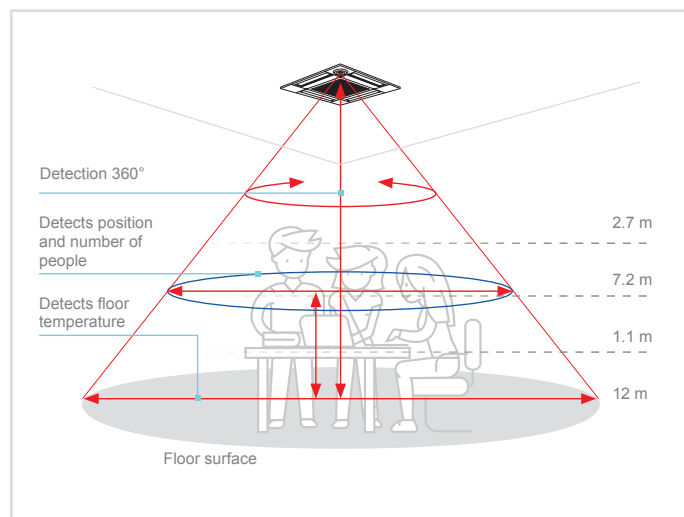

### 3D i-see sensor: Direct/Indirect flow function

Optional 3D i-see sensor allows to detect and count users in the environment and their position. User can set either Direct or Indirect flow to occupied areas, with single control on four vanes.



### 3D i-see sensor: Energy saving

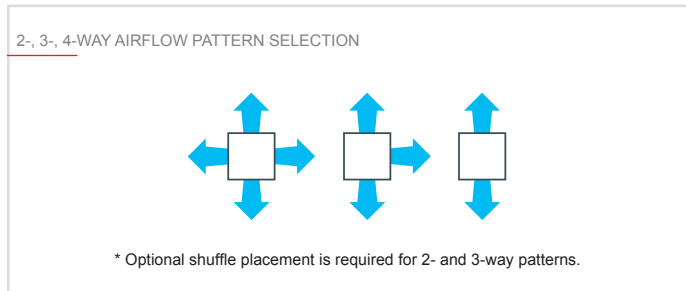
3D i-see sensor features allow to optimize comfort conditions and at the same time achieve energy saving. Thanks to the occupancy sensor the unit is able to automatically handle and reduce power output accordingly to users actually being present in the room or in certain areas of it. This feature is particularly helpful in those environments in which occupancy varies significantly during the day.



## Optimum airflow

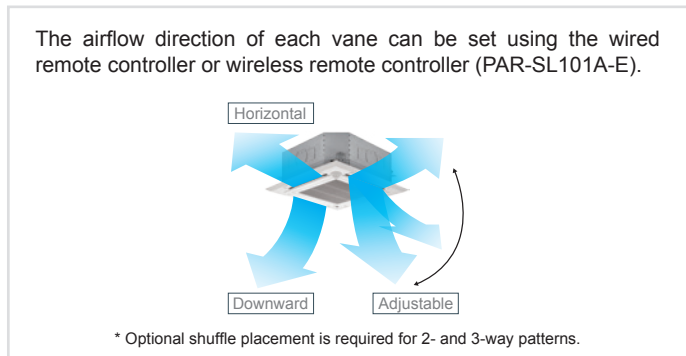
### 2-, 3-, 4-way airflow pattern selection

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



### Individual vane angle settings

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

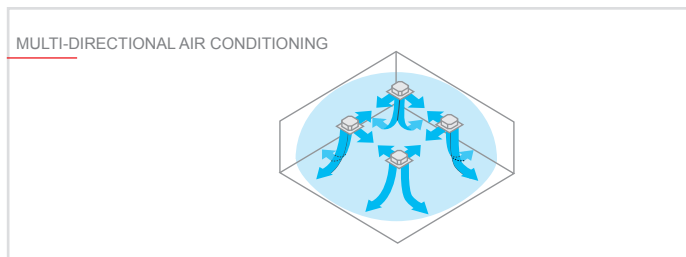


### 2-, 3-, 4-way airflow pattern selection

+

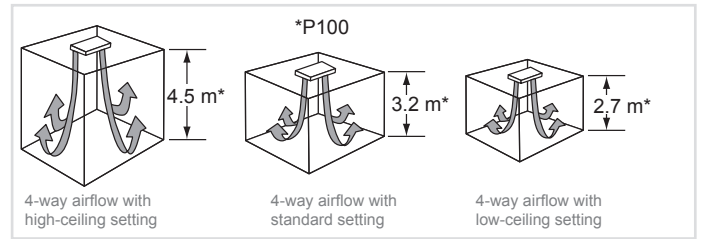
### Individual vane angle settings

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



## Equipped with high- and low-ceiling modes

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

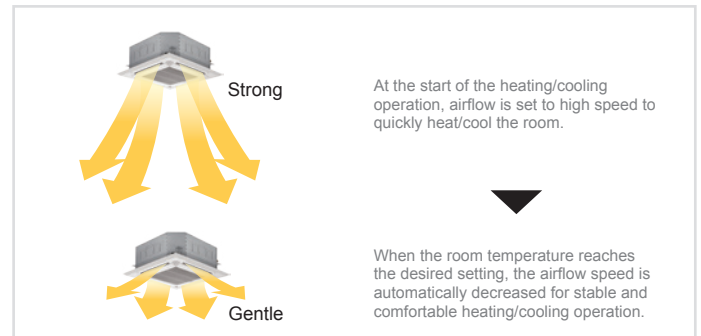


### Airflow range

Model Airflow pattern	M20-M80			M100/M125		
	High-ceiling setting	Standard setting	Low-ceiling setting	High-ceiling setting	Standard setting	Low-ceiling setting
4-way	3.5 m	2.7 m	2.5 m	4.5 m	3.2 m	2.7 m
3-way	3.5 m	3.0 m	2.7 m	4.5 m	3.6 m	3.0 m
2-way	3.5 m	3.3 m	3.0 m	4.5 m	4.0 m	3.3 m

## Automatic air-speed adjustment

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

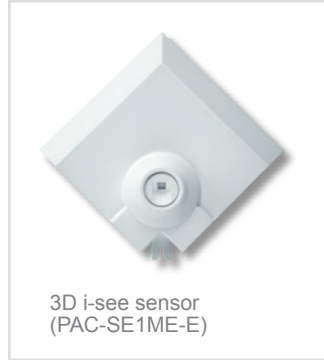


## Panel and control

The unit is supplied with PLP-6EA panel which does not include signal receiver. This component (PAR-SE9FA-E) can be installed as a corner accessory, as well as 3D i-See Sensor (PAC-SE1ME-E). The unit is compatible with all wired MA and ME remote controls and, if equipped with signal receiver, wireless remote controls. New PAR-SL101A-E is compatible with PLFY-M VEM, and presents numerous new features, such as weekly timer, backlit display, 0,5°C temperature setting and monitoring, as well as functions for 3D i-see sensor (optional).



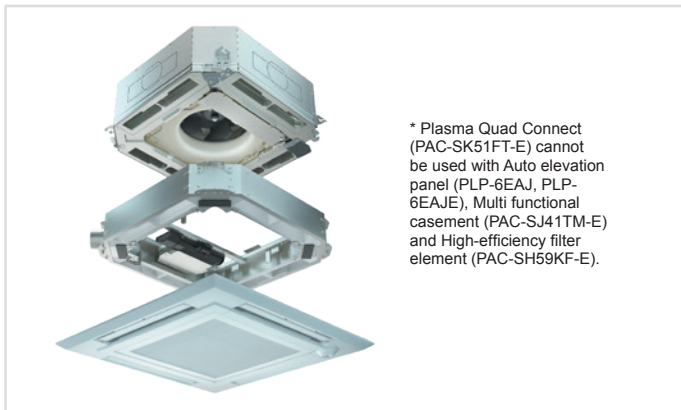
Wireless signal receiver (PAR-SE9FA-E)



3D i-see sensor (PAC-SE1ME-E)

### Connectable to Plasma Quad Connect

The optional Plasma Quad Connect PAC-SK51FT-E can be installed on the indoor units.



\* Plasma Quad Connect (PAC-SK51FT-E) cannot be used with Auto elevation panel (PLP-6EAJ, PLP-6EAJE), Multi functional casement (PAC-SJ41TM-E) and High-efficiency filter element (PAC-SH59KF-E).

## Simplified installation

Thanks to new temporary panel supports maintenance and installation operation are now easier for field technicians.



Also, panel weight has been reduced by 20% thanks to a new design.



A simple loosening of support screws allows the removal of the control box and corner accessories.



### Electrical box wiring

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



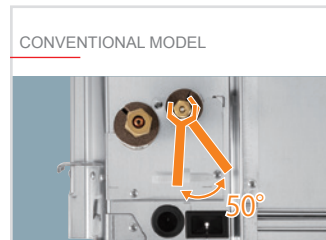
CONVENTIONAL MODEL



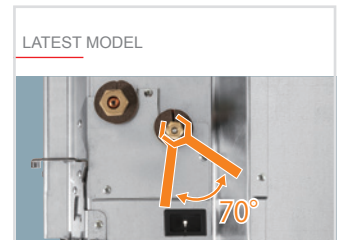
LATEST MODEL

### Increased space for plumbing work

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



CONVENTIONAL MODEL



LATEST MODEL

## Technical specifications

MODEL			PLFY-M20VEM6-E	PLFY-M25VEM6-E	PLFY-M32VEM6-E	PLFY-M40VEM6-E	PLFY-M50VEM6-E
Power			1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5	5.6
		Btu/h	7500	9600	12300	15400	19100
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0	6.3
		Btu/h	8500	10900	13600	17100	21500
Power consumption	Cooling	kW	0.03	0.03	0.03	0.03	0.06
	Heating	kW	0.03	0.03	0.03	0.03	0.07
Current	Cooling	A	0.31	0.31	0.32	0.32	0.52
	Heating	A	0.24	0.24	0.25	0.25	0.60
External finish(Munsell No.)	Unit	Galvanized steel plate					
	Grille	MUNSELL (1.0Y 9.2/0.2)					
Dimensions (HxLxW)	Unit	mm	258x840x840				298 x 840 x 840
	Grille	mm	40x950x950				
Net weight	Unit	kg	19	19	19	19	24
	Grille	kg	5	5	5	5	5
Heat exchanger	Cross fin (Aluminium fin and copper tube)						
Fan	Type x Quantity	Turbo fan x 1					
	Air flow*2	m³/min	12-13-14-15	12-13-14-15	13-14-15-16	13-14-15-17	16 - 17 - 18 - 25 (Cooling) 16 - 17 - 18 - 28 (Heating)
		l/s	200-217-233-250	200-217-233-250	217-233-250-267	217-233-250-283	267 - 283 - 300 - 417 (Cooling) 267 - 283 - 300 - 467 (Heating)
	Static ext.l pressure	Pa	0	0	0	0	0
Motor	Type	DC Motor					
	Power output	kW	0.050	0.050	0.050	0.050	0.120
Air filter	Polypropilene honeycomb fabric						
Refrigerant pipe diameter	Gas (swaged)	mm	Ø 12.7	Ø 12.7	Ø 12.7	Ø 12.7	Ø 12.7
	Liquid (swaged)	mm	Ø 6.35	Ø 6.35	Ø 6.35	Ø 6.35	Ø 6.35
Local drain pipe diameter	Grille		O.D.32	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	24-26-27-29	24-26-27-29	26-27-29-31	26-27-29-31	27 - 29 - 31 - 38(Cooling) 27 - 29 - 31 - 41(Heating)

\*1 Cooling/Heating capacity is the maximum value measured in the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) BS. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 High-mid1-mid2-low setting

\*3 Measured in anechoic chamber with 230V power supply.

Optional parts	DESCRIPTION
PAC-SK51FT-E	Plasma Quad Connect
PAC-SE1ME-E	Corner 3D I-see Sensor for PLFY-M VEM-E
PLP-6EALM	Panel with wireless remote controller

## Technical specifications

MODEL			PLFY-M63VEM6-E	PLFY-M71VEM6-E	PLFY-M80VEM6-E	PLFY-M100VEM6-E	PLFY-M125VEM6-E
Power			1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Capacity in cooling mode*1		kW	7.1	8.0	9.0	11.2	14.0
		Btu/h	24200	27300	30700	38200	47800
Capacity in heating mode*1		kW	8.0	9.0	10.0	12.5	16.0
		Btu/h	27300	30700	34100	42700	54600
Power consumption	Cooling	kW	0.09	0.12	0.12	0.12	0.12
	Heating	kW	0.12	0.12	0.12	0.12	0.12
Current	Cooling	A	0.74	0.97	0.97	0.97	0.97
	Heating	A	0.90	0.94	0.94	0.94	0.94
External finish(Munsell No.)	Unit	Galvanized steel plate					
	Grille	MUNSELL (1.0Y 9.2/0.2)					
Dimensions (HxLxW)	Unit	mm	298x840x840	298x840x840	298x840x840	298x840x840	298x840x840
	Grille	mm	40x950x950	40x950x950	40x950x950	40x950x950	40x950x950
Net weight	Unit	kg	24	27	27	27	27
	Grille	kg	5	5	5	5	5
Heat exchanger			Cross fin (Aluminium fin and copper tube)				
Fan	Type x Quantity		Turbo fan x 1				
	Air flow*2	m <sup>3</sup> /min	16 - 18 - 20 - 32 (Cooling) 16 - 18 - 20 - 35 (Heating)	16 - 18 - 20 - 35	16 - 20 - 23 - 35	17 - 22 - 28 - 35	17 - 24 - 31 - 35
		l/s	267 - 300 - 333 - 533 (Cooling) 267 - 300 - 333 - 583 (Heating)	267 - 300 - 333 - 583	267 - 333 - 383 - 583	283 - 367 - 467 - 583	283 - 400 - 517 - 583
	Static ext.l pressure	Pa	0	0	0	0	0
Motor	Type		DC Motor				
	Power output	kW	0.120	0.120	0.120	0.120	0.120
Air filter			Polypropilene honeycomb fabric				
Refrigerant pipe diameter	Gas (swaged)	mm	Ø 15.88	Ø 15.88	Ø 15.88	Ø 15.88	Ø 15.88
	Liquid (swaged)	mm	Ø 9.52	Ø 9.52	Ø 9.52	Ø 9.52	Ø 9.52
Local drain pipe diameter	Grille		O.D.32	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	27 - 30 - 32 - 43(Cooling) 27 - 30 - 32 - 46(Heating)	28 - 31 - 35 - 46	28 - 33 - 37 - 46	29 - 35 - 41 - 46	30 - 37 - 45 - 46

\*1 Cooling/Heating capacity is the maximum value measured in the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) BS. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 High-mid1-mid2-low setting

\*3 Measured in anechoic chamber with 230V power supply.

Optional parts	DESCRIPTION
PAC-SK51FT-E	Plasma Quad Connect
PAC-SE1ME-E	Corner 3D I-see Sensor for PLFY-M VEM-E
PLP-6EALM	Panel with wireless remote controller

**WHAT'S  
NEW**

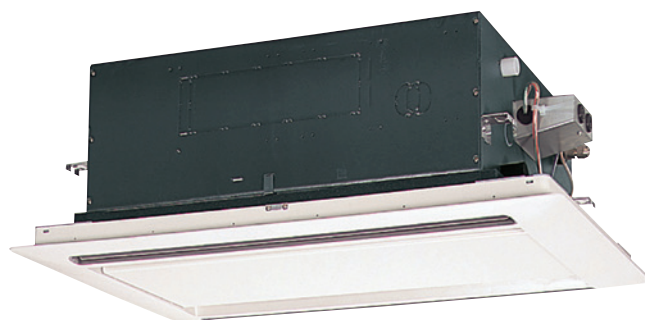
### What has changed on PLFY-M VEM6-E Cassette Units?

- The physical dimensions of the size 50,63 & 80 has been changed
- High Fan speed airflow has been increased, hence the new Mid1 can be used instead. However, this also depends on the capacity & sound rating of the required space
- Cooling and heating airflow rate on High Fan speed is different on size 50 & 63.
- The optional Plasma Quad Connect PAC-SK51FT-E can be installed on the indoor units



# PLFY-P VLMD-E

INDOOR UNITS - 2-way cassette



## Ideal for...

The slimline housing is ideal for installation in small ceiling spaces and for replacing obsolete equipment in old buildings. In fact, the unit is just 290 mm high.

## General characteristics

### Terminal block

The terminal block is positioned on the outside of the main unit for easier wiring.

### Direct external air intake

Clean air can enter the main unit directly (optional accessories required).

### Long-life filter supplied as standard

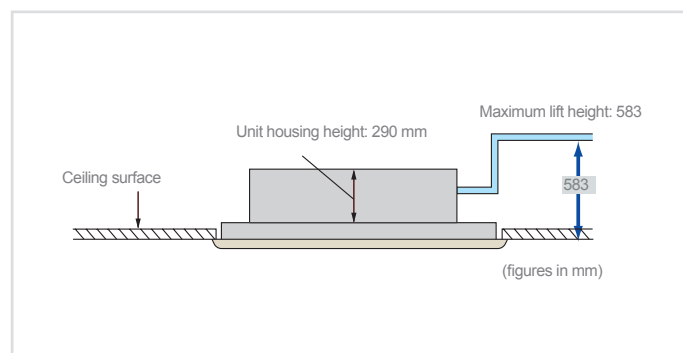
The long-life antibacterial filter requires no maintenance for approximately one year.

### Compact unit and low noise levels

15Pa noise levels (standard static pressure).

## Condensate lift pump

The standard version is equipped with a mechanism with condensate lift pump. The drain can be positioned anywhere up to 583mm from the ceiling surface, allowing greater freedom of movement due to long transverse pipes and greater pipe layout versatility.



Noise level

dB(A)

Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Fan speed	High		33		36	37	39	39	42	46
	Medium		30		33	34	37	36	39	42/44
	Low		27		29	31	32	33	36	40

## Easy installation

Installation and maintenance are made easier by the use of a lighter panel and the positioning of the switchboard close to the panel. In addition, the heat exchanger can be flushed by moving the central panel, filter and fan within the pipe layouts themselves.



### Key Technologies


### Technical specifications

MODEL			PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power	Single phase, 220-240V 50Hz					
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0.072	0.072	0.072	0.081
	Heating	kW	0.065	0.065	0.065	0.074
Current	Cooling	A	0.36	0.36	0.36	0.40
	Heating	A	0.30	0.30	0.30	0.34
External finish	Unit	Galvanized steel plate				
	Grille	Nr. Munsel 6.4Y 8.9/0.4 (white)				
Dimensions AxLxP	Unit	mm	290x776x634	290x776x634	290x776x634	290x776x634
	Grille	mm	20x1080x710	20x1080x710	20x1080x710	20x1080x710
Net weight	Unit	kg	23	23	24	24
	Grille	kg	6.5	6.5	6.5	6.5
Heat exchanger	Cross fin (Al/Cu)					
Fan	Type x Quantity	Turbo fan x 1				
	Air flow*2	m³/min	6.5-8.0-9.5	6.5-8.0-9.5	6.5-8.0-9.5	7.0-8.5-10.5
		l/s	108-133-158	108-133-158	108-133-158	117-142-175
		cfm	230-283-335	230-283-335	230-283-335	247-300-371
Ext. Static pressure	Pa	0	0	0	0	
Motor	Type	1-phase induction motor				
	Ext. Static pressure	kW	0.015 (a 240V)	0.015 (a 240V)	0.015 (a 240V)	0.015 (a 240V)
Air filter	Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø12.7	ø12.7	ø12.7
	Liquid (swaged)	mm	ø6.35	ø6.35	ø6.35	ø6.35
Local drain pipe diameter		mm	O.D. 32	O.D. 32	O.D. 32	O.D. 32
Sound pressure*2*3		dB(A)	28-31-34	28-31-34	28-31-34	30-34-37

\*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

Cooling: indoor 27°C (81 °F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

\*3 Measured in an anechoic chamber.

### Technical specifications

MODEL			PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E
Power	Single phase, 220-240V 50Hz					
Capacity in cooling mode*1	kW		5,6	7,1	9,0	11,2
	Btu/h		19100	24200	30700	38200
Capacity in heating mode*1	kW		6,3	8,0	10,0	12,5
	Btu/h		21500	27300	34100	42700
Power consumption	Cooling	kW	0,082	0,101	0,147	0,157
	Heating	kW	0,075	0,094	0,140	0,150
Current	Cooling	A	0,41	0,49	0,72	0,75
	Heating	A	0,35	0,43	0,66	0,69
External finish	Unit	Galvanized steel plate				
	Grille	Nr. Munsel 6.4Y 8.9/0.4 (white)				
Dimensions AxLxP	Unit	mm	290x946x634	290x946x634	290x1446x634	290x1446x634
	Grille	mm	20x1250x710	20x1250x710	20x1750x710	20x1750x710
Net weight	Unit	kg	23	28	44	47
	Grille	kg	7.5	7.5	12.5	12.5
Heat exchanger	Cross fin					
Fan	Type x Quantity		Turbo fan x 1	Turbo fan x 1	Turbo fan x 2	Turbo fan x 2
	Air flow*2	m³/min	6,5-8,0-9,5	11,0-13,0-15,5	15,5-18,5-22,0	17,5-21,0-25,0
		l/s	108-133-158	167-217-258	258-308-367	292-350-417
		cfm	230-283-335	353-459-547	547-653-777	618-742-883
Ext. Static pressure	Pa	0	0	0	0	
Motor	Type	1-phase induction motor				
	Ext. Static pressure	kW	0,020 (a 240V)	0,020 (a 240V)	0,020 (a 240V)	0,030 (a 240V)
Air filter	Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12,7	ø15,88	ø15,88	ø15,88
	Liquid (swaged)	mm	ø6,35	ø9,52	ø9,52	ø9,52
Local drain pipe diameter		mm	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	32-35-38	33-38-40	34-37-40	37-41-43

\*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68° F) DB, outdoor 7°C (45° F) DB/6°C (43°F) WB.

\*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

\*3 Measured in an anechoic chamber.



# PMFY-P VBM-E

INDOOR UNITS - 1-way cassette



## Ideal for...

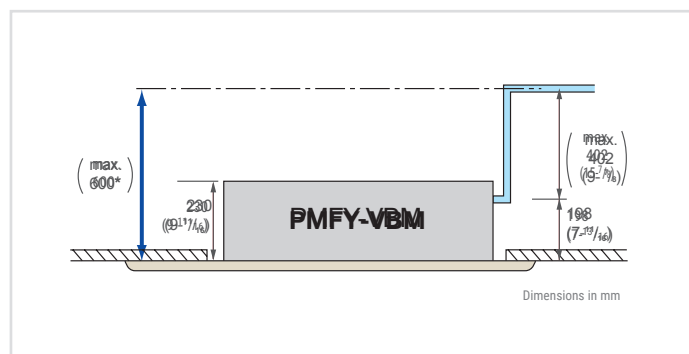
**Compact and light housing**, perfect for applications in premises with a limited ceiling space.

## Easy installation and maintenance

The dimensions of the unit housing have been standardised for all models at 854 mm to facilitate installation. The weight of the body is only 14 kg for the main unit and 3 kg for the panel, making this unit one of the lightest on the market.

## Condensate lift pump

The condensate drain can be positioned anywhere up to 600 mm from the ceiling surface.

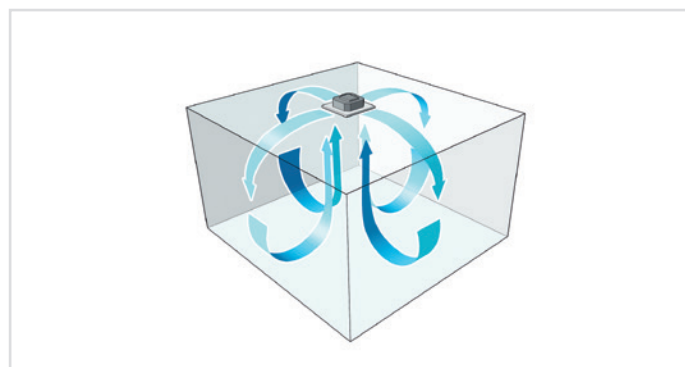


## Silent operation

New airflow control technology reduces noise levels to just 27dB (P20VBM) for industry-leading quiet performance.

## Improved Coanda effect

Thanks to this effect, the air tends to follow a trajectory that allows it to circulate more evenly in the air-conditioned environment.





### Key Technologies


### Technical specifications

MODEL			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power	Single phase, 220-240V 50Hz					
Capacity in cooling mode*1		kW	2,2	2,8	3,6	4,5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2,5	3,2	4,0	5,0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0,042	0,044	0,044	0,054
	Heating	kW	0,042	0,044	0,044	0,054
Current	Cooling	A	0,20	0,21	0,21	0,26
	Heating	A	0,20	0,21	0,21	0,26
External finish	Unit	Galvanized steel plate				
	Grille	Nr. Munsel 0.98Y 8.99/0.63				
Dimensions AxLxP	Unit	mm	230x812x395	230x812x395	230x812x395	230x812x395
	Grille	mm	30x1000x470	30x1000x470	30x1000x470	30x1000x470
Net weight	Unit	kg	14	14	14	14
	Grille	kg	3	3	3	3
Heat exchanger	Cross fin					
Fan	Type x Quantity	Linear Flow fan x 1				
	Air flow*2	m³/min	6,5-7,2-8,0-8,7	7,3-8,0-8,6-9,3	7,3-8,0-8,6-9,3	7,7-8,7-9,7-10,7
		l/s	108-120-133-145	122-133-143-155	122-133-143-155	128-145-162-178
		cfm	230-254-283-307	258-283-304-328	258-283-304-328	272-307-343-378
Ext. Static pressure	Pa	0	0	0	0	
Motor	Type	Single-phase induction motor				
	Ext. Static pressure	kW	0,028	0,028	0,028	0,028
Air filter	Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12,7	ø12,7	ø12,7	ø12,7
	Liquid (swaged)	mm	ø6,35	ø6,35	ø6,35	ø6,35
Local drain pipe diameter		mm	O.D. 26	O.D. 26	O.D. 26	O.D. 26
Sound pressure*2*3		dB(A)	27-30-33-35	32-34-36-37	32-34-36-37	33-35-37-39

\*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

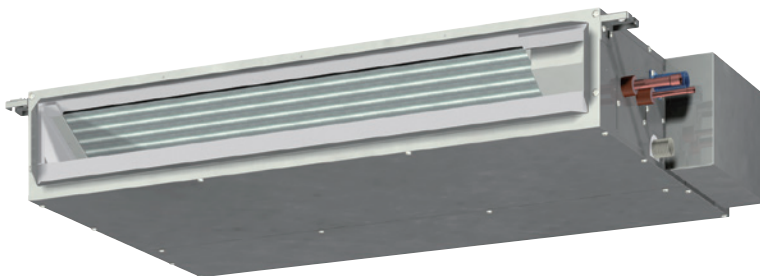
Cooling: indoor 27°C (81 °F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43° F) WB.

\*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

\*3 Measured in an anechoic chamber.

# PEFY-P VMS1-E

INDOOR UNITS - Ceiling concealed medium to low static pressure



CITY MULTI

## Ideal for...

This **ultra-slim 200 mm** unit offers extraordinary flexibility and is particularly suitable for use in rooms where low noise and compact vertical dimensions are essential.

## Ultra-slim

These units are extremely thin, at just 200 mm in height.

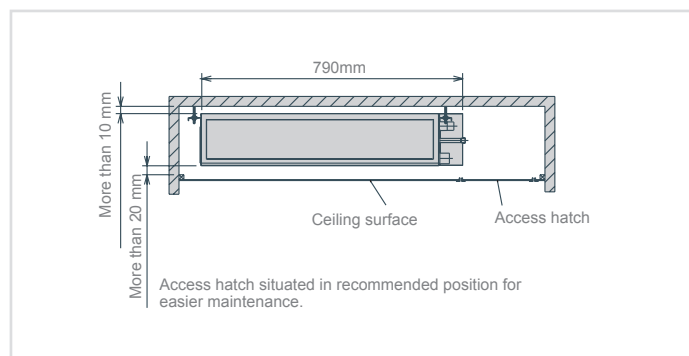
Extremely compact width and lengths of:

7790 mm for P15 and P32 models

990 mm for P40 and P50 models

1190 mm for P63 models

May be installed easily in cramped spaces such as ceiling recesses or double ceilings.



## Condensate lift pump

The VMS1 is equipped with a condensate lift pump as standard.

## Adjustable static pressure

L'unità è adatta per diverse applicazioni, grazie alle sue 4 impostazioni di presWith 4 selectable static pressure settings (5, 15, 25 and 50Pa), this unit is ideal for a variety of different applications.

## Adjustable air flow

Three different fan speed settings - "low", "medium" and "high" – ensure the desired levels of comfort.

## Low noise

The new design of the centrifugal fan and coil reduces noise levels.

Noise level

dB(A)

Capacity		P15	P20	P25	P32	P40	P50	P63
Fan speed	High		28		32	33	35	36
	Medium		24		27	30	32	33
	Low		22		24	28	30	30



### Key Technologies


### Technical specifications

MODEL		PEFY-P15VMS1-E	PEFY-P20VMS1-E	PEFY-P25VMS1-E	PEFY-P32VMS1-E	PEFY-P40VMS1-E	PEFY-P50VMS1-E	PEFY-P63VMS1-E
Power		A single-phase, 220-240V 50Hz / a 1 fase, 220-240V 60Hz						
Capacity in cooling mode*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	Btu/h	5800	7500	9600	12300	15400	19100	24200
Capacity in heating mode*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	Btu/h	6500	8500	10900	13600	17100	21500	27300
Power consumption	Cooling kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
	Heating kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	Cooling A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
	Heating A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish		Galvanised						
Dimensions HxLxW		mm 200x790x700	200x790x700	200x790x700	200x790x700	200x990x700	200x990x700	200x1190x700
Net weight		kg 19 [18]	19 [18]	19 [18]	20 [19]	24 [23]	24 [23]	28 [27]
Heat exchanger		Cross fins (sheet aluminium fins and copper piping)						
Fan	Type x Quantity	Sirocco x 2			Sirocco x 3		Sirocco x 4	
	Air flow (low-medium-high) m³/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
	Static external press Pa	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50
Motor	Type	Brushless DC motor						
	Power output kW	0.096	0.096	0.096	0.096	0.096	0.096	0.096
Air filter		Polypropylene honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (swaged) mm	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø15.88 brazed
	Liquid (swaged) mm	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø9.52 brazed
Local drain pipe diameter		O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32
Sound pressure (low-medium-high) dB(A)		22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.  
 Cooling: indoor 27°C DB/19°C WB, outdoor 35°C DB.  
 Heating: indoor 20°C DB (68°F DB), outdoor 7°C DB (45°F DB/43°F WB). Pipe length: 7.5 m (24-9/16 feet).  
 Height difference: 0 m (0 feet).

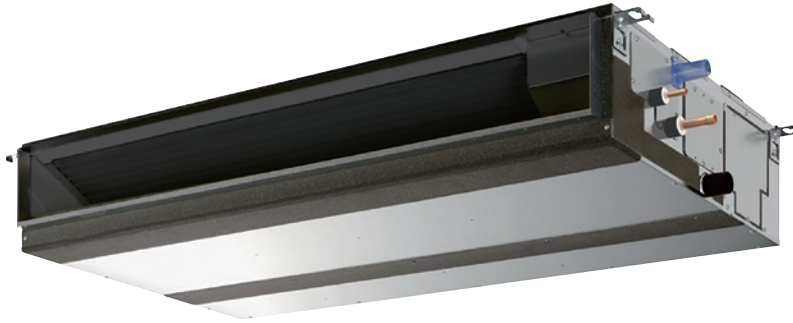
\*2 Static external pressure is set to 15 Pa by default.

\*3 [ ] in case of PEFY-P15-63VMS1L-E.



# PEFY-M VMA-A1 NEW

INDOOR UNITS - Ceiling concealed medium to high static pressure



CITY MULTI

## Five levels of external static pressure settings

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

External static pressure setting

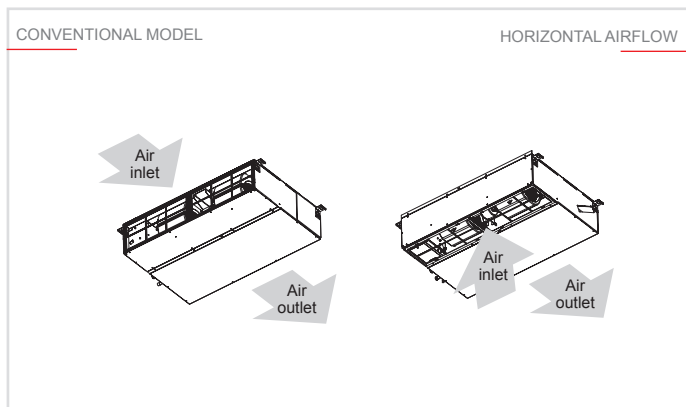
Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-M VMA-A1	35/50/70/100/150 Pa						40/50/70/100/150 Pa				

## Four fan speeds to choose from

The conventional models had three levels of fan speed, but the new models offer four levels (Low/Mid2/Mid1/High). Combined with a wider selection of external static pressure levels, the new models offer optimal operation settings to suit the air-conditioning load of the installation space.

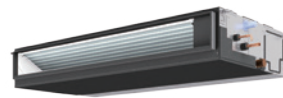
## Air inlet direction can be easily changed

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

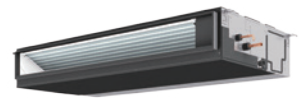


## Optional drain pump

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

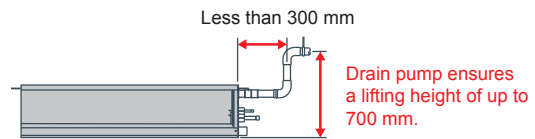


Built-in drain pump  
PEFY-M VMA-A1



No drain pump  
PEFY-M VMAL-A1

\*Units with an "L" at the end of the model name are not equipped with a drain pump.



## Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment or PQ box is required.



### Key Technologies


### Technical specifications

MODEL		PEFY-M20VMA-A1	PEFY-M25VMA-A1	PEFY-M32VMA-A1	PEFY-M40VMA-A1	
Power		1-phase 220-230-240 V 50 Hz				
Capacity in cooling mode *1	kW	2.2	2.8	3.6	4.5	
	Btu/h	7,500	9,600	12,300	15,400	
Capacity in heating mode*1	kW	2.5	3.2	4.0	5.0	
	Btu/h	8,500	10,900	13,600	17,100	
Power consumption	Cooling kW	0.039	0.039	0.060	0.087	
	Heating kW	0.037	0.037	0.058	0.085	
Current	Cooling A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64	
	Heating A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64	
External finish		Galvanized steel plate				
Dimensions HxLxW	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	
Net weight	kg	21	21	21	25	
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	
	Air flow (low-medium-high)	m³/min	6.0 - 7.5 - 8.5 - 10.0	6.0 - 7.5 - 8.5 - 10	7.4 - 9.0 - 10.5 - 12.5	10.0 - 11.5 - 13.5 - 19.0
		l/s	100 - 125 - 142 - 166	100 - 125 - 142 - 166	123 - 150 - 175 - 208	166 - 191 - 225 - 316
		cfm	212 - 265 - 300 - 353	212 - 265 - 300 - 353	261 - 317 - 370 - 441	353 - 406 - 476 - 670
External static press *2	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	
Motor	Type	DC Motor				
	Power output kW	0.085	0.085	0.085	0.121	
Air filter		Polypropylene honeycomb fabric (washable)				
Refrigerant pipe diameter	Gas (brazed) mm	12.7	12.7	12.7	12.7	
	Liquid (brazed) mm	6.35	6.35	6.35	6.35	
Local drain pipe diameter		O.D.32 (1-1/4")				
Sound pressure (Low-Mid2-Mid1-High)*3	Cooling dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	23.0 - 26.5 - 29.5 - 33.5	23.5-25.5-28.5-37.0	
	Heating dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	23.0 - 26.5 - 29.5 - 33.5	23.5-25.5-28.5-37.0	

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 The factory setting of airflow mode and external static pressure mode is shown without < >.

\*3 Measured in anechoic chamber with 230V mains power and at the factory setting of external static pressure.

### Technical specifications

MODEL			PEFY-M50VMA-A1	PEFY-M63VMA-A1	PEFY-M71VMA-A1	PEFY-M80VMA-A1
Power	1-phase 220-230-240 V 50 Hz					
Capacity in cooling mode *1	kW		5.6	7.1	8.0	9.0
	Btu/h		19,100	24,200	27,300	30,700
Capacity in heating mode*1	kW		6.3	8.0	9.0	10.0
	Btu/h		21,500	27,300	30,700	34,100
Power consumption	Cooling	kW	0.131	0.139	0.165	0.165
	Heating	kW	0.129	0.231	0.216	0.216
Current	Cooling	A	0.94-0.90-0.86	0.99-0.95-0.91	1.16-1.11-1.06	1.16-1.11-1.06
	Heating	A	0.94-0.90-0.86	1.55-1.48-1.42	1.47-1.41-1.35	1.47-1.41-1.35
External finish	Galvanized steel plate					
Dimensions HxLxW	mm		250 x 1100 x 732	250 x 1100 x 732	250 x 1400 x 732	250 x 1400 x 732
Net weight	kg		30	30	37	37
Heat exchanger	Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3
	Air flow (low-medium-high)	m <sup>3</sup> /min	12.0 - 14.5 - 16.5 - 25.6	13.5 - 16.0 - 19.2 - 26.2	14.5 - 18.0 - 21.0 - 33.1	14.5 - 18.0 - 21.0 - 33.1
		l/s	208 - 241 - 275 - 426	225 - 266 - 320 - 436	241 - 300 - 350 - 518	241 - 300 - 350 - 518
		cfm	441 - 511 - 582 - 903	476 - 564 - 677 - 925	511 - 635 - 741 - 1098	511 - 635 - 741 - 1098
External static press <sup>2</sup>	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	
Motor	Type		DC Motor			
	Power output	kW	0.121	0.121	0.300	0.300
Air filter	Polypropylene honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (brazed)	mm	12.7	15.88	15.88	15.88
	Liquid (brazed)	mm	6.35	9.52	9.52	9.52
Local drain pipe diameter	O.D.32 (1-1/4")					
Sound pressure (Low-Mid2-Mid1-High) <sup>3</sup>	Cooling	dB(A)	22.0-24.0-26.5-37.0	23.0-26.0-30.0-37.5	22.0-25.0-27.5-38.5	22.0-25.0-27.5-38.5
	Heating	dB(A)	22.0-24.0-26.5-37.0	23.0-26.0-30.0-41.5	22.0-25.0-27.5-40.5	22.0-25.0-27.5-40.5

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.  
 Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.  
 \*2 The factory setting of airflow mode and external static pressure mode is shown without < > .  
 \*3 Measured in anechoic chamber with 230V mains power

### Technical specifications

MODEL			PEFY-M100VMA-A1	PEFY-M125VMA-A1	PEFY-M140VMA-A1
Power	1-phase 220-230-240 V 50 Hz				
Capacity in cooling mode *1	kW		11.2	14.0	16.0
	Btu/h		38,200	47,800	54,600
Capacity in heating mode*1	kW		12.5	16.0	18.0
	Btu/h		42,700	54,600	61,400
Power consumption	Cooling	kW	0.211	0.218	0.282
	Heating	kW	0.140	0.197	0.206
Current	Cooling	A	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
	Heating	A	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
External finish	Galvanized steel plate				
Dimensions HxLxW	mm		250 x 1400 x 732	250 x 1400 x 732	250 x 1600 x 732
Net weight	kg		37	38	42
Heat exchanger	Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
	Air flow (low-medium-high)	m <sup>3</sup> /min	23.0 - 28.0 - 32.0 - 37.0	25.5 - 31.0 - 34.0 - 37.0	29.5 - 35.5 - 40.0 - 44.0
		l/s	383 - 466 - 533 - 616	425 - 516 - 566 - 616	491 - 591 - 666 - 733
		cfm	812 - 988 - 1129 - 1306	900 - 1094 - 1200 - 1306	1041 - 1253 - 1412 - 1553
External static press <sup>2</sup>	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	
Motor	Type		DC Motor		
	Power output	kW	0.300	0.300	0.300
Air filter	Polypropylene honeycomb fabric (washable)				
Refrigerant pipe diameter	Gas (swaged)	mm	15.88	15.88	15.88
	Liquid (swaged)	mm	9.52	9.52	9.52
Local drain pipe diameter	O.D.32 (1-1/4")				
Sound pressure (Low-Mid2-Mid1-High) <sup>3</sup>	Cooling	dB(A)	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5	34.0 - 38.0 - 40.5 - 43.0
	Heating	dB(A)	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5	34.0 - 38.0 - 40.5 - 43.0

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.  
 Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.  
 \*2 The factory setting of airflow mode and external static pressure mode is shown without < > .  
 \*3 Measured in anechoic chamber with 230V mains power

**WHAT'S  
NEW**

### **What has changed on PEFY-M VMA Ducted Units?**

- The physical dimensions of the size 50,63 & 80 has been changed
- The SHC (Sensible Capacity) of these new units have been improved
- Fan speed have been divided into 4 stages: High, Mid1, Mid2, low. Hence providing more flexibility on static and sounds rating depending on the installed space.
- High Fan speed airflow has been increased, hence the new Mid1 can be used instead. However, this also depends on the capacity & sound rating of the required space
- Cooling and Heating airflow rate on high Fan speed is different on size 63 & 80

# PEFY-P VMHS-E

INDOOR UNITS - Ceiling concealed high static pressure



CITY MULTI

## Four levels of external static pressure settings

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

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

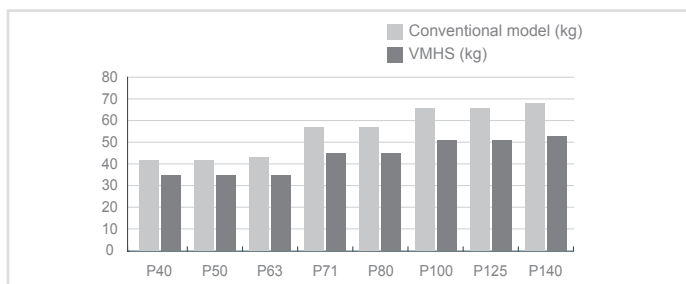
The factory setting of external static pressure is shown without < > . Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

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

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

## Reduction weight

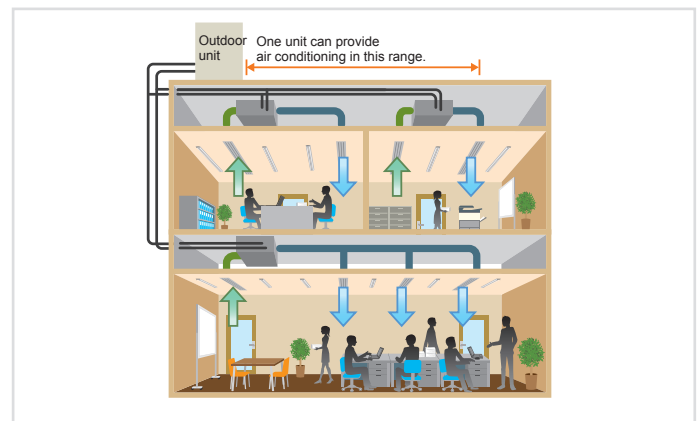
Downsizing of the motor helped reduce unit weight, offering easier installation.



## The use of DC motor

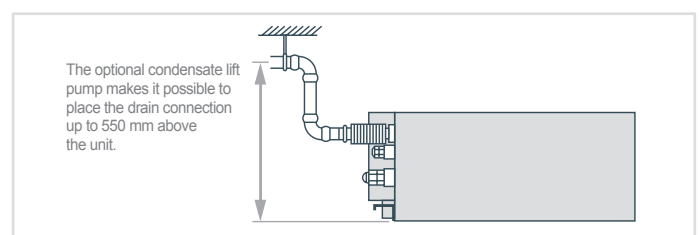
The new models are equipped with high-efficiency DC motors as compared to the AC motors on older models, which reduced power consumption. On the P80 models, power consumption is reduced by 59%\*.

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



## Optional drain pump

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





### Key Technologies


### Technical specifications

MODEL		PEFY-P40VMHS-E	PEFY-P50VMHS-E	PEFY-P63VMHS-E	PEFY-P71VMHS-E	PEFY-P80VMHS-E	PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E	
Power		A single-phase, 220-230-240V 50/60 Hz								
Capacity in cooling mode *1	kW	4,5	5,6	7,1	8,0	9,0	11,2	14,0	16,0	
	Btu/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600	
Capacity in heating mode*1	kW	5,0	6,3	8,0	9,0	10,0	12,5	16,0	18,0	
	Btu/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400	
Power consumption	Cooling kW	0,055	0,055	0,090	0,075	0,090	0,160	0,160	0,190	
	Heating kW	0,055	0,055	0,090	0,075	0,090	0,160	0,160	0,190	
Current	Cooling A	0,41-0,39-0,38	0,41-0,39-0,38	0,64-0,62-0,59	0,54-0,52-0,50	0,63-0,61-0,58	1,05-1,01-0,96	1,05-1,01-0,96	1,24-1,19-1,14	
	Heating A	0,41-0,39-0,38	0,41-0,39-0,38	0,64-0,62-0,59	0,54-0,52-0,50	0,63-0,61-0,58	1,05-1,01-0,96	1,05-1,01-0,96	1,24-1,19-1,14	
External finish		Galvanized								
Dimensions HxLxW	mm	380x745x900	380x745x900	380x745x900	380x1030x900	380x1030x900	380x1195x900	380x1195x900	380x1195x900	
Net weight	kg	35	35	35	45	45	51	51	53	
Heat exchanger		Cross fins (aluminium fins and copper piping)								
Fan	Type x Quantity	Sirocco x 1		Sirocco x 1	Sirocco x 2	Sirocco x 2	Sirocco x 2	Sirocco x 2	Sirocco x 2	
	Air flow (low-medium-high)	m³/min	10,0-12,0-14,0	10,0-12,0-14,0	13,5-16,0-19,0	15,5-18,0-22,0	18,0-21,5-25,0	26,5-32,0-38,0	26,5-32,0-38,0	28,0-34,0-40,0
		l/s	167-200-233	167-200-233	225-267-317	258-300-367	300-358-417	442-533-633	442-533-633	467-567-667
	cfm	353-424-494	353-424-494	477-565-671	547-636-777	636-759-883	936-1130-1342	936-1130-1342	989-1201-1412	
Static external press	Pa	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	
Motor	Type	Motor DC								
	Power output	kW	0,121	0,121	0,121	0,244	0,244	0,375	0,375	0,375
Air filter		-								
Refrigerant pipe diameter	Gas (swaged)	mm	12,7	12,7	15,88	15,88	15,88	15,88	15,88	15,88
	Liquid (swaged)	mm	6,35	6,35	9,52	9,52	9,52	9,52	9,52	9,52
Local drain pipe diameter		O.D 32								
Sound pressure (low-medium-high)*2	dB(A)	20-23-27	20-23-27	24-27-32	24-26-30	25-27-30	27-31-34	27-31-34	27-32-36	

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given:

Cooling: 27°C DB / 19°C WB, outdoor 35°C DB.

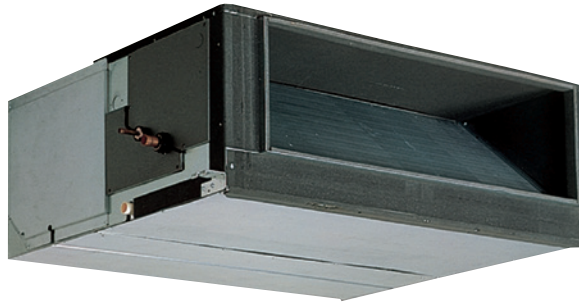
Heating: 27°C DB, outdoor 7°C DB / 6°C WB.

\*2 Static pressure is set to 50 Pa by default.

\*3 Measured in anechoic chamber.

# PEFY-P VMHS-E

INDOOR UNITS - Ceiling concealed high static pressure



CITY MULTI

## Ideal for...

The new VMHS series: improved **installation flexibility** and superior performance.

## DC Inverter motor

The new VMHS ducted indoor units are equipped with a single-phase DC Inverter electric motor, a solution that offers more precise electronic control and less noise.

## Remotely settable static overpressure

The static overpressure may be modified from a remote control. In addition to a dip switch on the unit, the PAR-41MAA remote control may also be used to modify static external pressure, making installation significantly simpler.

A choice of up to five different settings is available: 50, 100, 150, 200 or 250 Pa.

## Automatic fan speed adjustment

The automatic fan speed adjustment mode ensures fast, comfortable heating as soon as heating mode is activated. Automatic fan speed control is included in the three standard modes "Low", "Medium" and "High", and ensures faster, comfortable air conditioning by increasing the air flow speed on activation and then reducing speed once stable comfort levels are attained.

## Quieter

The VMHS series is 15% quieter than the previous VMH model.



### Key Technologies


### Technical specifications

MODEL			PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power	A single-phase, 220-240V, 50Hz			
Capacity in cooling mode *1		kW	22.4	28.0
		Btu/h	76,000	95,500
Capacity in heating mode*1		kW	25.0	31.5
		Btu/h	72,300	90,400
Power consumption	Cooling	kW	0.63/0.63/0.63	0.82/0.82/0.82
	Heating	kW	0.63/0.63/0.63	0.82/0.82/0.82
Current	Cooling	A	3.47/3.32/3.18	4.72/4.43/4.14
	Heating	A	3.47/3.32/3.18	4.72/4.43/4.14
External finish	Galvanised			
Dimensions HxLxW		mm	470 x 1250 x 1120	470 x 1250 x 1120
Net weight		kg	97	100
Heat exchanger	Cross Fin			
Fan	Type x Quantity		Sirocco x 2	
	Air flow (low-medium-high)	m³/min	50-61-72	58-71-84
	Static external press*2	Pa	(50)/(100)/150/(200)/(250)	
Motor	Type		Single-phase induction motor	
	Power output	kW	0.87	0.87
Air filter			-	-
Refrigerant pipe diameter	Gas (swaged)	mm	19.05	22.2
	Liquid (swaged)	mm	9.52	9.52
Local drain pipe diameter			32	32
Sound pressure (low-medium-high)*3		dB(A)	36-39-43	39-42-46

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given:

Cooling: 27°C DB / 19°C WB, outdoor 35°C DB.

Heating: 27°C DB, outdoor 7°C DB / 6°C WB.

\*2 Static pressure is set to 150 Pa by default.

\*3 Measured in anechoic chamber.



# PCFY-P VKM-E

INDOOR UNITS - Ceiling-suspended



CITY MULTI

## Ideal for...

Designed and built for quiet operation and simple maintenance, these units deliver efficient, comfortable air conditioning performance.

## Optimised air flow

Air flow speed is optimised for the height of the ceiling. The ideal air flow setting may be selected for ceilings up to 4.2m in height, maximising both air conditioning efficacy and comfort.

## Extremely simple installation

With the direct mount system, it is not necessary to remove the mounting from the main unit, cutting installation times.

The condensate drain pipes may be connected on the left or right of the unit.

## Automatic fan speed adjustment

As well as the 4 manual fan speed settings, the PCFY series may also be set to automatically adjust fan speed in relation to ambient conditions: the fan speed is always set to the highest setting when the unit is switched on, to reach the desired conditions more quickly, and is reduced automatically near the setpoint for stable comfort.

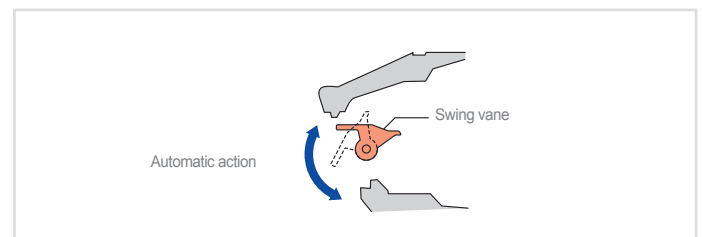
## Extra slim

Extremely slim and with elegant curves, the PCFY series is perfectly suited to any interior. The unit also features a single air outlet, meaning that the automatic swing vane also doubles as a shutter when the unit is off.



## Automatic swing vane

The automatic swing vane mode distributes air more uniformly. The vane swings upwards and downwards automatically to distribute air effectively into every corner of the room.





### Key Technologies


### Technical specifications

MODEL			PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E	
Power	A single-phase, 220-230-240VAC 50Hz						
Capacity in cooling mode*1	kW		4.5	7.1	11.2	14.0	
	Btu/h		15400	24200	38200	47800	
Capacity in heating mode*1	kW		5.0	8.0	12.5	16.0	
	Btu/h		17100	27300	42700	54600	
Power consumption	Cooling	kW	0.04	0.05	0.09	0.11	
	Heating	kW	0.04	0.05	0.09	0.11	
Current	Cooling	A	0.28	0.33	0.65	0.76	
	Heating	A	0.28	0.33	0.65	0.76	
External finish	Munsell 6.4Y 8.9/ 0.4						
Dimensions HxLxW	mm		230x960x680	230x1280x680	230x1600x680	230x1600x680	
Net weight	kg		24	32	36	38	
Heat exchanger	Cross fins (aluminium fins and copper piping)						
Fan	Type x Quantity		Sirocco x 2	Sirocco x 3	Sirocco x 4	Sirocco x 4	
	Air flow (low-medium-high)	m³/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31	
		l/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517	
	Static external press	Pa	0	0	0	0	
Motor	Type	Single-phase DC motor					
	Power output	kW	0.090	0.095	0.160	0.160	
Air filter	Polypropylene honeycomb fabric (long life)						
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø15.88	ø15.88 / ø19.05 (compatible)	ø15.88 / ø19.05 (compatible)	
	Liquid (swaged)	mm	ø6.35	ø9.52	ø9.52	ø9.52	
Local drain pipe diameter	O.D. 26 (1)						
Sound pressure (low-medium-high)*2		dB(A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44	

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes.

\*3 Measured in anechoic chamber.

# PKFY-P VLM-E

INDOOR UNITS - Wall-mounted



CITY MULTI

## New design

A sharp and simple form that combines beauty and function. The simple square design harmonizes beautifully with the straight lines created by the intersection of the walls, floor and ceiling of the space. With a new white body color, it is the ideal solution for residential applications, offices and large stores.

## New line-up

New exclusive P10 model is added in wall mounted lineup. P10 size allows to respond to the needs of narrow spaces conditioning them finely. In addition, miniaturization of conventional P32 model has been realized. It contributes to space saving of installation area.

Capacity	P10	P15	P20	P25	P32	P40	P50	P63	P100
VLM	<b>NEW</b>	•	•	•	•	•	•		

## Horizontal airflow

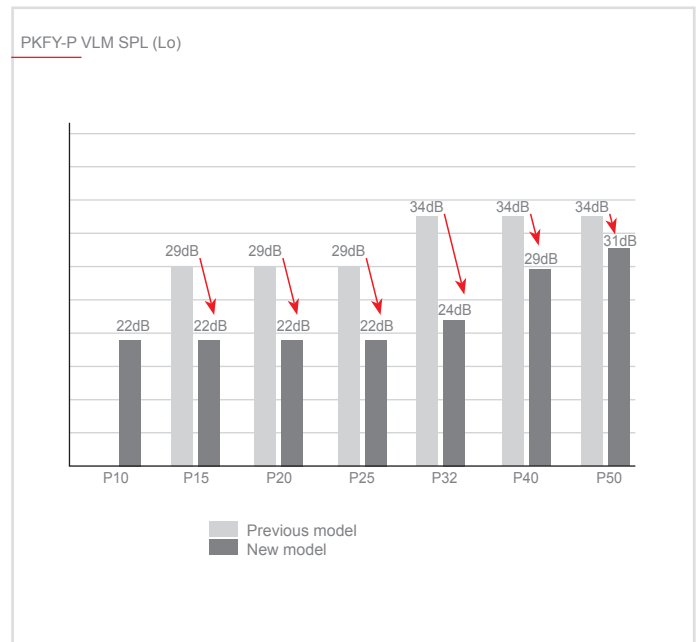
The vane angle can be set to five steps, including the one that allows horizontal air flow, reducing the feeling of draft. Besides, 4 steps of air speed are available.

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

<b>NEW</b>	PKFY-P** VLM-E	4 speeds + AUTO	5 steps	✓
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## Quietness...

The noise level has been significantly reduced compared to the conventional model by reviewing the unit structure and improving the line flow fan.





### Key Technologies


### Technical specifications

MODEL			PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E	
Power			A single-phase, 220-240V 50Hz, A single-phase, 220-230V 60Hz							
Capacity in cooling mode*1		kW	1.2	1.7	2.2	2.8	3.6	4.5	5.6	
		Btu/h	4100	5800	7500	9600	12300	15400	19100	
Capacity in heating mode*1		kW	1.4	1.9	2.5	3.2	4.0	5.0	6.3	
		Btu/h	4800	6500	8500	10900	13600	17100	21500	
Power consumption	Cooling	kW	0.02	0.02	0.02	0.03	0.04	0.04	0.05	
	Heating	kW	0.01	0.01	0.01	0.02	0.03	0.03	0.04	
Current	Cooling	A	0.20	0.20	0.20	0.25	0.35	0.35	0.45	
	Heating	A	0.15	0.15	0.15	0.20	0.30	0.30	0.40	
External finish			Plastic (0.7PB 9.2/0.4)							
Dimensions HxLxW		mm	299 x 773 x 237						299 x 898 x 237	
Net weight		kg	11 (25)						13 (29)	
Heat exchanger			Cross fin (Aluminium fin and copper tube)							
Fan	Type x Quantity		Line flow fan x 1							
	Air flow *2	m³/min	3.3-3.5-3.8-4.2	4.0-4.2-4.4-4.7	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4	
		l/s	55-58-63-70	67-70-73-78	67-73-82-90	67-77-90-112	72-90-115-140	105-123-143-167	113-138-170-207	
		cfm	117-124-134-148	141-148-155-166	141-155-173-191	141-162-191-237	152-191-244-297	222-261-304-353	240-293-360-438	
Static external press	Pa	0 (0)								
Motor	Type		DC motor							
	Power output	kW	0.03							
Air filter			PP Honeycomb							
Refrigerant pipe diameter	Gas (swaged)	mm	Ø 12.7 (Ø1/2)							
	Liquid (swaged)	mm	Ø 6.35 (Ø1/4)							
Local drain pipe diameter			I.D. 16 (5/8)							
Sound pressure *2 *3		dB(A)	22-24-26-28	22-24-26-28	22-26-29-31	22-27-31-35	24-31-37-41	29-34-37-40	31-36-41-46	

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.  
Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.  
\*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes.  
\*3 Measured in anechoic chamber.

# PKFY-P VKM-E

INDOOR UNITS - Wall-mounted



CITY MULTI

## Ideal for...

An elegant design with simple, clean lines, compact dimensions and a distinctly recognisable family look: **the ideal solution for residential applications, offices and large stores.**

## Smooth front panel with pure white finish

All the models of the PKFY series now feature a smooth front panel instead of the mesh used on the previous version. The units themselves are now finished in pure white instead of standard appliance white to fit in perfectly with the style of practically any interior space.



Capacity	P15	P20	P25	P32	P40	P50	P63	P100
VKM							•	•

## Key Technologies VKM (P63-P100)




## Technical specifications

MODEL			PKFY-P63VKM-E	PKFY-P100VKM-E
Power	A single-phase, 220-230-240VAC 50Hz			
Capacity in cooling mode*1		kW	7.1	11.2
		Btu/h	24200	38200
Capacity in heating mode*1		kW	8.0	12.5
		Btu/h	27300	42600
Power consumption	Cooling	kW	0.05	0.08
	Heating	kW	0.04	0.07
Current	Cooling	A	0.37	0.58
	Heating	A	0.30	0.51
External finish	Munsell plastic 1.0Y 9.2/0.2			
Dimensions HxLxW		mm	365x1170x295	365x1170x295
Net weight		kg	21	21
Heat exchanger	Cross fins (aluminium fins and copper piping)			
Fan	Type x Quantity	Linear flow fan x 1		
	Air flow (low-medium-high)	m <sup>3</sup> /min	16-20	20-26
		l/s	267-333	333-433
		cfm	565-706	706-918
Static external press	Pa	0	0	
Motor	Type			
	Power output	kW	0.056	0.056
Air filter	Polypropylene honeycomb fabric (washable)			
Refrigerant pipe diameter	Gas (swaged)	mm	ø15.88	ø15.88 / 19.05
	Liquid (swaged)	mm	ø9.52	ø9.52
Local drain pipe diameter	I.D. 16 (5/8)			I.D. 16 (5/8)
Sound pressure (low-medium-high)*2		dB(A)	39-45	41-49

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes, in low-medium-high modes or in low-high modes, depending on model. Measured in anechoic chamber.

# PAC-LV11-E

INDOOR UNITS - Wall-mounted design indoor unit LEV Kit



CITY MULTI

## Ideal for...

The new LEV Kit may be used to connect both standard VRF indoor units and Residential line indoor units in the same CITY MULTI VRF system.

The new LEV Kit makes it possible to connect stylish residential indoor units, with looks that are perfectly suited for large installations in applications such as residential buildings and hotels, where design is a decisive factor in the choice of indoor units.


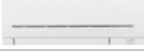
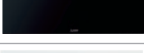



## Easy installation and maintenance

The new LEV Kit is easy to install in double ceilings or dedicated niches not only because of its compact size (183 mm H x 355 mm L x 142 mm W), but also and especially because it can be installed vertically or horizontally with no condensate drain.

Additionally, a maximum permissible piping length of 15 m between indoor units and the LEV Kit offers the freedom to install the kit in the most effective position possible.

## Residential indoor units

The following residential indoor units may be connected to the LEV Kit:






Types and Sizes available Residential indoor units	15	18	20	22	25	35	42	50
MSZ-LN_VG(2) 		•			•	•		•
MSZ-AP_VG(K) 	•		•		•	•	•	•
MSZ-EF_VE/VG 		•		•	•	•	•	•
MSZ-SF_VAVE3 	•		•	•	•	•	•	•
MFZ-KJ_VE 					•	•		•
MFZ-KT_VG 					•	•		•

### ATTENTION !!

FOR DETAILS ON COMPATIBILITY BETWEEN EACH MODEL OF INDOOR UNITS AND OUTDOOR UNITS PLEASE CONTACT YOUR LOCAL DISTRIBUTOR

## Unparalleled comfort and air quality

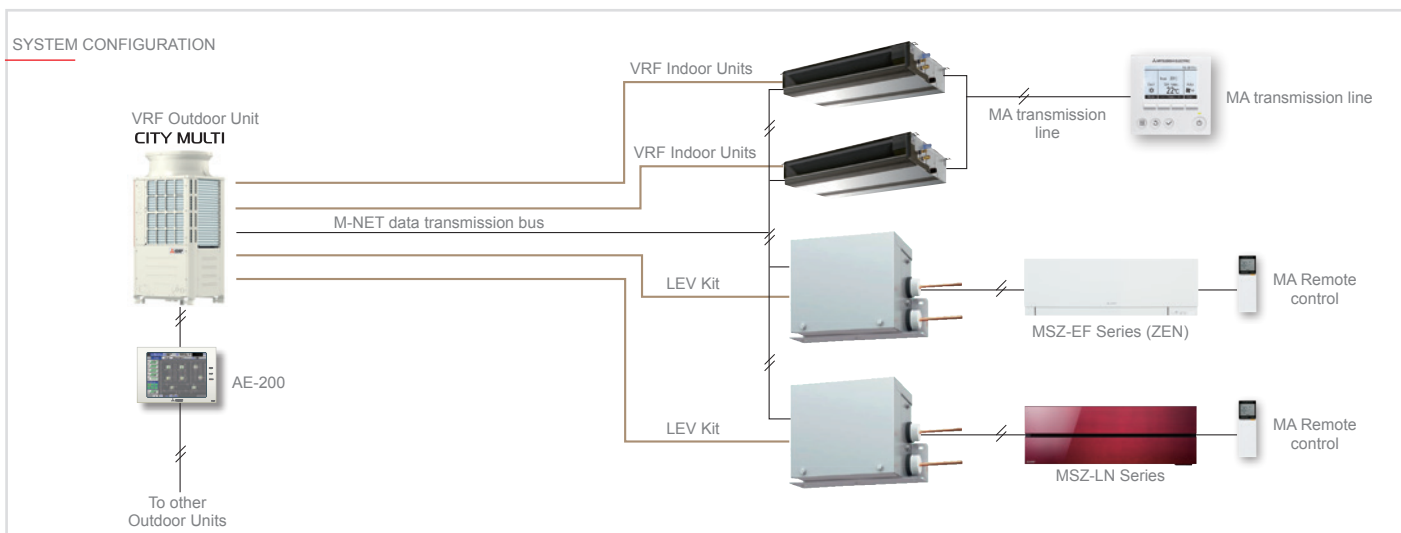
The quality of an environment also depends on perceived noise levels. Mitsubishi Electric air conditioners connected to a VRF CITY MULTI system using the LEV Kit offer the highest levels of acoustic comfort available today on the market.

Interior of a train  80dB(A)	Interior of a quiet car (40 km/h)  60dB(A)	Inside a library  40dB(A)	Sound of rustling leaves  22dB(A) SEZ-KD	Limit of human hearing  10dB(A)
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The residential indoor units also contribute to higher air quality levels with the superior filtration power of air filters with nanoplatinum treatment.



### Key Technologies

### Technical specifications

MODEL			PAC-LV11-E
Power			A single-phase, 220-240VAC 50Hz
Compatible Family series residential indoor units			MSZ-EF, MSZ-LN, MSZ-SF, MSZ-KJ
Number of branches			1 way
Maximum distance between indoor unit and LEV Kit	m		15
Compatible CITY MULTI outdoor units			Small Y Line - Small Y Compact Line - Y Lines (Ecostandard/ Standard Efficiency/High Efficiency) - Y Line Zubadan (YHM) - Y Line Replace Multi (YJM), R2 Lines (Standard Efficiency/High Efficiency) - R2 Line Replace Multi (YJM), WY Line (YHM) - WR2 Line (YHM)
Dimensions (HxLxW)	mm		180x355x142
Net weight	kg		3.5
Condensate drain			Not necessary
Installation			Vertical Horizontal
Refrigeration pipe diameter	Liquid	mm	6.35 (brazed)
	Gas	mm	-
Compatible remote controls			Standard: Remote control included with optional residential indoor units (purchased separately): 1. MA wired remote control interfaced via MAC-397IF board (optional, for installation in indoor units - purchased separately). 2. ME wired remote control, interfaced via LEV Kit terminal board.



# PFFY-P VKM-E

INDOOR UNITS - Design floor-standing unit



CITY MULTI

## Ideal for...

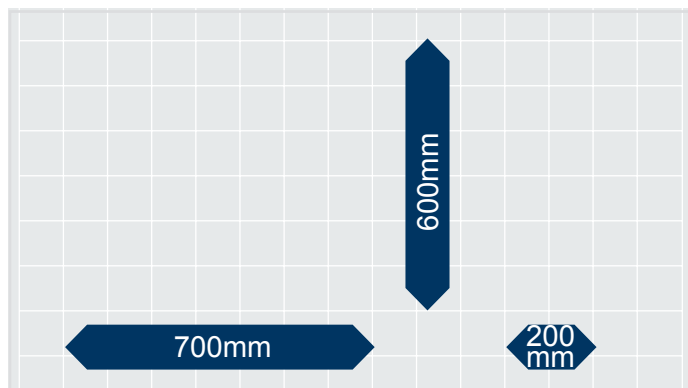
A high performance floor-standing air conditioner unit with an **elegant design** for lounges, bedrooms or offices where style is imperative.

## Sophisticated design

A floor-standing air conditioner unit by Mitsubishi Electric boasting an innovative design and combining simple, linear lines with a wide choice of functions. Conceived to leave the walls free, a unit that delivers comfortable cooling performance in summer and pleasant heat in winter. The gloss pure white finish lends the unit a premium look suitable for any interior space. Both the upper and lower air vents are closed when the air conditioner is switched off, giving the unit an elegantly stylish feel. A beautifully stylish and innovative air conditioner from Mitsubishi that suits your most elegant interior spaces to perfection.

## Slim but powerful

The slimline housing of the unit expresses the essence of compactness. The ideal size for a lounge, bedroom and many other rooms. The front panel is removable and washable, making the unit extremely simple to clean. Cleaning your air conditioner simply and regularly will keep it looking great and working perfectly for maximum energy efficiency.

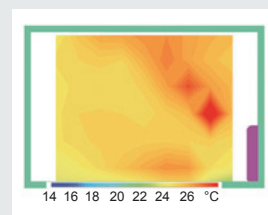


## Ideal air distribution

Air is distributed powerfully and effectively via the upper and lower air vents, ensuring a comfortable temperature throughout the room. The angle of the upper vent is settable into 5 different positions (+ swing and automatic modes) from a remote control, while 4 different air speed settings are available. Setting the vane to an almost vertical position prevents undesirable draughts, for even greater comfort.



The air delivered from the upper and lower vents is controlled for optimum comfort and distributed evenly into every corner of the room. In heating mode, the warm air flow is controlled intelligently to reach floor level, making cold feet a thing of the past!





### Key Technologies


### Technical specifications

MODEL			PFFY-P20VKM-E	PFFY-P25VKM-E	PFFY-P32VKM-E	PFFY-P40VKM-E
Power			A single-phase, 220-240V 50Hz			
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0.025	0.025	0.025	0.028
	Heating	kW	0.025	0.025	0.025	0.028
Current	Cooling	A	0.20	0.20	0.20	0.24
	Heating	A	0.20	0.20	0.20	0.24
External finish			Plastic (pure white)			
Dimensions HxLxW		mm	600x700x200	600x700x200	600x700x200	600x700x200
Net weight		kg	15	15	15	15
Heat exchanger			Cross fins (aluminium fins and copper piping)			
Fan	Type x Quantity		Linear flow fan x 2			
	Air flow (low-medium-high-extra high)	m <sup>3</sup> /min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	Static external pres.	Pa	0	0	0	0
Motor	Type		DC motor			
	Power output	kW	0.03x2	0.03x2	0.03x2	0.03x2
Air filter			Polypropylene honeycomb fabric (catechin filter)			
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø12.7	ø12.7	ø12.7
	Liquid (swaged)	mm	ø6.35	ø6.35	ø6.35	ø6.35
Local drain pipe diameter			D.I. 16 (PVC pipe connectable to VP-16)			
Sound pressure (low-medium-high)*2		dB(A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

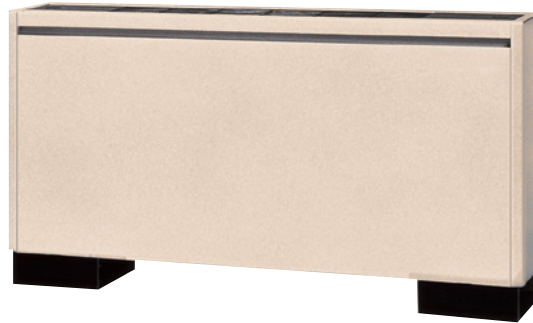
\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 Measured in anechoic chamber.

# PFFY-P VLEM-E

INDOOR UNITS - Floor standing unit



CITY MULTI

## Ideal for...

A free floor standing unit ideal for perimeter zones. A compact unit for easy conditioning even in the perimeter area. The 220mm deep body (8-11 / 16in.)

Can be easily installed in the perimeter area to achieve effective conditioning in this area as well.

## Compact unit

A compact unit offering a simple solution for conditioning perimeter zones. The compact unit, measuring just 220 mm in depth (8-11/16"), is easily installable in perimeter areas to ensure effective conditioning performance in these zones too.

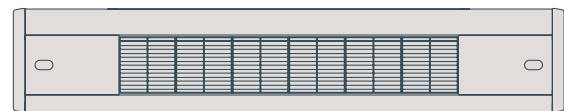
## Cooling dehumidification function

The electronic dehumidifier function uses cooling to dehumidify the air. The compact unit, measuring just 220 mm in depth, is easily installable in perimeter areas to ensure effective conditioning performance in these zones too.

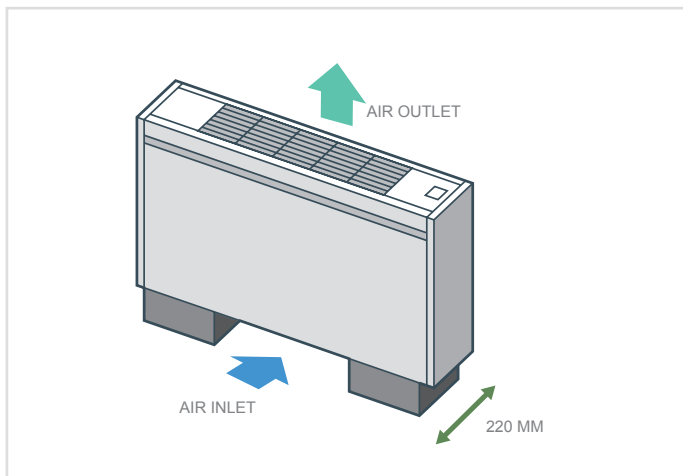
## Characteristics of PFFY-P VLEM-E

- Standardised design with simple lines.
- Suitable for all spaces, from offices and shops to hospitals.
- May be equipped with a water vapour impermeable membrane humidifier system.
- Features a specific concealed housing for stowing a remote control unit out of sight.

REMOTE CONTROLLER CAN BE BUILT-IN



MA remote controller PAR-33MAA(G) can be installed.





### Key Technologies

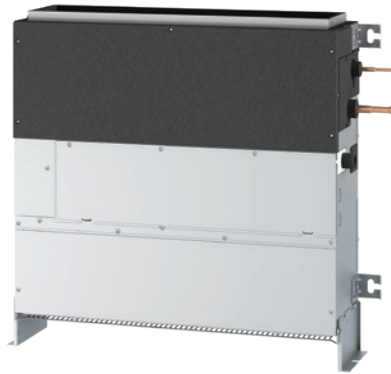

### Technical specifications

MODEL			PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power			A single-phase, 220-240V, 50Hz / a single-phase, 208-230V, 60Hz					
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7500	9600	12300	15400	19100	24200
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8500	10900	13600	17100	21500	27300
Power consumption	Cooling	kW	0.04 / 0.06	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating	kW	0.04 / 0.06	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling	A	0.19 / 0.25	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating	A	0.19 / 0.25	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish			Acrylic paint (5Y 8/1)					
Dimensions HxLxW		mm	630x1050x220	630x1050x220	630x1170x220	630x1170x220	630x1410x220	630x1410x220
Net weight		kg	23	23	25	26	30	32
Heat exchanger			Cross fins (aluminium fins and copper piping)					
Fan	Type x Quantity		Sirocco x 1	Sirocco x 1	Sirocco x 1	Sirocco x 2	Sirocco x 2	Sirocco x 2
	Air flow	m³/min	5.5-6.5	5.5-6.5	7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		l/s	92-108	92-108	117-150	150-183	200-233	200-258
		cfm	194-230	194-230	247-318	318-388	424-494	424-547
Static external pres.	Pa	0	0	0	0	0	0	
Motor	Type		Single-phase induction motor					
	Power output	kW	0.015	0.015	0.018	0.030	0.035	0.050
Air filter			Polypropylene honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø12.7	ø12.7	ø12.7	ø12.7	ø15.88
	Liquid (swaged)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52
Local drain pipe diameter			D.I. 26 (1) <Accessory pipe O.D. 27 (upper end: O.D. 20)>					
Sound pressure**2*3*4		dB(A)	34-40	34-40	35-40		38-43	40-46

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.  
 Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB.  
 \*\* Air flow/noise levels given for operation in low-high modes.  
 \*3 Measurement point: 1m x 1m, Power: 240V AC/50Hz:  
 1dB(A) less with 230V AC/50Hz.  
 2dB(A) less with 220V AC/50Hz.  
 3dB(A) less with measurement point at 1.5 m x 1.5 m.  
 \*4 Measured in anechoic chamber.

# PFFY-P VCM-E

## INDOOR UNITS - Floor standing concealed



CITY MULTI

### Ideal for...

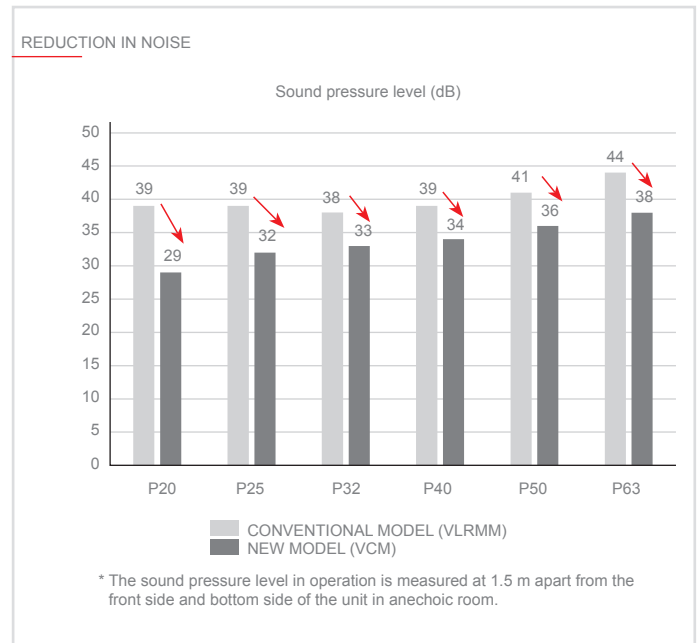
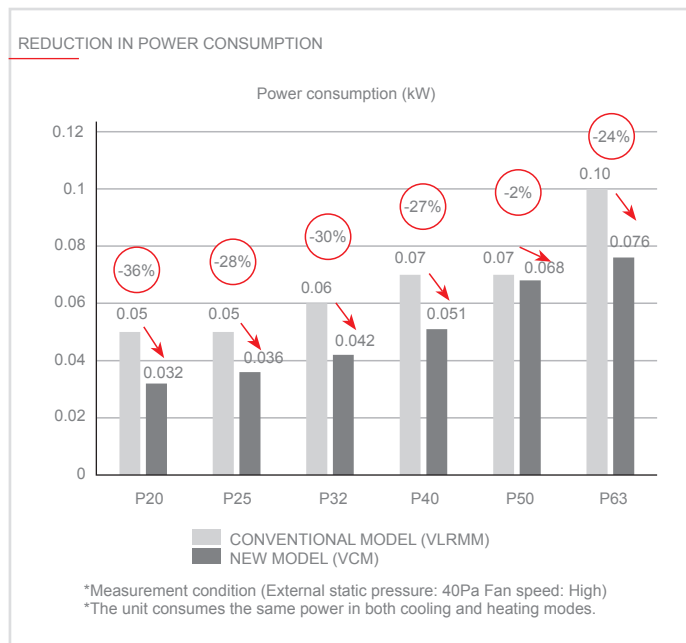
Built-in floor units: simplified installation for effective air conditioning performance.

### Flexible air-flow and external static pressure setting

The VCM series may be configured with a choice of four different static external pressure settings: 0, 10, 40 and 60 Pa. Besides airflow rate can be selected from 3 patterns (Low-Mid-High).

### Reduced power consumption and noise

New structure realizes smoother airflow to reduce pressure loss in air pathway. The combination of an improved air pathway structure and components contributes to reduce power consumption and operation noise.



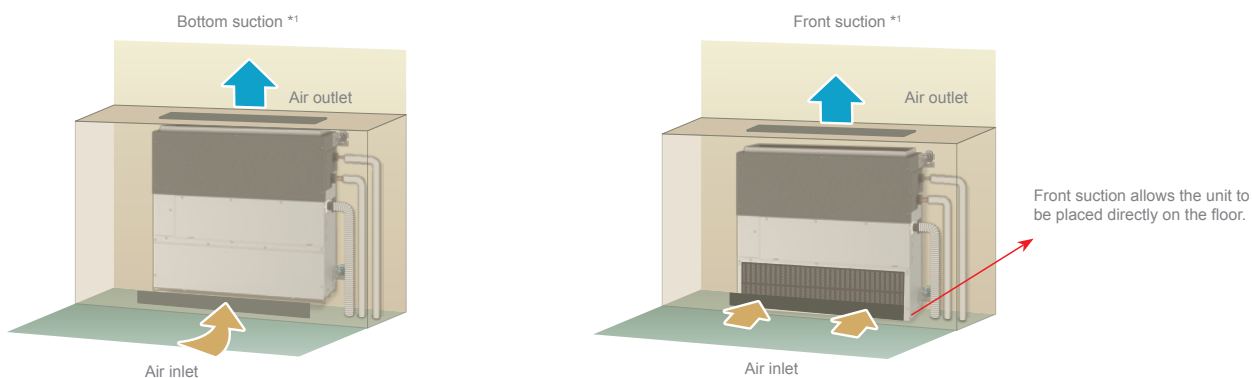


### Key Technologies VCM


#### FLEXIBLE INSTALLATION

##### Selectable air inlet pattern

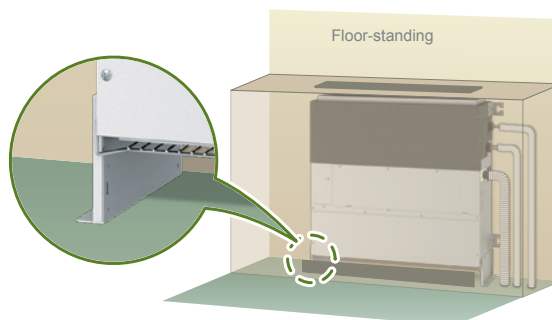
It is selectable bottom suction or front suction by changing panel, fan guard and filter.



\*1 Select a site where the flow of supply and air is not blocked. This unit cannot be placed directly on the floor with bottom suction.  
 \*2 Unit with front suction makes noise than that with bottom suction. It is recommended that the bottom suction to be selected when installing the units in rooms that should be quiet, such as bedrooms.

##### Floor-standing with legs

The unit can be placed on the floor with the supplied legs.



\*Height of unit (with legs) is 690 mm.

## Technical specifications

MODEL			PFFY-P20VCM-E	PFFY-P25VCM-E	PFFY-P32VCM-E	PFFY-P40VCM-E	PFFY-P50VCM-E	PFFY-P63VCM-E	
Power	A single-phase, 220-240V, 50Hz / a single-phase, 208-230V, 60Hz								
Capacity in cooling mode*1	kW		2.2	2.8	3.6	4.5	5.6	7.1	
	Btu/h		7,500	9,600	12,300	15,400	19,100	24,200	
Capacity in heating mode*1	kW		2.5	3.2	4.0	5.0	6.3	8.0	
	Btu/h		8,500	10,900	13,600	17,100	21,500	27,300	
Power consumption*2	Cooling	kW	0.022	0.026	0.031	0.038	0.052	0.058	
	Heating	kW	0.022	0.026	0.031	0.038	0.052	0.058	
Current*2	Cooling	A	0.25	0.30	0.34	0.38	0.50	0.49	
	Heating	A	0.25	0.30	0.34	0.38	0.50	0.49	
External finish	Galvanized steel plate								
Dimensions HxLxW*3	mm		615(690)x700x200	615(690)x700x200	615(690)x700x200	615(690)x900x200	615(690)x900x200	615(690)x1,100x200	
Net weight	kg		18	18	18.5	22.5	22.5	25.5	
Heat exchanger	Cross fin (aluminium fin and copper piping)								
Fan	Type x Quantity		Sirocco x 2	Sirocco x 2	Sirocco x 2	Sirocco x 3	Sirocco x 3	Sirocco x 4	
	Air flow	(Low-Mid-High)							
		m <sup>3</sup> /min		5.5-6.0-7.0	5.5-6.5-8.0	5.5-7.0-8.5	8.0-9.5-11.0	10.0-11.5-13.5	12.0-14.0-16.5
		l/s		83-100-117	92-108-133	92-117-142	133-158-183	167-192-225	200-233-275
cfm		177-212-247	194-230-282	194-247-300	282-335-388	353-406-477	424-494-583		
Static external pres.	Pa	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	
Motor	Type	DC motor							
	Power output	kW	0.096	0.096	0.096	0.096	0.096	0.096	
Air filter	Polypropylene honeycomb fabric (washable)								
Refrigerant pipe diameter	Gas (brazed)	mm	ø12.7	ø12.7	ø12.7	ø12.7	ø12.7	ø15.88	
	Liquid (brazed)	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52	
Field drainpipe diameter	O.D. 32 (1-1/4)								
Sound pressure*2	dB(A)		21-23-26	22-25-29	23-26-30	25-27-30	28-31-34	28-32-35	

\*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

\*2 The values are measured at the factory setting of external static pressure (10 Pa).

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

