

**MITSUBISHI  
ELECTRIC**

*Changes for the Better*

**AIR CONDITIONING SYSTEMS**

for a greener tomorrow



# CITY MULTI

YKB, YLM Series Lineup Catalogue

**CM14YLM-C**



Air conditioning is an ideal way of controlling the temperature, movement and cleanliness of air inside any building, large or small. With today's buildings being so well insulated and increasingly full of electronic equipment, the need for effective climate control is greater than ever. Not only does it cool in the summer months, but air conditioning can also heat, doing away with the need for separate heating systems altogether. More and more people today are enjoying the benefits of comfortable working and living environments made possible with air conditioning.

## Our Latest Technologies

### VRF system

VRF stands for Variable Refrigerant Flow. A VRF air conditioning system modulates the flow of refrigerant depending upon the capacity requirements of the building. In its simplest form, a VRF system comprises an air-cooled outdoor unit and a series of indoor units that regulate the air temperature inside an internal space.

### Inverter driven technology

At Mitsubishi Electric we strive to continually meet the increasing demands of our customers, being the first in the industry to offer highly advanced 'inverter driven' systems. Using inverter technology our systems produce just the right amount of output to match the exact requirement of any building. These systems work so efficiently that they don't waste valuable energy by over-heating or over-cooling, resulting in greatly reduced running costs. Alternative systems that may appear cheaper, can often cost substantially more to run, making us the most cost effective choice all round.

### Intelligent Power Module (IPM) technology

The CITY MULTI range from Mitsubishi Electric provides precise control of energy input, through utilization of its Intelligent Power Module (IPM) technology. By employing this technology, highly efficient operation is possible with compact units closely matching building requirements.

### R410A refrigerant

As scientific evidence points to man-made chemicals for the damage caused to the ozone layer, we only use chlorine-free refrigerants that are safe with zero ODP (Ozone Depletion Potential). Accordingly, our systems require less energy to run, and have a significantly lower indirect global warming potential. In short, we produce the most efficient equipment possible, while helping to protect the environment.



## Unsurpassed air conditioning from Mitsubishi Electric

Known the world over, the name Mitsubishi is a trusted household name associated with a variety of products and services. Founded in 1920, the company known today as Mitsubishi Electric, quickly rose to the forefront of the air conditioning industry - a position we still enjoy today. We pride ourselves on offering some of the most energy efficient systems available on the market.

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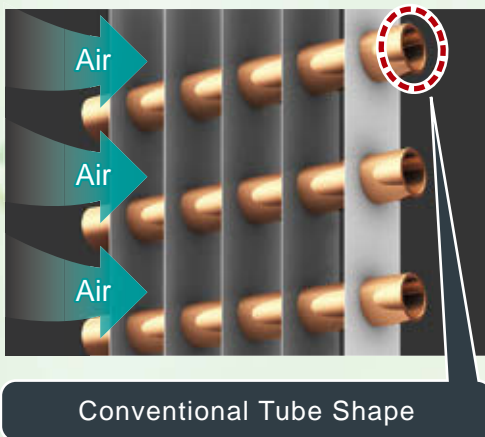
# The New YKB/YLM Series



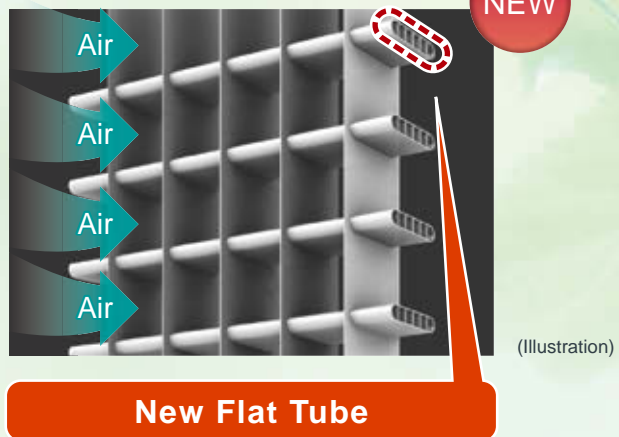
**New Technology** (PUHY/PURY-EP-Y(S)LM-A(-BS) only)

The world-first\*<sup>1</sup> flat-tube heat exchanger significantly improves heat exchange performance achieving high SEER/SCOP and high air-conditioning capacity.

## Conventional Heat Exchanger



## Flat-tube Heat Exchanger



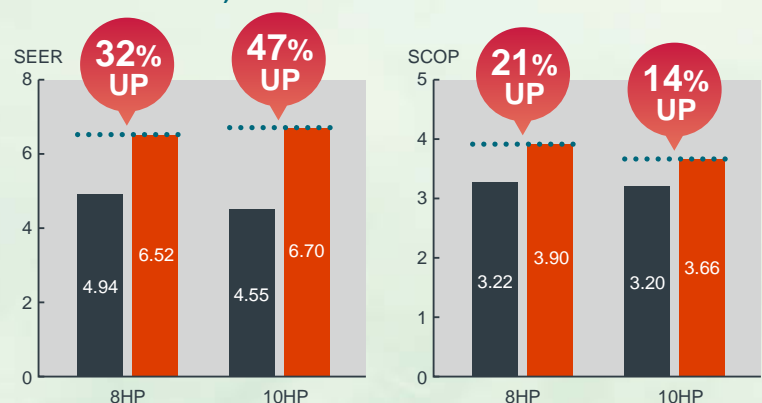
The heat exchanger of the outdoor unit has been drastically changed. Our new model uses a world-first\*<sup>1</sup> aluminum flat-tube heat exchanger as a heat exchanger of the outdoor unit. The flat tubes can reduce airflow resistance, and the larger number of tubes can be installed in the flat-tube heat exchanger compared to our conventional heat exchanger, which can increase the surface area that is in contact with the refrigerant, and the heat exchange performance can be greatly improved. Our new air conditioner can, therefore, operate at higher SEER/SCOP, and maintain the required cooling/heating capacity.

**Energy Saving** (PUHY/PURY-EP-Y(S)LM-A(-BS) only)

Lowest power consumption achieves industry-leading energy efficiency.

The new YLM series features various advanced technologies including the world-first\*<sup>1</sup> flat-tube heat exchangers, optimum distribution of refrigerant, high efficiency compressor and DC fan motors.

### Comparison of SEER and SCOP (between PUHY-EP-YJM-A and PUHY-EP-YLM-A)



\*1: As of October 2013 (according to our own survey); for VRF systems

\*2: CITY MULTI series PUHY-EP-Y(S)JM-A

\*3: Any continuous operation over 46°C may require an increased frequency of maintenance.

\*4: Except for EP300 and EP350 models

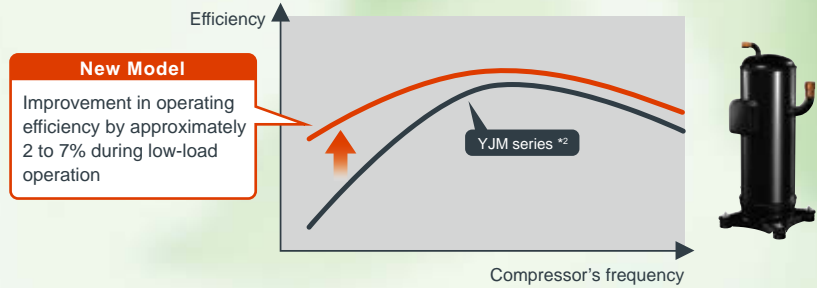


**New Technology**

**Equipped with High Efficiency Compressor**

Optimizing the capacity of the scroll compressor and modifying the winding of the compressor motor have led to the improvement in operating efficiency by approximately 2 to 7% during low-load operation that can occur often in actual use.

**Relationship between Compressor's Frequency and Efficiency**



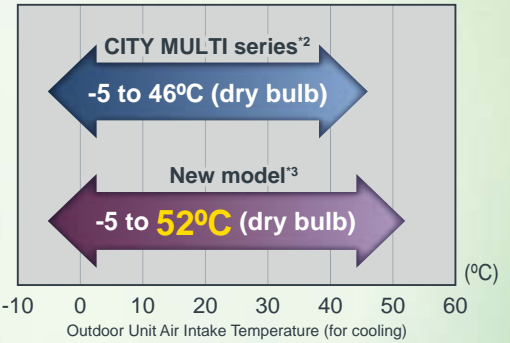
**Flexibility of Design**

(PUHY-P-Y(S)KB-A1(-BS)/PUHY-EP-Y(S)LM-A(-BS))

**The new model can work in cooling mode successfully even at high ambient temperature.**

Enhancement in performance in consideration of the actual installation environment of the outdoor unit - expands the cooling operation temperature range up to the ambient temperature of 52°C

Global warming with year by year increasing summer temperature should be a matter of concern when designing air conditioners. Besides, the outdoor unit may undergo higher intake temperature than the ambient temperature due to the higher temperature exhaust air from it. Higher temperature of intake air of the outdoor unit may reduce the cooling capacity of the air conditioner.



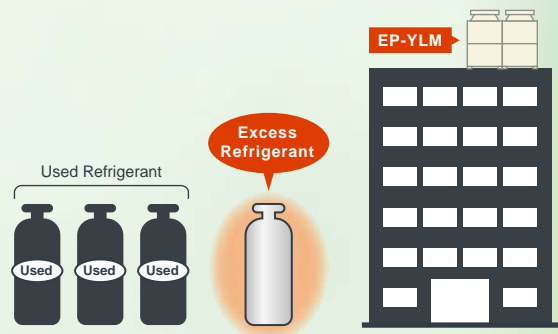
**Reliability**

(PUHY/PURY-EP-Y(S)LM-A(-BS) only)

**Less amount of refrigerant is required to be charged on site.**

With our new flat-tube heat exchanger, the amount of refrigerant to be charged on site can be controlled and reduced. For example, when the total refrigerant piping length is 150 m, the amount of refrigerant to be charged on site can be reduced by approximately 10% compared to our conventional models, achieving reduction in cost and time of the construction work.

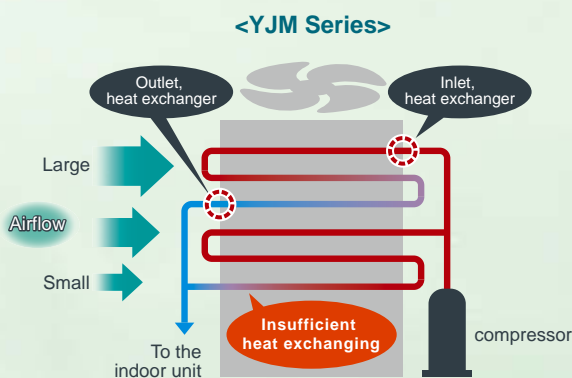
\*In the case of liquid pipe ø19.05



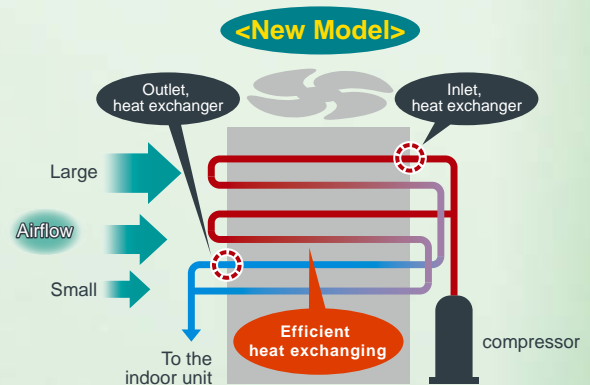
**New Technology**

(PUHY-EP-Y(S)LM-A(-BS) only)\*4

**Optimum Distribution of Refrigerant Using a BSC Circuit**



The uniform distribution of the gas-liquid two-phase refrigerant flow throughout the heat exchanger resulted in insufficient heat exchanging at the lower part of the heat exchanger where the airflow was smaller.



At the upper part of the heat exchanger where the airflow is larger, the gas-liquid two-phase refrigerant which is having a large cooling capacity is intensively distributed. This function leads to efficient use of the unit's heat exchanging capacity.



# Sophisticated Yet Simple Technology

## Reliable

Designed and manufactured to the highest standards, the CITY MULTI range offers one of the most reliable air conditioning systems available. Simple to install and easy to maintain, so this range provides ideal solutions you can trust to protect your investment.



PEFY-VMS1



PEFY-VMR



PFFY-VKM

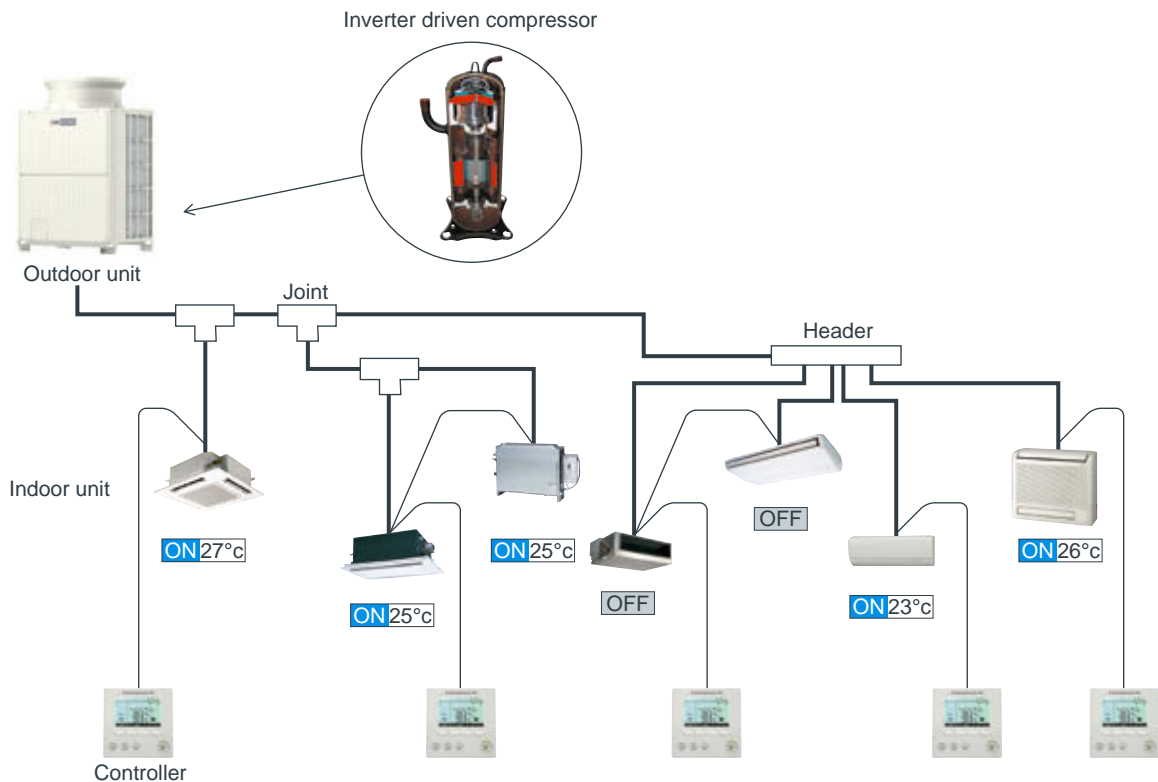
**>All the CITY MULTI outdoor units are made under stringent control.**

# VRF Systems

## Our Answer to VRF

Mitsubishi Electric sets the boundaries of VRF technology with the CITY MULTI range, which is available using R410A refrigerant with zero ODP (Ozone Depletion Potential). The range has been specifically designed for today's building requirements and addresses key market issues such as energy efficiency, adaptability and reliability. With user friendly control systems utilizing internet technology and integrated cooling and ventilation indoor units, CITY MULTI is the benchmark and market leader in VRF technology.

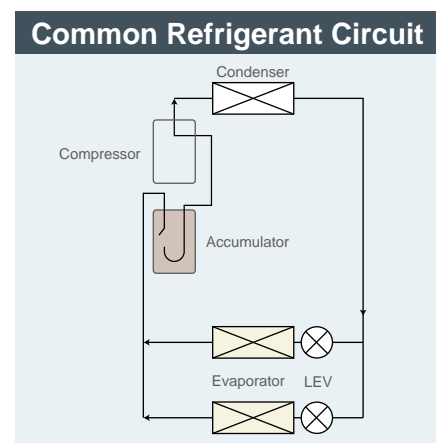
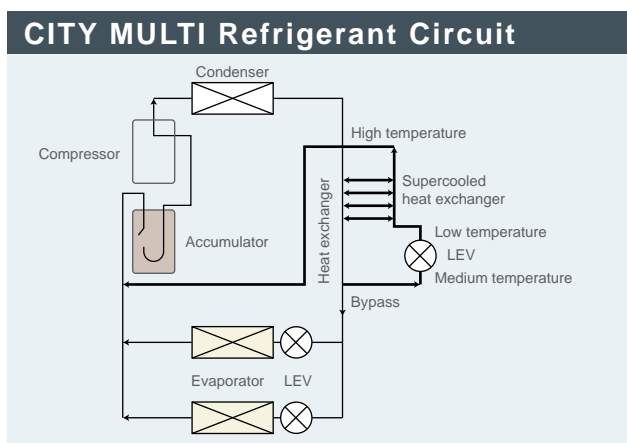
VRF is a multi and direct expansion type air conditioning system where by one outdoor unit can be connected with multiples indoor units. The amount of refrigerant can be regulated freely according to the load on the indoor unit by the inverter driven compressor in the outdoor unit. Zoning in a small office is possible with a small capacity indoor unit. Energy conservation is easily handled because individual indoor units can stop and start their operation as needed. There are various indoor units available in order to suit various interior design needs.



# Unbeatable Efficiency

## Heat Interchange Circuit

The unique Heat Interchange Circuit (HIC) enhances efficiency by providing additional sub-cooling and allows the expansion device to effectively control the refrigerant distribution, thereby increasing the operating efficiency and reducing the volume of refrigerant in each system.





# Inverter Driven Compressor Technology



Low Starting Currents

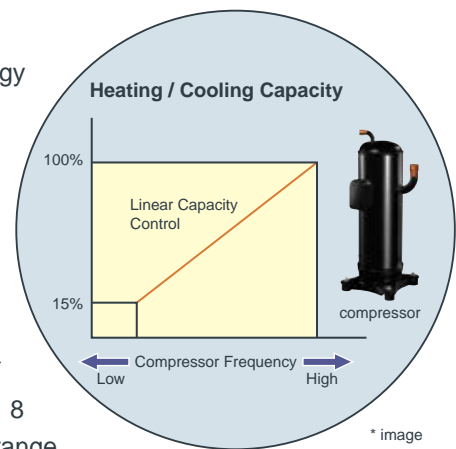
## Using inverter driven technology saves energy for several reasons:

The compressor varies its speed to match the indoor cooling or heating demand and therefore only consumes the energy that is required.

When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non inverter system.

The fixed speed system can only operate at 100%, however, partial load conditions prevail for the majority of the time. Therefore, fixed speed systems cannot match the annual efficiencies of inverter driven systems.

Using proven single inverter driven compressor technology, the CITY MULTI range is favored by the industry for low starting currents (only 8 amps for a 20HP YLM-A outdoor unit) and smooth transition across the range of compressor frequencies.



\* The values vary depending on the actual conditions such as ambient temperature.

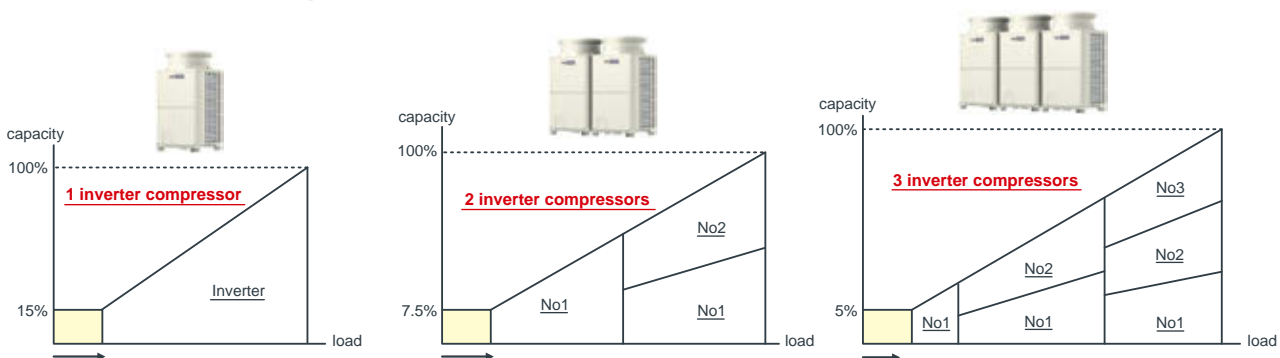
### All CITY MULTI compressors are inverter-driven type.

#### -Capable of precisely matching a building's cooling and heating demands. (High COP model)

The outdoor unit combinations comprise 1 unit for 8-20HP systems (for Y and R2 series), 2 units for 22-24HP systems (for R2, 22-36HP) and 3 units for 26-54HP systems (Y series only). Each unit carries one inverter compressor making simple and highly reliable control possible.

Not only does it allow low starting currents, the inverter-driven compressor also provides precise indoor comfort and adapts to the air conditioning load.

### Stable and Smooth Operation

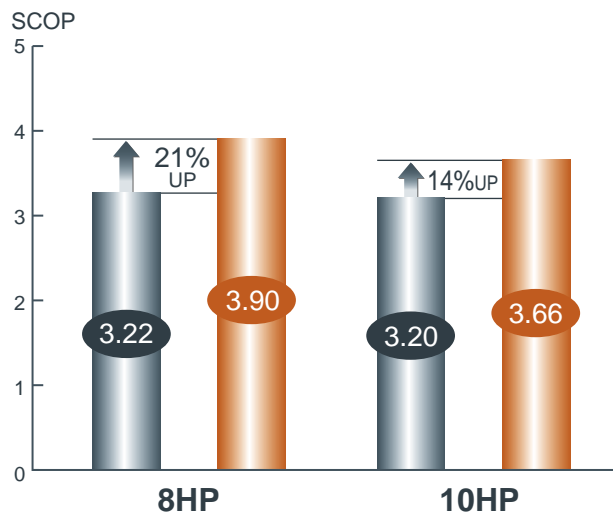
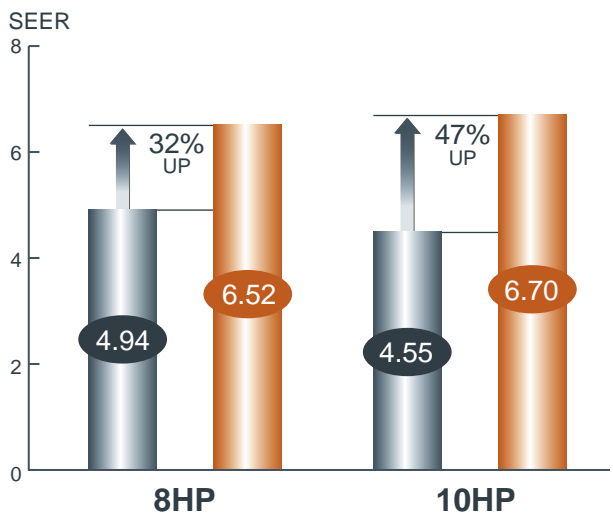




# Total Energy Conservation

## Comparison of SEER and SCOP (between PUHY-EP-YJM-A and PUHY-EP-YLM-A)

Legend:   
■ PUHY-EP-YJM-A   
■ **NEW** PUHY-EP-YLM-A





# Intelligent Power Module (IPM) Technology

The YLM-A range from Mitsubishi Electric provides precise control of energy input, through utilization of its Intelligent Power Module (IPM) technology. By employing this technology, it is possible to closely match the building requirements, achieving more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of power input required is significantly reduced, resulting in greatly improved COP's.

In addition, IPM technology ensures effective performance under partial load conditions, a condition that most systems will be in for the majority of the normal working life cycle. By taking account the efficiency at both part load and peak load conditions, R410A CITY MULTI is designed to provide unbeatable year round/seasonal efficiency.

## The Difference between YLM-A and Previous Mitsubishi Electric Models

**Technology is the key when increased efficiency is demanded.  
The CITY MULTI YLM-A range is able to deliver this in simple ways.**

A highly efficient R410A scroll compressor design results in less friction losses at the motor. A simplified refrigerant circuit (low pressure loss) including a new accumulator design also adds a few more points to the efficiency scale. Enhancements to the heat interchange circuit, an inverter driven fan motor and a heat exchanger design again add vital increases to overall system efficiencies and COPs.

## The Importance of COP

COP stands for "Coefficient of Performance". It is a measure of the useful energy a system can deliver compared to the energy it consumes. It is calculated by dividing the energy output by the energy input of a system. The higher the figure then the more efficient the system is deemed to be. Mitsubishi Electric VRF models, the world's highest energy-efficient air-conditioners, will undoubtedly reduce millions of tons of CO<sub>2</sub> emissions.





# For the Environment

Enhancing Environmental Care (measures for the RoHS Directive and the refrigerant reduction)

Every unit is in compliance with the RoHS Directive,\* which stands for the Restriction of Hazardous Substances: Lead-free soldering is used to avoid Lead Groundwater Contamination on the print board. The amount of refrigerant on the unit has also been reduced to enhance environmental care.

\* RoHS Directive: the restriction of the use of certain hazardous substances in electrical and electronic equipment that has been sold in EU since July 2006



# Efficient R410A Refrigerant



## History of Refrigerant

R22, an HCFC-based refrigerant, had been a popular choice for most chillers. However, R22 has been targeted by the Montreal Protocol to be phased out in new equipment. Additionally, governments in many countries are enforcing a ban of HCFC-based refrigerants for new installations.

Because of these restrictions, R410A refrigerants are desirable. R410A is a blend of HFCs, which do not deplete the ozone.

## Technical Aspects of Refrigerant

R410A is a more efficient refrigerant as it has a higher specific heat capacity when compared to R407C or R22. This higher energy carrying capacity allows for smaller pipe sizes, longer pipe runs and reduces the volume of refrigerant within a system. This is a major factor when concerning safety and environmental requirements in the design, manufacture, installation, operation, maintenance and disposal of refrigerating systems.

## New Design



Photo : YLM series

New Unit Casing

Reduction in fan input power

New Heat Exchanger Design

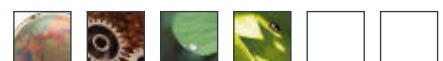
Improvement of COP

New Inverter Compressor

Improvement of COP

New Control Box Design

Improvement of reliability and easy maintenance



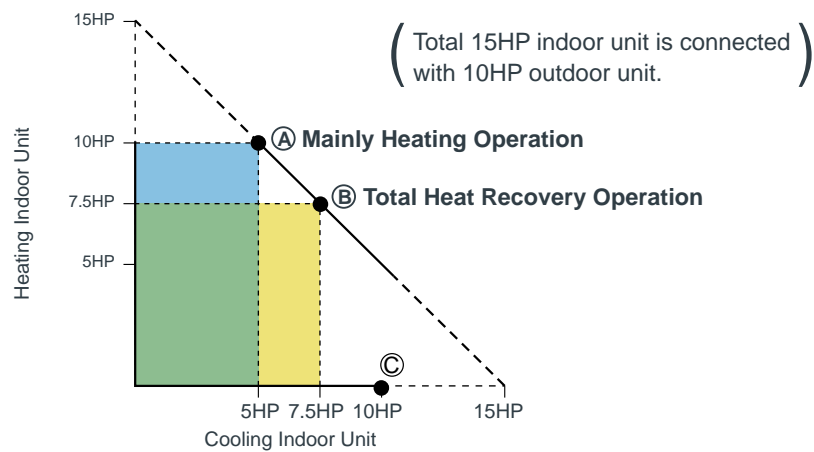


# Affordable & Effective

## air conditioning you can rely on

By the heat recovery system, the more frequently cooling and heating simultaneous operation is carried out, the higher energy-saving effect becomes.

Operation Pattern of CITY MULTI *R2* System



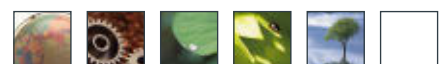
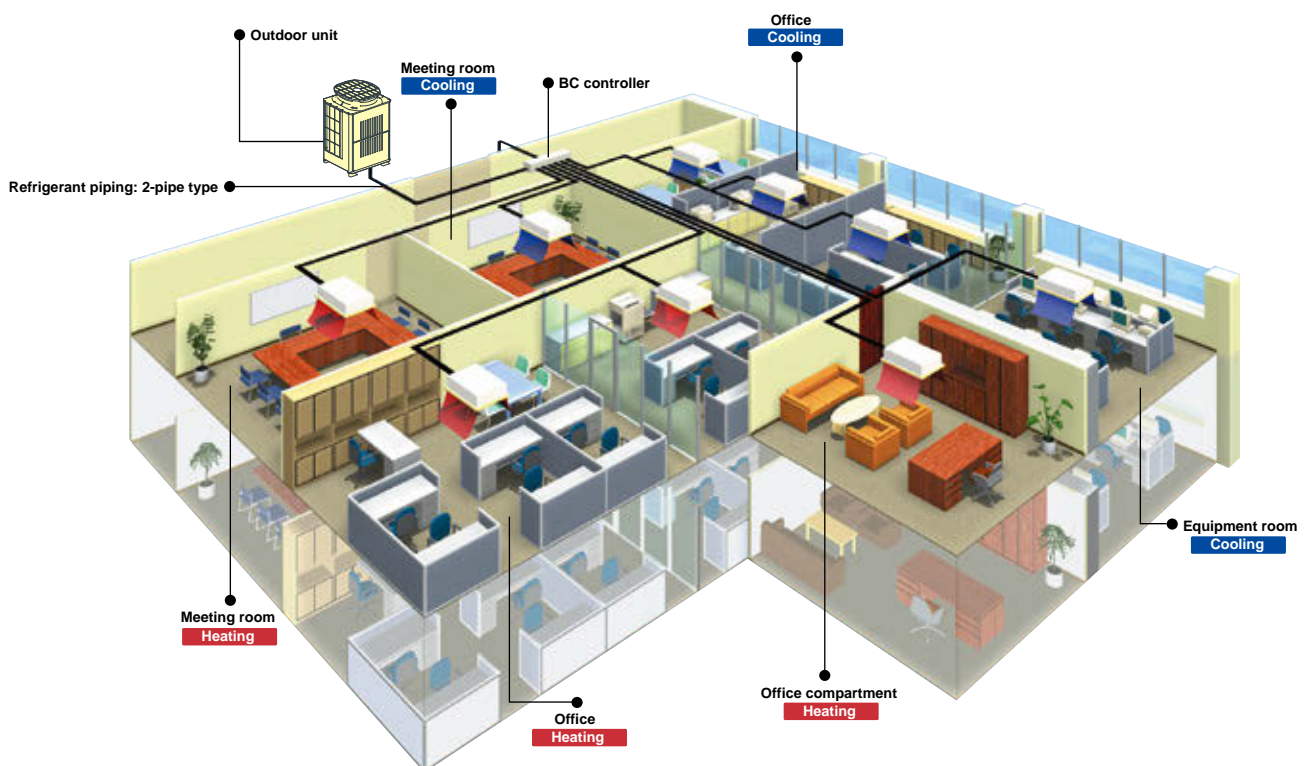


# Unique Technology

**Unique to Mitsubishi Electric**, our heat recovery technology uses just two pipes, as opposed to the market conventional three. Our R2 system, designed for effective simultaneous heating and cooling, offers substantial savings on installation and annual running costs.

## Why Heat Recovery?

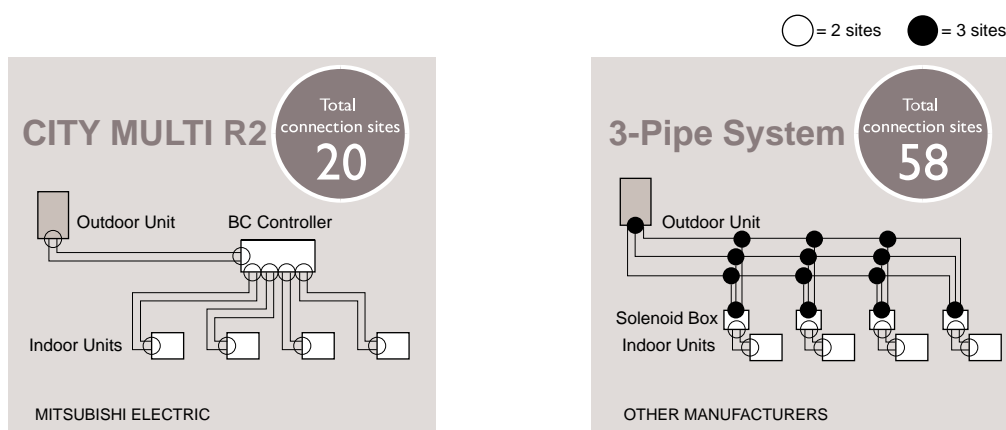
Flexibility and efficiency are key factors when selecting a heat recovery system. For example, while a heat pump system is adequate for a large open-plan office, an office that has a more partitioned structure will require the need to simultaneously heat or cool different sections of the office according to each user's individual preferences. The efficiency of this type of system comes from the ability to use the by-products of cooling and heating to transfer energy where it is required, thus acting as a balanced heat exchanger achieving up to 20% cost savings over a conventional heat pump system. The number of connection sites needed for a R2 system are also significantly lower than those needed for a three pipe version. This helps to reduce installation costs, further increasing the savings associated with CITY MULTI.





# “2-pipe” System Provides Better Efficiency and Performance

## Comparison Example of Piping Connection Sites





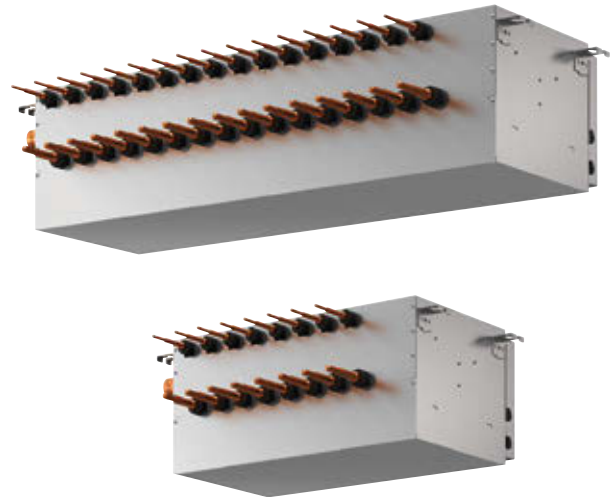
# The World's First and Only "2-pipe" System

## How does the R2 Heat Recovery System Operate on 2-Pipe's?

The secret of CITY MULTI heat recovery systems lies in the

### BC Controller

The BC Controller houses a liquid/gas separator, allowing the outdoor unit to deliver a mixture (2-phase) of hot gas for heating and liquid for cooling, all through the same pipe. Three pipe systems allocate a pipe to each of these phases. When this mixture arrives at the BC Controller, it is separated and the correct phase delivered to each indoor unit depending on the individual requirement of either heating or cooling.



1

High pressure and low pressure decides the compressor frequency, the mode of heat exchanger, and control the amounts of heat exchange.

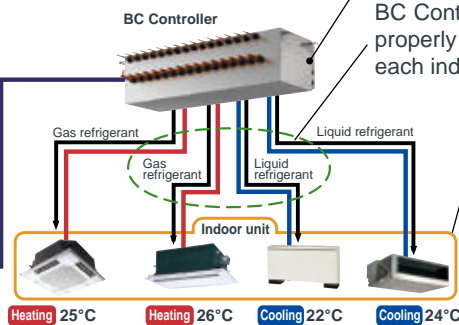


High pressure gas-liquid 2-phase refrigerant

2 R2 Refrigerant Circuit

Gas-liquid 2-phase refrigerant from outdoor unit into gas refrigerant and liquid refrigerant is divided by gas-liquid separator in BC Controller.

BC Controller divides refrigerant to each indoor unit properly in compliance with the operation mode of each indoor unit.

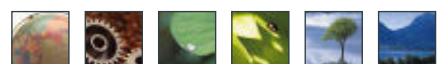


3

Adjust the refrigerant flow by temperature difference between inlet and outlet.

Meet the demand of  
--- cooling / heating flexibly.

Heating=gas refrigerant  
Cooling=liquid refrigerant











## O Outdoor Unit

- **Heat Pump Series (Y)**
- **Heat Pump Series - High COP (Y)**
- **Heat Recovery Series (R2)**
- **Heat Recovery Series - High COP (R2)**





# Wide Selection of Outdoor Units

System	Type	Model name	HP	4.5	5	6	8	10	12	14	16	
			Model	P112	P125	P140	P200	P250	P300	P350	P400	
Air Cooled	Heat Pump	<b>Y series</b> <b>NEW</b> <small>Page26 - Page36</small> <b>PUHY-P YKB-A1(-BS)</b> 	S				8	10				
		L						12	14	16		
		XL										
		S									8	8
		L										
		XL										
	Heat Recovery	<b>Y series - High COP</b> <b>NEW</b> <small>Page37 - Page47</small> <b>PUHY-EP YLM-A(-BS)</b> <b>PUHY-EP YSLM-A(-BS)</b> 	S				8	10				
		L							12	14		
		XL									16	
		S									8	8
		L										
		XL										
Heat Recovery	<b>R2 series</b> <b>NEW</b> <small>Page48 - Page53</small> <b>PURY-P YLM-A1(-BS)</b> 	S				8	10					
	L							12	14	16		
	XL											
	S									8	8	
	L											
	XL											
Heat Recovery	<b>R2 series - High COP</b> <b>NEW</b> <small>Page54 - Page58</small> <b>PURY-EP YLM-A(-BS)</b> <b>PURY-EP YSLM-A(-BS)</b> 	S				8	10					
	L							12	14			
	XL									16		
	S									8	8	
	L											
	XL											

\*1. Indicates S, L, XL modules

\*2. The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
	P450	P500	P550	P600	P650	P700	P750	P800	P850	P900	P950	P1000	P1050	P1100	P1150	P1200	P1250	P1300	P1350
	18	20																	
	8 10	10 10	10	10							10								
			12	14	12 14	14 14	14 16	14	16		12 16	12 12 16	12 14 16	14 14 16	14 14	14 16	14	16	
								18	18	18 18					18	18	18 18	18 18	18 18
			10		8 8 10	8 8	8 10	8	10										
			12	12 12		12	12	12 12	12 12	12 12 12	12 12 14	12 12 12	12 14 14	14 14 14	14	14			
	18	20										16	16	16	18	16 18	18 18	16 18 18	18 18 18
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			12	12 12	12 14	14 14	14												
	18	20					16	16 16	16 18	18 18									

# Y (Heat Pump) series



## Cooling or Heating

- Y series — [ PUHY-P YKB-A1(-BS)  
PUHY-P YSKB-A1(-BS) PUHY-EP YLM-A(-BS)  
PUHY-EP YSLM-A(-BS)

## The two-pipe zoned system designed for Heat Pump Operation

The CITY MULTI Y series (for large applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively. With a wide line-up of indoor units in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 50 (Y series) indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

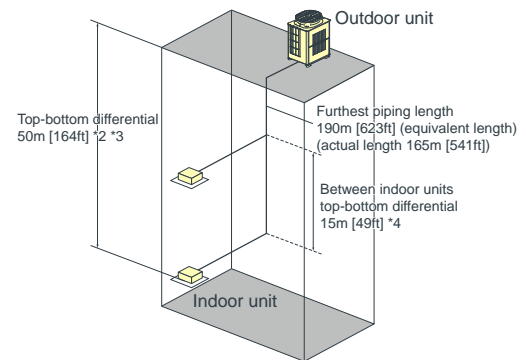
### Large Offices (Y series)



### System Pipe Lengths

[8-54HP (Y series), (High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	1,000 [3,280]
Maximum allowable length.....	165 (190equivalent) [541 (623)]
Farthest indoor from first branch.....	40 [131]*1
Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher).....	50 [164]*2
Indoor/outdoor (outdoor lower).....	40 [131]*3
Indoor/indoor.....	15 [49]*4



\*1 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.  
 \*2 90m [295ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.  
 \*3 60m [196ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.  
 \*4 30m [98ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one-size larger pipes for indoor unit liquid pipes.



Outdoor Unit



# R2 (Heat Recovery) series

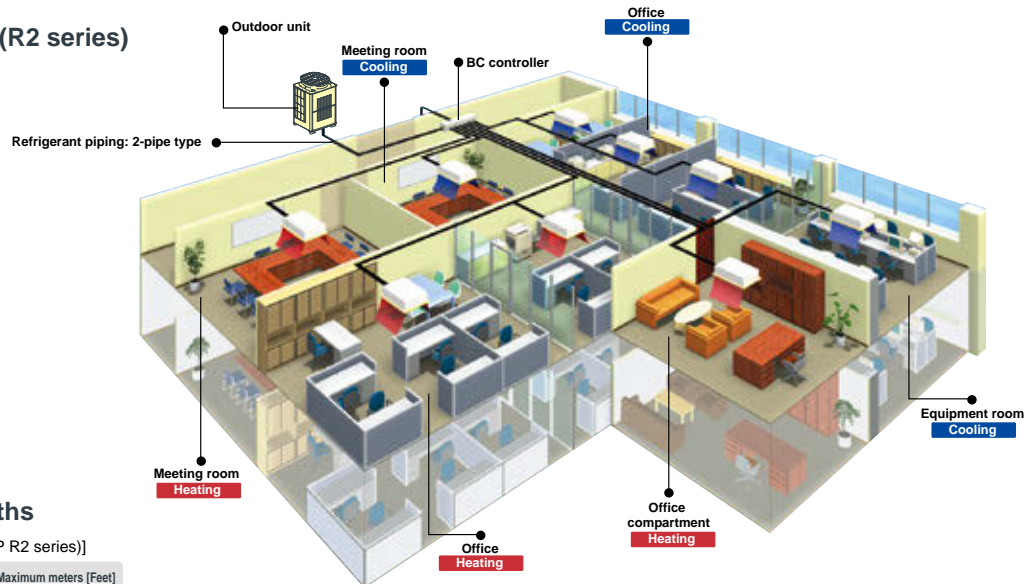
## Simultaneous Cooling and Heating

R2 series — **PURY-P YLM-A1(-BS)**      **PURY-EP YLM-A(-BS)**  
**PURY-P YSLM-A1(-BS)**      **PURY-EP YSLM-A(-BS)**

## The world's first two-pipe system that Simultaneously Cools and Heats

CITY MULTI R2 series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe. This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity

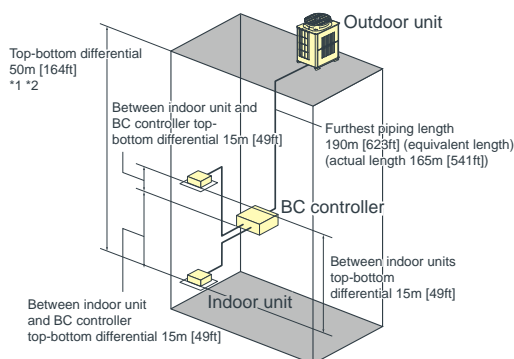
Installation image (R2 series)



### System Pipe Lengths

[8-36HP (R2 series), (High COP R2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	550 [1,804]
(EP600, 650 only)	
Total length.....	700 [2,296]
(EP700, 750, 800, 850, 900 only)	
Maximum allowable length.....	165 (190equivalent)
	[541(623)]
Maximum length between outdoor and single/main BC controller.....	110 [360]
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.	
Maximum length between single/main BC controller and indoor.....	40-60 [131-196]
<b>Vertical differentials between units</b>	<b>Maximum meters [Feet]</b>
Indoor/outdoor (outdoor higher).....	50 [164]*2
Indoor/outdoor (outdoor lower).....	40 [131]*2
Indoor/BC controller (single/main).....	15 [49]
*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.	
Indoor/indoor.....	15 [49]
Main BC Controller/Sub BC Controller.....	15 [49]



\*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

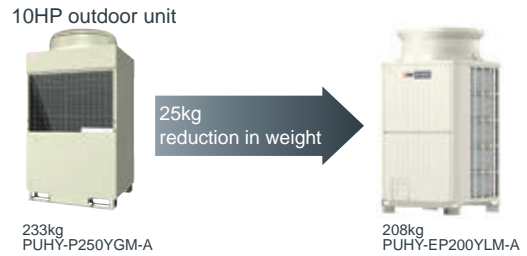
\*2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.



# Features in Y (Heat Pump) series & R2 (Heat Recovery) series

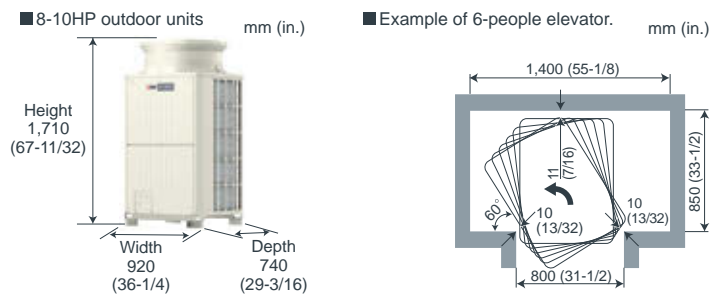
## Compact Design Industry Leading Weight Saving

The manageability of the outdoor unit has been improved due to a drastic reduction in its weight, leading to easy transportation, installation, and reduction in withstand load.



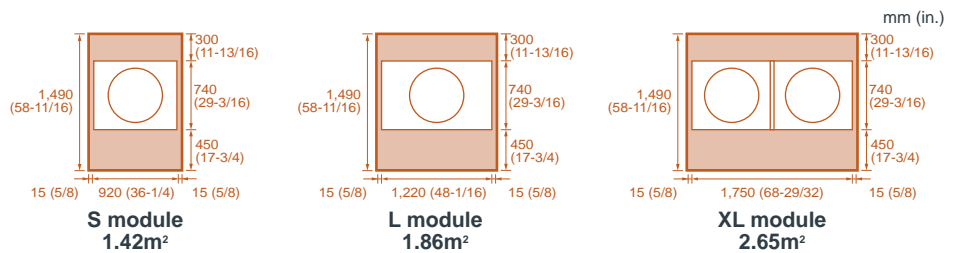
## Industry Leading Space Saving

The downsized outdoor unit can be transported through a 800 mm wide door.

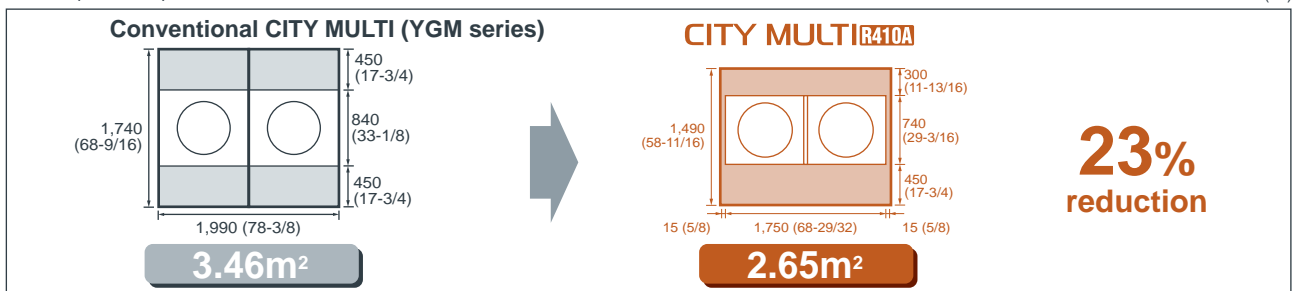


## Effective Use of Space

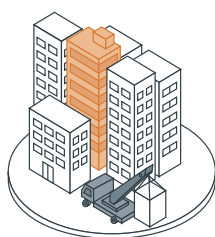
The new models have a smaller foot print and service space requirement than previous models.



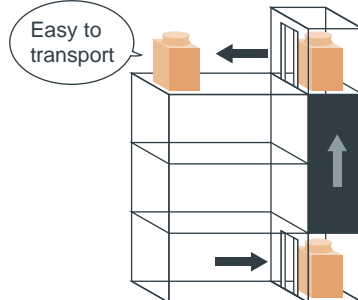
## 18HP (Yseries)



The unit can easily be transported even into slender buildings.



CITY MULTI makes it easy.



The narrow space between buildings makes it difficult to use a crane.

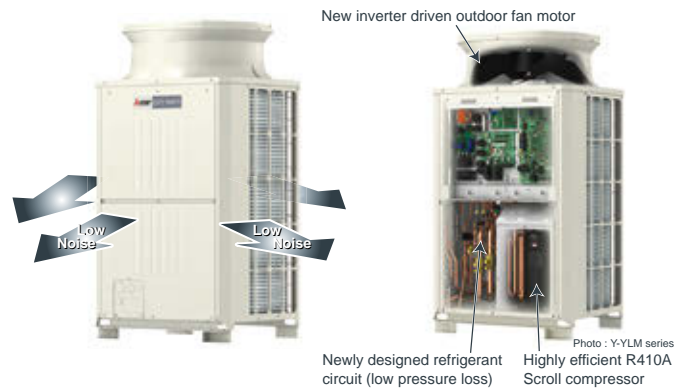


Outdoor Unit

## Low Noise Levels New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan motors some ten years ago, achieving substantially lower noise levels over multiple designs.

Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include low noise mode. This function works by lowering the fan speed and compressor frequency proportionally with reduction in demand.



The compressor compartment is sealed by metal panels to attain low noise levels in all directions.

## R410A Pipe Sizing

As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and less riser space is required within the building.

Conventional		CITY MULTI R410A	
Gas piping	Liquid piping	Gas piping	Liquid piping
ø28.58 (ø1-1/8)	ø12.7 (ø1/2)	ø22.2 (ø7/8)	ø9.52 (ø3/8)

mm (in.)

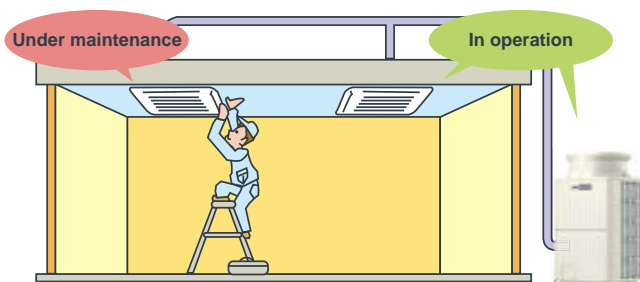
Based on 10HP model

## Easy Maintenance

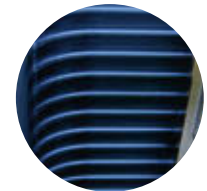
Even when one of the indoor units in the system is under maintenance, the other indoor unit can still operate.

\* Not applicable to all situations.

\* Be sure to turn off the power to the indoor unit when repairing or servicing the unit.



## Blue Fin Treatment (PUHY-P-YKB/ PURY-P-YLM only)



The anti-corrosion Blue Fin treatment of the heat exchanger is especially effective in urban environments where the traffic pollutions can damage the aluminum fins reducing the capacity and life expectancy of the unit. All CITY MULTI R410A outdoor units have been treated with Blue Fin.

\*Standard: Anti-corrosion Blue Fin treatment & copper tube.  
BS type (optional): salt-resistant cross fin & copper tube.

## Salt resistant Cross Fin (PUHY/PURY-EP-Y(S)LM-A only)

For PUHY/PURY-EP-Y(S)LM-A with aluminum flat-tube heat exchanger, salt resistant cross fin is provided as standard.

## 60Pa High Static Pressure as standard

Both Y and R2 series correspond to high static pressure of 60Pa, ideal and flexible for any type of application.

## System Check

Ensuring simple and easy maintenance, system tests are available to check wiring, sensors and the refrigerant amount.





# OUTDOOR UNIT

## Y Series

### PUHY-P YKB-A1(-BS)



## ► Specifications

Model		PUHY-P200YKB-A1 (-BS)	PUHY-P250YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5	40.0	
	*1 BTU / h	76,400	95,500	114,300	136,500	
	Power input kW	5.19	6.88	8.56	11.69	
	Current input A	8.7-8.3-8.0	11.6-11.0-10.6	14.4-13.7-13.2	19.7-18.7-18.0	
EER	kW / kW	4.31	4.06	3.91	3.42	
	D.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	
Temp. range of cooling	Indoor	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	-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 kW	25.0	31.5	37.5	45.0	
	*2 BTU / h	85,300	107,500	128,000	153,500	
	Power input kW	5.81	7.34	9.07	11.13	
	Current input A	9.8-9.3-8.9	12.3-11.7-11.3	15.3-14.5-14.0	18.7-17.8-17.2	
COP	kW / kW	4.30	4.29	4.13	4.04	
	D.B.	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	
Temp. range of heating	Indoor	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	-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)	
Indoor unit connectable	Total capacity	50-130% of outdoor unit capacity				
	Model / Quantity	P15-P250/1-17	P15-P250/1-21	P15-P250/1-26	P15-P250/1-30	
Sound pressure level (measured in anechoic room)	dB <A>	57	59	61	61	
Sound power level (measured in anechoic room)	dB <A>	78	79	83	83	
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)	12.7 (1/2) Brazed	
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
FAN	Type x Quantity	Propeller fan x 1				
	Air flow rate	m <sup>3</sup> /min	175	175	210	210
		L/s	2,917	2,917	3,500	3,500
		cfm	6,179	6,179	7,415	7,415
		Driving mechanism	Inverter-control, Direct-driven by motor			
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)				
Compressor	Type x Quantity	Inverter scroll hermetic compressor				
	Starting method	Inverter				
	Motor output kW	5.5	6.9	8.1	10.5	
	Case heater kW	-				
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection				
	Compressor	-				
	Fan motor	-				
Refrigerant	Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	
Net weight	kg (lbs)	190 (419)	199 (439)	251 (554)	251 (554)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & aluminium tube		
Optional parts		Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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

# OUTDOOR UNIT

## Y Series

### PUHY-P YKB-A1(-BS)



## ► Specifications

Model	PUHY-P400YKB-A1 (-BS)		PUHY-P450YKB-A1 (-BS)		PUHY-P500YKB-A1 (-BS)	
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	45.0		50.0	
	*1	BTU / h	153,500		170,600	
		Power input kW	13.55		14.79	
		Current input A	22.8-21.7-20.9		24.9-23.7-22.8	
		EER kW / kW	3.32		3.38	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Nominal)	*2	kW	50.0		56.0	
	*2	BTU / h	170,600		191,100	
		Power input kW	12.50		15.55	
		Current input A	21.1-20.0-19.3		26.2-24.9-24.0	
		COP kW / kW	4.00		3.60	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P15~P250/1~34		P15~P250/1~39		
Sound pressure level (measured in anechoic room)		dB <A>	63		66	
Sound power level (measured in anechoic room)		dB <A>	83		85	
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Braze		15.88 (5/8) Braze	
	Gas pipe	mm (in.)	28.58 (1-1/8) Braze		28.58 (1-1/8) Braze	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	210		360	
		L/s	3,500		6,000	
		cfm	7,415		12,712	
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1		0.92 x 2	
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		
	Motor output	kW	10.8		12.4	
	Case heater	kW	-		0.045	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-		-		
	Fan motor	-		-		
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	251 (554)		304 (671)		
Heat exchanger	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Optional parts	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model			PUHY-P400YSKB-A1 (-BS)		PUHY-P450YSKB-A1 (-BS)		PUHY-P500YSKB-A1 (-BS)	
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	45.0		50.0		56.0	
	*1	BTU / h	153,500		170,600		191,100	
		Power input kW	11.00		12.59		14.54	
		Current input A	18.5-17.6-17.0		21.2-20.1-19.4		24.5-23.3-22.4	
		EER kW / kW	4.09		3.97		3.85	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)	
Heating capacity (Nominal)	*2	kW	50.0		56.0		63.0	
	*2	BTU / h	170,600		191,100		215,000	
		Power input kW	12.24		13.72		15.46	
		Current input A	20.6-19.6-18.9		23.1-22.0-21.2		26.0-24.7-23.8	
		COP kW / kW	4.08		4.08		4.07	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P15~P250/1~34		P15~P250/1~39		P15~P250/1~43	
Sound pressure level (measured in anechoic room)		dB <A>	60		61.5		62	
Sound power level (measured in anechoic room)		dB <A>	81		82		82	
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
<b>Set Model</b>								
Model			PUHY-P200YKB-A1 (-BS)		PUHY-P200YKB-A1 (-BS)		PUHY-P250YKB-A1 (-BS)	
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	175		175		175	
		L/s	2,917		2,917		2,917	
		cfm	6,179		6,179		6,179	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
Motor output	kW		0.92 x 1		0.92 x 1		0.92 x 1	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter		Inverter	
	Motor output		kW		5.5		6.9	
	Case heater		kW		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740	
	in.		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		-		-		-	
	Fan motor		-		-		-	
Refrigerant			R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 8.0 kg (18 lbs)	
Net weight			kg (lbs)		190 (419)		199 (439)	
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		9.52 (3/8) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P550YSKB-A1 (-BS)	PUHY-P600YSKB-A1 (-BS)	PUHY-P650YSKB-A1 (-BS)				
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling capacity (Nominal)	*1 kW	63.0	69.0	73.0				
	*1 BTU / h	215,000	235,400	249,100				
	Power input kW	16.66	19.43	20.97				
	Current input A	28.1-26.7-25.7	32.8-31.1-30.0	35.4-33.6-32.4				
	EER kW / kW	3.78	3.55	3.48				
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)				
	Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)				
Heating capacity (Nominal)	*2 kW	69.0	76.5	81.5				
	*2 BTU / h	235,400	261,000	278,100				
	Power input kW	17.29	19.36	21.00				
	Current input A	29.1-27.7-26.7	32.6-31.0-29.9	35.4-33.6-32.4				
	COP kW / kW	3.99	3.95	3.88				
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)				
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity						
	Model / Quantity	P15~P250/2~47 P15~P250/2~50 P15~P250/2~50						
Sound pressure level (measured in anechoic room)	dB <A>	63.5	63.5	64				
Sound power level (measured in anechoic room)	dB <A>	84.5	84.5	86				
Refrigerant piping diameter	Liquid pipe mm (in.)	15.88 (5/8) Brazed						
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed						
<b>Set Model</b>								
Model		PUHY-P250YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P250YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	175	210	175	210	210	210
		L/s	2,917	3,500	2,917	3,500	3,500	3,500
		cfm	6,179	7,415	6,179	7,415	7,415	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor
*3 External static press.	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
	External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	6.9	8.1	6.9	10.5	8.1	10.5	
	Case heater kW	-	-	-	-	-	-	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-	-	-	-	-	-	
	Fan motor	-	-	-	-	-	-	
Refrigerant	Type x original charge	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	
Net weight	kg (lbs)	199 (439)	251 (554)	199 (439)	251 (554)	251 (554)	251 (554)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P700YSKB-A1 (-BS)	PUHY-P750YSKB-A1 (-BS)	PUHY-P800YSKB-A1 (-BS)				
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling capacity (Nominal)	*1 kW	80.0	85.0	90.0				
	*1 BTU / h	273,000	290,000	307,100				
	Power input kW	24.69	26.56	27.86				
	Current input A	41.6-39.5-38.1	44.8-42.5-41.0	47.0-44.6-43.0				
	EER kW / kW	3.24	3.20	3.23				
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)				
	Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)				
Heating capacity (Nominal)	*2 kW	88.0	95.0	100.0				
	*2 BTU / h	300,300	324,100	341,200				
	Power input kW	22.97	24.93	27.62				
	Current input A	38.7-36.8-35.5	42.0-39.9-38.5	46.6-44.2-42.6				
	COP kW / kW	3.83	3.81	3.62				
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)				
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity						
	Model / Quantity	P15~P250/2~50						
Sound pressure level (measured in anechoic room)	dB <A>	64	65.5	67.5				
Sound power level (measured in anechoic room)	dB <A>	86	86	87.5				
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed						
	Gas pipe mm (in.)	34.93 (1-3/8) Brazed						
<b>Set Model</b>								
Model		PUHY-P350YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	210	210	210	210	210	360
		L/s	3,500	3,500	3,500	3,500	3,500	6,000
		cfm	7,415	7,415	7,415	7,415	7,415	12,712
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
*3 External static press.	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2	
	External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter		
	Motor output kW	10.5	10.5	10.5	10.8	10.5	12.4	
	Case heater kW	-	-	-	-	-	0.045	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection		
	Compressor	-	-	-	-	-		
	Fan motor	-	-	-	-	-		
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)	304 (671)	
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	
	Gas pipe mm (in.)	28.58 (1-1/8) 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	28.58 (1-1/8) Brazed	
Optional parts	Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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

# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P850YSKB-A1 (-BS)	PUHY-P900YSKB-A1 (-BS)			
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1 kW	96.0	101.0			
	*1 BTU / h	327,600	344,600			
	Power input kW	30.18	31.46			
	Current input A	50.9-48.4-46.6	53.1-50.4-48.6			
	EER kW / kW	3.18	3.21			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)			
	Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2 kW	108.0	113.0			
	*2 BTU / h	368,500	385,600			
	Power input kW	29.90	33.00			
	Current input A	50.4-47.9-46.2	55.7-52.9-51.0			
	COP kW / kW	3.61	3.42			
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)			
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity			
	Model / Quantity	P15~P250/2~50	P15~P250/2~50			
Sound pressure level (measured in anechoic room)	dB <A>	68	69			
Sound power level (measured in anechoic room)	dB <A>	87.5	88			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed			
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed			
<b>Set Model</b>						
Model		PUHY-P400YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	210	360	360	360
		L/s	3,500	6,000	6,000	6,000
		cfm	7,415	12,712	12,712	12,712
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	10.8	12.4	12.4	12.4	
	Case heater kW	-	0.045	0.045	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-	-	-	-	
	Fan motor	-	-	-	-	
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	251 (554)	304 (671)	304 (671)	304 (671)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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





# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P950YSKB-A1 (-BS)		PUHY-P1000YSKB-A1 (-BS)					
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling capacity (Nominal)	*1 kW	108.0		113.0					
	*1 BTU / h	368,500		385,600					
	Power input kW	30.25		32.10					
	Current input A	51.0-48.5-46.7		54.1-51.4-49.6					
	EER kW / kW	3.57		3.52					
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)					
	Outdoor D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)					
Heating capacity (Nominal)	*2 kW	119.5		127.0					
	*2 BTU / h	407,700		433,300					
	Power input kW	30.40		32.70					
	Current input A	51.3-48.7-46.9		55.2-52.4-50.5					
	COP kW / kW	3.93		3.88					
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)					
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)					
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity					
	Model / Quantity	P15~P250/2~50		P15~P250/2~50					
Sound pressure level (measured in anechoic room)	dB <A>	66.5		66.5					
Sound power level (measured in anechoic room)	dB <A>	87		88					
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed					
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed					
<b>Set Model</b>									
Model		PUHY-P250YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P300YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 1			
	Air flow rate	m <sup>3</sup> /min	175	210	210	210	210	210	
		L/s	2,917	3,500	3,500	3,500	3,500	3,500	
		cfm	6,179	7,415	7,415	7,415	7,415	7,415	
	Driving mechanism	Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor			
Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1		
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor				Inverter scroll hermetic compressor			
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter		
	Motor output kW	6.9	8.1	10.8	8.1	8.1	10.8		
	Case heater kW	—	—	—	—	—	—		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740		
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection			
	Compressor	—	—	—	—	—	—		
	Fan motor	—	—	—	—	—	—		
Refrigerant	Type x original charge	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)		
Net weight	kg (lbs)	199 (439)	251 (554)	251 (554)	251 (554)	251 (554)	251 (554)		
Heat exchanger		Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube				
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed		
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed		
Optional parts		Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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

# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P1050YSKB-A1 (-BS)			PUHY-P1100YSKB-A1 (-BS)			
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1 kW	118.0			124.0			
	*1 BTU / h	402,600			423,100			
	Power input kW	35.01			38.62			
	Current input A	59.1-56.1-54.1			65.1-61.9-59.6			
	EER kW / kW	3.37			3.21			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)			
	Outdoor D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2 kW	132.0			140.0			
	*2 BTU / h	450,400			477,700			
	Power input kW	34.25			36.60			
	Current input A	57.8-54.9-52.9			61.7-58.6-56.5			
	COP kW / kW	3.85			3.82			
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)			
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity			
	Model / Quantity	P15~P250/2~50			P15~P250/2~50			
Sound pressure level (measured in anechoic room)	dB <A>	66.5			66.5			
Sound power level (measured in anechoic room)	dB <A>	88			88			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed			
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed			
<b>Set Model</b>								
Model		PUHY-P300YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	210		210	210	210	210
		L/s	3,500		3,500	3,500	3,500	3,500
		cfm	7,415		7,415	7,415	7,415	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor		
Motor output kW	0.92 x 1		0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor				Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter	Inverter	Inverter	Inverter	
	Motor output kW	8.1		10.5	10.8	10.5	10.8	
	Case heater kW	-		-	-	-	-	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection		
	Compressor	-				-		
	Fan motor	-				-		
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)		R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	
Net weight	kg (lbs)	251 (554)		251 (554)	251 (554)	251 (554)	251 (554)	
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	
	Gas pipe mm (in.)	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	
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model			PUHY-P1150YSKB-A1 (-BS)			PUHY-P1200YSKB-A1 (-BS)								
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz								
Cooling capacity (Nominal)	*1	kW	130.0			136.0								
	*1	BTU / h	443,600			464,000								
	Power input	kW	40.24			44.10								
	Current input	A	67.9-64.5-62.2			74.4-70.7-68.1								
	EER	kW / kW	3.23			3.08								
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)								
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)								
Heating capacity (Nominal)	*2	kW	145.0			150.0								
	*2	BTU / h	494,700			511,800								
	Power input	kW	39.29			40.76								
	Current input	A	66.3-63.0-60.7			68.8-65.3-63.0								
	COP	kW / kW	3.69			3.68								
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)								
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)								
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity									
	Model / Quantity	P15~P250/2~50			P15~P250/2~50									
Sound pressure level (measured in anechoic room)		dB <A>	68.5			69								
Sound power level (measured in anechoic room)		dB <A>	88.5			88.5								
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed								
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed								
<b>Set Model</b>														
Model			PUHY-P350YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P350YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)						
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	210		210		360		210		210		360	
		L/s	3,500		3,500		6,000		3,500		3,500		6,000	
		cfm	7,415		7,415		12,712		7,415		7,415		12,712	
	Driving mechanism		Inverter-control, Direct-driven by motor						Inverter-control, Direct-driven by motor					
*3	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 2		0.92 x 1		0.92 x 1		0.92 x 2	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor						Inverter scroll hermetic compressor					
	Starting method		Inverter		Inverter		Inverter		Inverter		Inverter		Inverter	
	Motor output		10.5		10.5		12.4		10.5		10.8		12.4	
	Case heater		-		-		0.045		-		-		0.045	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740	
	in.		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)						High pressure sensor, High pressure switch at 4.15 MPa (601 psi)					
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection						Over-heat protection, Over-current protection					
	Compressor		-						-					
	Fan motor		-						-					
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)		R410A x 11.5 kg (26 lbs)		R410A x 11.8 kg (27 lbs)		R410A x 11.5 kg (26 lbs)		R410A x 11.5 kg (26 lbs)		R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)		251 (554)		251 (554)		304 (671)		251 (554)		251 (554)		304 (671)	
Heat exchanger			Salt-resistant cross fin & copper tube						Salt-resistant cross fin & copper tube					
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) 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		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G						Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G					

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P1250YSKB-A1 (-BS)			PUHY-P1300YSKB-A1 (-BS)			
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1 kW	140.0			146.0			
	*1 BTU / h	477,700			498,200			
	Power input kW	43.80			47.80			
	Current input A	73.9-70.2-67.7			80.6-76.6-73.8			
EER		3.19			3.05			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)			
	Outdoor D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2 kW	156.5			163.0			
	*2 BTU / h	534,000			556,200			
	Power input kW	44.08			46.04			
	Current input A	74.4-70.6-68.1			77.7-73.8-71.1			
COP		3.55			3.54			
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)			
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity			
	Model / Quantity	P15~P250/2-50			P15~P250/2-50			
Sound pressure level (measured in anechoic room)	dB <A>	70			70			
Sound power level (measured in anechoic room)	dB <A>	89.5			89.5			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed			
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed			
<b>Set Model</b>								
Model		PUHY-P350YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P400YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	210		360	360	210	360
		L/s	3,500		6,000	6,000	3,500	6,000
		cfm	7,415		12,712	12,712	7,415	12,712
	Driving mechanism	Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor		
Motor output kW	0.92 x 1		0.92 x 2	0.92 x 2	0.92 x 1	0.92 x 2	0.92 x 2	
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor				Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter	Inverter	Inverter	Inverter	
	Motor output kW	10.5		12.4	12.4	10.8	12.4	
	Case heater kW	-		0.045	0.045	-	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection		
	Compressor	-				-		
	Fan motor	-				-		
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	251 (554)	304 (671)	304 (671)	251 (554)	304 (671)	304 (671)	
Heat exchanger		Salt-resistant cross fin & copper tube				Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	
	Gas pipe mm (in.)	28.58 (1-1/8) 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	28.58 (1-1/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## Y Series

### PUHY-P YSKB-A1(-BS)



## ► Specifications

Model		PUHY-P1350YSKB-A1 (-BS)			
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1 kW	150.0			
	*1 BTU / h	511,800			
	Power input kW	47.40			
	Current input A	80.0-76.0-73.2			
EER	kW / kW		3.16		
Temp. range of cooling	Indoor	W.B. 15.0~24.0°C (59~75°F)			
	Outdoor	D.B. -5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2 kW	168.0			
	*2 BTU / h	573,200			
	Power input kW	49.12			
	Current input A	82.9-78.7-75.9			
COP	kW / kW		3.42		
Temp. range of heating	Indoor	D.B. 15.0~27.0°C (59~81°F)			
	Outdoor	W.B. -20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			
	Model / Quantity	P15~P250/2~50			
Sound pressure level (measured in anechoic room)	dB <A>	71			
Sound power level (measured in anechoic room)	dB <A>	90			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			
<b>Set Model</b>					
Model		PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	PUHY-P450YKB-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 2			
	Air flow rate	m <sup>3</sup> /min	360		
		L/s	6,000		
		cfm	12,712		
	Driving mechanism	Inverter-control, Direct-driven by motor			
	Motor output	kW 0.92 x 2			
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)				
Compressor	Type x Quantity	Inverter scroll hermetic compressor			
	Starting method	Inverter			
	Motor output	kW 12.4			
	Case heater	kW 0.045			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,750 x 740			
	in.	67-3/8 (65 without legs) x 68-15/16 x 29-3/16			
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection			
	Compressor	-			
	Fan motor	-			
Refrigerant	Type x original charge	R410A x 11.8 kg (27 lbs)			
Net weight	kg (lbs)	304 (671)			
Heat exchanger	Salt-resistant cross fin & copper tube				
Pipe between unit and distributor	Liquid pipe mm (in.)	15.88 (5/8) Brazed			
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed			
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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

# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YLM-A(-BS)



## ► Specifications

Model	PUHY-EP200YLM-A (-BS)		PUHY-EP250YLM-A (-BS)		PUHY-EP300YLM-A (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW	22.4	28.0		33.5		
	*1 BTU / h	76,400	95,500		114,300		
	Power input kW	5.19	6.89		8.56		
	Current input A	8.7-8.3-8.0	11.6-11.0-10.6		14.4-13.7-13.2		
	EER kW / kW	4.31	4.06		3.91		
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)		
Heating capacity (Nominal)	*2 kW	25.0	31.5		37.5		
	*2 BTU / h	85,300	107,500		128,000		
	Power input kW	5.73	7.68		9.16		
	Current input A	9.6-9.1-8.8	12.9-12.3-11.8		15.4-14.6-14.1		
	COP kW / kW	4.36	4.10		4.09		
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P15~P250/1~17	P15~P250/1~21		P15~P250/1~26		
Sound pressure level (measured in anechoic room)	dB <A>	57	60		61		
Sound power level (measured in anechoic room)	dB <A>	79.5	80		82		
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 90 m)		9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)		
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	175	175		200	
		L/s	2,917	2,917		3,333	
		cfm	6,179	6,179		7,062	
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1	0.92 x 1		0.92 x 1		
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter		Inverter		
	Motor output kW	5.6	6.9		8.1		
	Case heater kW	-	-		-		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 1,220 x 740		
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-	-		-		
	Fan motor	-	-		-		
Refrigerant	Type x original charge	R410A x 7.5 kg (17 lbs)	R410A x 7.5 kg (17 lbs)		R410A x 10.3 kg (23 lbs)		
Net weight	kg (lbs)	208 (459)	208 (459)		252 (556)		
Heat exchanger		Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
Optional parts		Joint: CMY-Y102SS/LS-G2	Joint: CMY-Y102SS/LS-G2		Joint: CMY-Y102SS/LS-G2		
		Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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





# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YLM-A(-BS)



### ► Specifications

Model		PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP500YLM-A (-BS)	
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1 kW	40.0	45.0	50.0	56.0	
	*1 BTU / h	136,500	153,500	170,600	191,100	
	Power input kW	11.69	12.26	14.79	18.72	
	Current input A	19.7-18.7-18.0	20.6-19.6-18.9	24.9-23.7-22.8	31.6-30.0-28.9	
	EER kW / kW	3.42	3.67	3.38	2.99	
Temp. range of cooling	Indoor W.B.	15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)		
	Outdoor D.B.	-5.0-52.0°C (23-126°F)		-5.0-52.0°C (23-126°F)		
Heating capacity (Nominal)	*2 kW	45.0	50.0	56.0	63.0	
	*2 BTU / h	153,500	170,600	191,100	215,000	
	Power input kW	12.53	13.15	16.09	19.68	
	Current input A	21.1-20.0-19.3	22.1-21.0-20.3	27.1-25.8-24.8	33.2-31.5-30.4	
	COP kW / kW	3.59	3.80	3.48	3.20	
Temp. range of heating	Indoor D.B.	15.0-27.0°C (59-81°F)		15.0-27.0°C (59-81°F)		
	Outdoor W.B.	-20.0-15.5°C (-4-60°F)		-20.0-15.5°C (-4-60°F)		
Indoor unit connectable	Total capacity	50-130% of outdoor unit capacity		50-130% of outdoor unit capacity		
	Model / Quantity	P15-P250/1-30		P15-P250/1-39		
Sound pressure level (measured in anechoic room)	dB <A>	61	62.5	63	63.5	
Sound power level (measured in anechoic room)	dB <A>	82.5	82.5	83	83.5	
Refrigerant piping diameter	Liquid pipe mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed		
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	200	320	370	370
		L/s	3,333	5,333	6,167	6,167
		cfm	7,062	11,299	13,065	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1		0.92 x 2		
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		
	Motor output kW	10.5		12.4		
	Case heater kW	-		0.045		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-		-		
	Fan motor	-		-		
Refrigerant	Type x original charge	R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	252 (556)		318 (702)		
Heat exchanger		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
Optional parts		Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		

#### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1, \*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT Y Series - High COP PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP550YSLM-A (-BS)		PUHY-EP600YSLM-A (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1	kW	63.0		69.0			
	*1	BTU / h	215,000		235,400			
		Power input kW	16.62		18.59			
		Current input A	28.0-26.6-25.6		31.3-29.8-28.7			
	EER	kW / kW	3.79		3.71			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)			
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)		-5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2	kW	69.0		76.5			
	*2	BTU / h	235,400		261,000			
		Power input kW	17.73		19.66			
		Current input A	29.9-28.4-27.4		33.1-31.5-30.3			
	COP	kW / kW	3.89		3.89			
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)			
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P15~P250/2~47		P15~P250/2~50			
Sound pressure level (measured in anechoic room)		dB <A>	63.5		64			
Sound power level (measured in anechoic room)		dB <A>	84.5		85			
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed		15.88 (5/8) Brazed			
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed			
<b>Set Model</b>								
Model			PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	175		200		200	
		L/s	2,917		3,333		3,333	
		cfm	6,179		7,062		7,062	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
*3	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter		Inverter	
	Motor output	kW	6.9		8.1		8.1	
	Case heater	kW	-		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm	1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740	
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		-		-		-	
Fan motor		-		-		-		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)	
Net weight	kg (lbs)		208 (459)		252 (556)		252 (556)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		12.7 (1/2) Brazed		12.7 (1/2) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT Y Series - High COP PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP650YSLM-A (-BS)			PUHY-EP700YSLM-A (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	73.0			80.0		
	*1	BTU / h	249,100			273,000		
		Power input kW	18.15			20.15		
		Current input A	30.6-29.1-28.0			34.0-32.3-31.1		
	EER	kW / kW	4.02			3.97		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)		
Heating capacity (Nominal)	*2	kW	81.5			88.0		
	*2	BTU / h	278,100			300,300		
		Power input kW	20.07			21.67		
		Current input A	33.8-32.1-31.0			36.5-34.7-33.4		
	COP	kW / kW	4.06			4.06		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity		
	Model / Quantity		P15~P250/2~50			P15~P250/2~50		
Sound pressure level (measured in anechoic room)		dB <A>	63			63.5		
Sound power level (measured in anechoic room)		dB <A>	84.5			85.5		
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed			19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed			34.93 (1-3/8) Brazed		
<b>Set Model</b>								
Model			PUHY-EP200YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP300YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	175		175		175	
		L/s	2,917		2,917		2,917	
		cfm	6,179		6,179		6,179	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
*3	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 1	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter		Inverter		Inverter	
	Motor output		5.6		6.9		5.6	
	Case heater		-		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740	
	in.		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		-			-		
	Fan motor		-			-		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)		R410A x 7.5 kg (17 lbs)		R410A x 10.3 kg (23 lbs)	
Net weight	kg (lbs)		208 (459)		208 (459)		252 (556)	
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		12.7 (1/2) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP750YSLM-A (-BS)			PUHY-EP800YSLM-A (-BS)				
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	85.0			90.0				
	*1	BTU / h	290,000			307,100				
		Power input kW	21.85			23.43				
		Current input A	36.8-35.0-33.7			39.5-37.5-36.2				
		EER kW / kW	3.89			3.84				
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)				
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)				
Heating capacity (Nominal)	*2	kW	95.0			100.0				
	*2	BTU / h	324,100			341,200				
		Power input kW	23.92			25.18				
		Current input A	40.3-38.3-36.9			42.5-40.3-38.9				
		COP kW / kW	3.97			3.97				
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)				
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity				
	Model / Quantity		P15~P250/2~50			P15~P250/2~50				
Sound pressure level (measured in anechoic room)	dB <A>		64.5			65				
Sound power level (measured in anechoic room)	dB <A>		85.5			86.5				
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed				
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed			34.93 (1-3/8) Brazed				
<b>Set Model</b>										
Model			PUHY-EP200YLM-A (-BS)	PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP200YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	175		175		200		175	
		L/s	2,917		2,917		3,333		2,917	
		cfm	6,179		6,179		7,062		6,179	
	Driving mechanism		Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor			
	Motor output		0.92 x 1		0.92 x 1		0.92 x 1		0.92 x 1	
*3 External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor				
	Starting method		Inverter		Inverter		Inverter		Inverter	
	Motor output		5.6		6.9		8.1		5.6	
	Case heater		-		-		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 920 x 740	
	in.		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection				
	Compressor		-			-				
	Fan motor		-			-				
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)		R410A x 7.5 kg (17 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 7.5 kg (17 lbs)	
Net weight	kg (lbs)		208 (459)		208 (459)		252 (556)		208 (459)	
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube				
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed		9.52 (3/8) Brazed		12.7 (1/2) Brazed		9.52 (3/8) Brazed	
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		22.2 (7/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP850YSLM-A (-BS)			PUHY-EP900YSLM-A (-BS)					
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling capacity (Nominal)	*1	kW	96.0			101.0					
	*1	BTU / h	327,600			344,600					
	Power input	kW	25.53			27.22					
	Current input	A	43.0-40.9-39.4			45.9-43.6-42.0					
	EER	kW / kW	3.76			3.71					
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)					
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)					
Heating capacity (Nominal)	*2	kW	108.0			113.0					
	*2	BTU / h	368,500			385,600					
	Power input	kW	27.76			29.04					
	Current input	A	46.8-44.5-42.9			49.0-46.5-44.8					
	COP	kW / kW	3.89			3.89					
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)					
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity					
	Model / Quantity		P15~P250/2~50			P15~P250/2~50					
Sound pressure level (measured in anechoic room)		dB <A>	65.5			66					
Sound power level (measured in anechoic room)		dB <A>	86.5			87					
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed					
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed					
<b>Set Model</b>											
Model			PUHY-EP250YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)			
FAN	Type x Quantity		Propeller fan x 1			Propeller fan x 1			Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	175			200			200		
		L/s	2,917			3,333			3,333		
		cfm	6,179			7,062			7,062		
	Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1			0.92 x 1			0.92 x 1		
*3 External static press.		0 Pa (0 mmH <sub>2</sub> O)			0 Pa (0 mmH <sub>2</sub> O)			0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter			Inverter			Inverter		
	Motor output	kW	6.9			8.1			8.1		
	Case heater	kW	-			-			-		
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm		1,710 (1,650 without legs) x 920 x 740			1,710 (1,650 without legs) x 1,220 x 740			1,710 (1,650 without legs) x 1,220 x 740		
		in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16			67-3/8 (65 without legs) x 48-1/16 x 29-3/16			67-3/8 (65 without legs) x 48-1/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		-			-			-		
	Fan motor		-			-			-		
Refrigerant	Type x original charge		R410A x 7.5 kg (17 lbs)			R410A x 10.3 kg (23 lbs)			R410A x 10.3 kg (23 lbs)		
Net weight	kg (lbs)		208 (459)			252 (556)			252 (556)		
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed			12.7 (1/2) Brazed			12.7 (1/2) Brazed		
	Gas pipe	mm (in.)	22.2 (7/8) Brazed			28.58 (1-1/8) Brazed			28.58 (1-1/8) Brazed		
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



Outdoor Unit

# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP950YSLM-A (-BS)			PUHY-EP1000YSLM-A (-BS)				
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	108.0			113.0				
	*1	BTU / h	368,500			385,600				
		Power input kW	30.33			31.04				
		Current input A	51.2-48.6-46.8			52.4-49.7-47.9				
	EER	kW / kW	3.56			3.64				
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)				
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)				
Heating capacity (Nominal)	*2	kW	119.5			127.0				
	*2	BTU / h	407,700			433,300				
		Power input kW	32.03			33.50				
		Current input A	54.0-51.3-49.5			56.5-53.7-51.7				
	COP	kW / kW	3.73			3.79				
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)				
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity				
	Model / Quantity		P15~P250/2~50			P15~P250/2~50				
Sound pressure level (measured in anechoic room)		dB <A>	66			66.5				
Sound power level (measured in anechoic room)		dB <A>	87			87				
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed				
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed				
<b>Set Model</b>										
Model			PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP300YLM-A (-BS)	PUHY-EP400YLM-A (-BS)		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	200		200		200		320	
		L/s	3,333		3,333		3,333		5,333	
		cfm	7,062		7,062		7,062		11,299	
	Driving mechanism		Inverter-control, Direct-driven by motor				Inverter-control, Direct-driven by motor			
Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2		
*3	External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor				
	Starting method		Inverter		Inverter		Inverter			
	Motor output	kW	8.1		10.5		8.1			
	Case heater	kW	-		-		-			
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection				
	Compressor		-			-				
	Fan motor		-			-				
Refrigerant	Type x original charge	R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	252 (556)		252 (556)		252 (556)		318 (702)		
Heat exchanger		Salt-resistant cross fin & aluminium tube				Salt-resistant cross fin & aluminium tube				
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YSLM-A(-BS)



## ► Specifications

Model			PUHY-EP1050YSLM-A (-BS)			PUHY-EP1100YSLM-A (-BS)								
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz								
Cooling capacity (Nominal)	*1	kW	118.0			124.0								
	*1	BTU / h	402,600			423,100								
	Power input	kW	34.40			38.15								
	Current input	A	58.0-55.1-53.1			64.4-61.1-58.9								
	EER	kW / kW	3.43			3.25								
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)								
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)								
Heating capacity (Nominal)	*2	kW	132.0			140.0								
	*2	BTU / h	450,400			477,700								
	Power input	kW	36.87			41.17								
	Current input	A	62.2-59.1-56.9			69.5-66.0-63.6								
	COP	kW / kW	3.58			3.40								
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)								
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)								
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity								
	Model / Quantity		P15~P250/3~50			P15~P250/3~50								
Sound pressure level (measured in anechoic room)		dB <A>	66.5			66.5								
Sound power level (measured in anechoic room)		dB <A>	87.5			87.5								
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed								
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed								
<b>Set Model</b>														
Model			PUHY-EP300YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)						
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	200		200		320		200		200		320	
		L/s	3,333		3,333		5,333		3,333		3,333		5,333	
		cfm	7,062		7,062		11,299		7,062		7,062		11,299	
	Driving mechanism		Inverter-control, Direct-driven by motor						Inverter-control, Direct-driven by motor					
Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 2		0.92 x 1		0.92 x 1		0.92 x 2		
*3	External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor						Inverter scroll hermetic compressor					
	Starting method		Inverter		Inverter		Inverter		Inverter		Inverter		Inverter	
	Motor output		8.1		10.5		10.9		10.5		10.5		10.9	
	Case heater		-		-		-		-		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740	
	in.		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)						High pressure sensor, High pressure switch at 4.15 MPa (601 psi)					
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection						Over-heat protection, Over-current protection					
	Compressor		-						-					
	Fan motor		-						-					
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)		252 (556)		252 (556)		318 (702)		252 (556)		252 (556)		318 (702)	
Heat exchanger			Salt-resistant cross fin & aluminium tube						Salt-resistant cross fin & aluminium tube					
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed		12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) 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		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G						Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G					

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



Outdoor Unit



# OUTDOOR UNIT Y Series - High COP PUHY-EP YSLM-A (-BS)



## ► Specifications

Model			PUHY-EP1150YSLM-A (-BS)			PUHY-EP1200YSLM-A (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	130.0			136.0		
	*1	BTU / h	443,600			464,000		
		Power input kW	41.53			42.76		
		Current input A	70.1-66.6-64.1			72.1-68.5-66.0		
		EER kW / kW	3.13			3.18		
Temp. range of cooling	Indoor	W.B.	15.0-24.0°C (59-75°F)			15.0-24.0°C (59-75°F)		
	Outdoor	D.B.	-5.0-52.0°C (23-126°F)			-5.0-52.0°C (23-126°F)		
Heating capacity (Nominal)	*2	kW	145.0			150.0		
	*2	BTU / h	494,700			511,800		
		Power input kW	44.47			45.45		
		Current input A	75.0-71.3-68.7			76.7-72.8-70.2		
		COP kW / kW	3.26			3.30		
Temp. range of heating	Indoor	D.B.	15.0-27.0°C (59-81°F)			15.0-27.0°C (59-81°F)		
	Outdoor	W.B.	-20.0-15.5°C (-4-60°F)			-20.0-15.5°C (-4-60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity		
	Model / Quantity		P15-P250/3-50			P15-P250/3-50		
Sound pressure level (measured in anechoic room)		dB <A>	66.5			67		
Sound power level (measured in anechoic room)		dB <A>	87.5			87.5		
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed		
<b>Set Model</b>								
Model			PUHY-EP350YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP350YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	200		200		370	
		L/s	3,333		3,333		6,167	
		cfm	7,062		7,062		13,065	
	Driving mechanism		Inverter-control, Direct-driven by motor					
	Motor output	kW	0.92 x 1		0.92 x 1		0.92 x 2	
*3	External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter		Inverter		Inverter	
	Motor output	kW	10.5		10.5		12.4	
	Case heater	kW	-		-		-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740	
	in.		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		-			-		
	Fan motor		-			-		
Refrigerant	Type x original charge	R410A x 10.3 kg (23 lbs)		R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	252 (556)		252 (556)		318 (702)		
Heat exchanger			Salt-resistant cross fin & aluminium tube			Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed		12.7 (1/2) Brazed		15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed	
Optional parts			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## Y Series - High COP

### PUHY-EP YSLM-A (-BS)



### ► Specifications

Model			PUHY-EP1250YSLM-A (-BS)			PUHY-EP1300YSLM-A (-BS)		
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	140.0			146.0		
	*1	BTU / h	477,700			498,200		
		Power input kW	45.90			46.94		
		Current input A	77.4-73.6-70.9			79.2-75.2-72.5		
	EER	kW / kW	3.05			3.11		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			-5.0~52.0°C (23~126°F)		
Heating capacity (Nominal)	*2	kW	156.5			163.0		
	*2	BTU / h	534,000			556,200		
		Power input kW	49.36			50.62		
		Current input A	83.3-79.1-76.2			85.4-81.1-78.2		
	COP	kW / kW	3.17			3.22		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			15.0~27.0°C (59~81°F)		
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			50~130% of outdoor unit capacity		
	Model / Quantity		P15~P250/3~50			P15~P250/3~50		
Sound pressure level (measured in anechoic room)		dB <A>	67.5			68		
Sound power level (measured in anechoic room)		dB <A>	88			88		
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed		
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed		
<b>Set Model</b>								
Model			PUHY-EP350YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP400YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m <sup>3</sup> /min	200	370	370	320	370	370
		L/s	3,333	6,167	6,167	5,333	6,167	6,167
		cfm	7,062	13,065	13,065	11,299	13,065	13,065
	Driving mechanism		Inverter-control, Direct-driven by motor					
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor					
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.5	12.4	12.4	10.9	12.4	12.4
	Case heater	kW	-	-	-	-	-	-
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)					
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection					
	Compressor		-					
	Fan motor		-					
Refrigerant	Type x original charge	R410A x 10.3 kg (23 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	252 (556)	318 (702)	318 (702)	318 (702)	318 (702)	318 (702)	
Heat exchanger		Salt-resistant cross fin & aluminium tube						
Pipe between unit and distributor	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	
	Gas pipe	mm (in.)	28.58 (1-1/8) 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	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G						

#### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



Outdoor Unit

# OUTDOOR UNIT Y Series - High COP PUHY-EP YSLM-A(-BS)



## ► Specifications

Model		PUHY-EP1350YSLM-A (-BS)			
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1 kW	150.0			
	*1 BTU / h	511,800			
	Power input kW	50.00			
	Current input A	84.4-80.1-77.2			
EER	kW / kW	3.00			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C (59~75°F)			
	Outdoor D.B.	-5.0~52.0°C (23~126°F)			
Heating capacity (Nominal)	*2 kW	168.0			
	*2 BTU / h	573,200			
	Power input kW	54.36			
	Current input A	91.7-87.1-84.0			
COP	kW / kW	3.09			
Temp. range of heating	Indoor D.B.	15.0~27.0°C (59~81°F)			
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			
	Model / Quantity	P15-P250/3-50			
Sound pressure level (measured in anechoic room)	dB <A>	68			
Sound power level (measured in anechoic room)	dB <A>	88			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			
<b>Set Model</b>					
Model		PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	PUHY-EP450YLM-A (-BS)	
FAN	Type x Quantity	Propeller fan x 2			
	Air flow rate	m <sup>3</sup> /min	370	370	370
		L/s	6,167	6,167	6,167
		cfm	13,065	13,065	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor			
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 2
*3 External static press.		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor			
	Starting method	Inverter			
	Motor output	kW	12.4	12.4	12.4
	Case heater	kW	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection			
	Compressor	-	-	-	
	Fan motor	-	-	-	
Refrigerant	Type x original charge	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	318 (702)	318 (702)	318 (702)	
Heat exchanger	Salt-resistant cross fin & aluminium tube				
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## R2 Series

### PURY-P YLM-A1(-BS)



#### ► Specifications

Model		PURY-P200YLM-A1 (-BS)	PURY-P250YLM-A1 (-BS)	PURY-P300YLM-A1 (-BS)	PURY-P350YLM-A1 (-BS)
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5	40.0
	*1 BTU / h	76,400	95,500	114,300	136,500
	Power input kW	5.29	6.98	9.10	11.76
	Current input A	8.9-8.4-8.1	11.7-11.1-10.7	15.3-14.5-14.0	19.8-18.8-18.1
	EER kW / kW	4.23	4.01	3.68	3.40
Temp. range of cooling	*3 Indoor W.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)
	Outdoor D.B.	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)
Heating capacity (Nominal)	*2 kW	25.0	31.5	37.5	45.0
	*2 BTU / h	85,300	107,500	128,000	153,500
	Power input kW	5.49	7.32	9.37	11.59
	Current input A	9.2-8.8-8.4	12.3-11.7-11.3	15.8-15.0-14.4	19.5-18.5-17.9
	COP kW / kW	4.55	4.30	4.00	3.88
Temp. range of heating	*3 Indoor W.B.	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)
	Outdoor W.B.	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)
Indoor unit connectable	Total capacity	50-150%	50-150% of outdoor unit capacity	50-150% of outdoor unit capacity	50-150% of outdoor unit capacity
	Model / Quantity	P15-P250/1-20	P15-P250/1-25	P15-P250/1-30	P15-P250/1-35
Sound pressure level (measured in anechoic room)	dB <A>	59	60	62.5	62.5
Sound power level (measured in anechoic room)	dB <A>	82.5	83.5	86	86
Refrigerant piping diameter	High pressure mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Low pressure mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity	Propeller fan x 1			
	Air flow rate m <sup>3</sup> /min	185	185	230	230
	L/s	3,083	3,083	3,833	3,833
	cfm	6,532	6,532	8,121	8,121
	Driving mechanism	Inverter-control, Direct-driven by motor			
	*4 Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
External static press.	0 Pa (0 mmH <sub>2</sub> O)				
Compressor	Type x Quantity	Inverter scroll hermetic compressor			
	Starting method	Inverter			
	Motor output kW	5.6	6.9	8.1	10.5
	Case heater kW	-			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection			
	Compressor	-			
	Fan motor	-			
Refrigerant	Type x original charge	R410A x 9.5 kg (21 lbs)			
Net weight	kg (lbs)	205 (452)			
Heat exchanger	Salt-resistant cross fin & copper tube				
Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1				

#### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB (45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1, \*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## R2 Series

### PURY-P YLM-A1(-BS)



## ► Specifications

Model	PURY-P400YLM-A1 (-BS)		PURY-P450YLM-A1 (-BS)		PURY-P500YLM-A1 (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1	kW	45.0		50.0		
	*1	BTU / h	153,500		170,600		
		Power input kW	13.71		14.32		
		Current input A	23.1-21.9-21.1		24.1-22.9-22.1		
		EER kW / kW	3.28		3.49		
Temp. range of cooling	*3	Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
		Outdoor D.B.	-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		
Heating capacity (Nominal)	*2	kW	45.0		56.0		
	*2	BTU / h	153,500		191,100		
		Power input kW	11.42		14.93		
		Current input A	19.2-18.3-17.6		25.2-23.9-23.0		
		COP kW / kW	3.94		3.75		
Temp. range of heating	*3	Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity		P15~P250/1~40		P15~P250/1~45		
Sound pressure level (measured in anechoic room)	dB <A>		62.5		62.5		
Sound power level (measured in anechoic room)	dB <A>		86		86		
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	230		320		
		L/s	3,833		5,333		
		cfm	8,121		11,299		
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	*4 External static press.	kW		0.92 x 1		0.92 x 2	
Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method		Inverter		Inverter		
	Motor output kW		10.9		12.4		
	Case heater kW		-		-		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		
	in.		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor		-		-		
	Fan motor		-		-		
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)		246 (543)		321 (708)		
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Optional parts		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°F WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## R2 Series

### PURY-P YSLM-A1(-BS)



#### ► Specifications

Model		PURY-P400YSLM-A1 (-BS)		PURY-P450YSLM-A1 (-BS)		PURY-P500YSLM-A1 (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW	45.0		50.0		56.0		
	*1 BTU / h	153,500		170,600		191,100		
	Power input kW	10.97		12.50		14.39		
	Current input A	18.5-17.5-16.9		21.1-20.0-19.3		24.2-23.0-22.2		
EER	kW / kW	4.10		4.00		3.89		
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor D.B.	-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		
Heating capacity (Nominal)	*2 kW	50.0		56.0		63.0		
	*2 BTU / h	170,600		191,100		215,000		
	Power input kW	10.98		12.64		14.65		
	Current input A	18.5-17.6-16.9		21.3-20.2-19.5		24.7-23.4-22.6		
COP	kW / kW	4.55		4.43		4.30		
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity	50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity	P15~P250/1~40		P15~P250/1~45		P15~P250/1~50		
Sound pressure level (measured in anechoic room)	dB <A>	62		62.5		63		
Sound power level (measured in anechoic room)	dB <A>	85.5		86		86.5		
Refrigerant piping diameter	High pressure mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		22.2 (7/8) Brazed		
	Low pressure mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
<b>Set Model</b>								
Model		PURY-P200YLM-A1 (-BS)	PURY-P200YLM-A1 (-BS)	PURY-P200YLM-A1 (-BS)	PURY-P250YLM-A1 (-BS)	PURY-P250YLM-A1 (-BS)	PURY-P250YLM-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	185		185		185	
		L/s	3,083		3,083		3,083	
		cfm	6,532		6,532		6,532	
Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			
Motor output kW	0.92 x 1		0.92 x 1		0.92 x 1			
*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	5.6		5.6		6.9		
	Case heater kW	-		-		-		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 920 x 740		
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-		-		-		
	Fan motor	-		-		-		
Refrigerant	Type x original charge	R410A x 9.5 kg (21 lbs)		R410A x 9.5 kg (21 lbs)		R410A x 9.5 kg (21 lbs)		
Net weight	kg (lbs)	205 (452)		205 (452)		205 (452)		
Heat exchanger	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	High pressure mm (in.)	15.88 (5/8) Brazed		15.88 (5/8) Brazed		19.05 (3/4) Brazed		
	Low pressure mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed		22.2 (7/8) Brazed		
Optional parts	Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK-A Joint: CMY-Y102S-G2,CMY-Y102L-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1			

#### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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

# OUTDOOR UNIT

## R2 Series

### PURY-P YSLM-A1(-BS)



## ► Specifications

Model		PURY-P550YSLM-A1 (-BS)	PURY-P600YSLM-A1 (-BS)	PURY-P650YSLM-A1 (-BS)				
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling capacity (Nominal)	*1 kW	63.0	69.0	73.0				
	*1 BTU / h	215,000	235,400	249,100				
	Power input kW	16.89	19.32	21.28				
	Current input A	28.5-27.0-26.1	32.6-30.9-29.8	35.9-34.1-32.8				
	EER kW / kW	3.73	3.57	3.43				
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)				
	Outdoor D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)				
Heating capacity (Nominal)	*2 kW	69.0	76.5	81.5				
	*2 BTU / h	235,400	261,000	278,100				
	Power input kW	16.62	19.12	20.68				
	Current input A	28.0-26.6-25.6	32.2-30.6-29.5	34.9-33.1-31.9				
	COP kW / kW	4.15	4.00	3.94				
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)				
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity	50~150% of outdoor unit capacity						
	Model / Quantity	P15~P250/2~50						
Sound pressure level (measured in anechoic room)	dB <A>	64.5	65.5	65.5				
Sound power level (measured in anechoic room)	dB <A>	88	89	89				
Refrigerant piping diameter	High pressure mm (in.)	28.58 (1-1/8) Brazed						
	Low pressure mm (in.)	28.58 (1-1/8) Brazed						
<b>Set Model</b>								
Model		PURY-P250YLM-A1 (-BS)	PURY-P300YLM-A1 (-BS)	PURY-P300YLM-A1 (-BS)	PURY-P300YLM-A1 (-BS)	PURY-P300YLM-A1 (-BS)	PURY-P350YLM-A1 (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	185	230	230	230	230	230
		L/s	3,083	3,833	3,833	3,833	3,833	3,833
		cfm	6,532	8,121	8,121	8,121	8,121	8,121
	Driving mechanism	Inverter-control, Direct-driven by motor						
*4 Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	
	Starting method	Inverter		Inverter	Inverter	Inverter	Inverter	
	Motor output	kW	6.9	8.1	8.1	8.1	8.1	10.5
	Case heater	kW	-	-	-	-	-	-
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor	-		-	-	-	-	
	Fan motor	-		-	-	-	-	
Refrigerant	Type x original charge	R410A x 9.5 kg (21 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	
Net weight	kg (lbs)	205 (452)	248 (547)	248 (547)	248 (547)	248 (547)	248 (547)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	
	Low pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Outdoor Twinning kit: CMY-R100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1, \*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## R2 Series

### PURY-P YSLM-A1(-BS)



## ► Specifications

Model			PURY-P700YSLM-A1 (-BS)	PURY-P750YSLM-A1 (-BS)	PURY-P800YSLM-A1 (-BS)					
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling capacity (Nominal)	*1	kW	80.0	85.0	90.0					
	*1	BTU / h	273,000	290,000	307,100					
		Power input kW	24.24	26.23	28.30					
		Current input A	40.9-38.8-37.4	44.2-42.0-40.5	47.7-45.3-43.7					
		EER kW / kW	3.30	3.24	3.18					
Temp. range of cooling	*3	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)					
		Outdoor D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)					
Heating capacity (Nominal)	*2	kW	88.0	90.0	90.0					
	*2	BTU / h	300,300	307,100	307,100					
		Power input kW	22.68	23.01	22.84					
		Current input A	38.2-36.3-35.0	38.8-36.9-35.5	38.5-36.6-35.3					
		COP kW / kW	3.88	3.91	3.94					
Temp. range of heating	*3	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)					
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)					
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity					
	Model / Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50					
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5	65.5					
Sound power level (measured in anechoic room)		dB <A>	89	89	89					
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed					
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed					
<b>Set Model</b>										
Model			PURY-P350YLM-A1 (-BS)	PURY-P350YLM-A1 (-BS)	PURY-P350YLM-A1 (-BS)	PURY-P400YLM-A1 (-BS)	PURY-P400YLM-A1 (-BS)	PURY-P400YLM-A1 (-BS)	PURY-P400YLM-A1 (-BS)	
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	230	230	230	230	230	230	230	
		L/s	3,833	3,833	3,833	3,833	3,833	3,833	3,833	
		cfm	8,121	8,121	8,121	8,121	8,121	8,121	8,121	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
*4	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1		
Compressor	External static press.		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter		Inverter		Inverter	
	Motor output		kW	10.5	10.5	10.5	10.9	10.9	10.9	
	Case heater		kW	-	-	-	-	-	-	
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740		
	in.		67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP/FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection			
	Compressor		-		-		-			
	Fan motor		-		-		-			
Refrigerant	Type x original charge		R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)	R410A x 10.3 kg (23 lbs)		
Net weight	kg (lbs)		248 (547)	248 (547)	248 (547)	246 (543)	246 (543)	246 (543)		
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	High pressure	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed		
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed		
Optional parts			Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1			

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## R2 Series

### PURY-P YSLM-A1(-BS)



## ► Specifications

Model		PURY-P850YSLM-A1 (-BS)		PURY-P900YSLM-A1 (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW	96.0		101.0		
	*1 BTU / h	327,600		344,600		
	Power input kW	29.26		29.79		
	Current input A	49.3-46.9-45.2		50.2-47.7-46.0		
	EER kW / kW	3.28		3.39		
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor D.B.	-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		
Heating capacity (Nominal)	*2 kW	101.0		113.0		
	*2 BTU / h	344,600		385,600		
	Power input kW	26.23		30.13		
	Current input A	44.2-42.0-40.5		50.8-48.3-46.5		
	COP kW / kW	3.85		3.75		
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity	50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity	P15~P250/2~50		P15~P250/2~50		
Sound pressure level (measured in anechoic room)	dB <A>	65.5		65.5		
Sound power level (measured in anechoic room)	dB <A>	89		89		
Refrigerant piping diameter	High pressure mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
	Low pressure mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed		
<b>Set Model</b>						
Model		PURY-P400YLM-A1 (-BS)		PURY-P450YLM-A1 (-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	230		320	
		L/s	3,833		5,333	
		cfm	8,121		11,299	
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
Motor output	kW	0.92 x 1		0.92 x 2		
	External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		
	Motor output kW	10.9		12.4		
	Case heater kW	-		-		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,750 x 740		
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 68-15/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-		-		
	Fan motor	-		-		
Refrigerant	Type x original charge	R410A x 10.3 kg (23 lbs)		R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	246 (543)		321 (708)		
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	High pressure mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		
	Low pressure mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
Optional parts		Outdoor Twinning kit: CMY-R200XLVBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-R200XLVBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-2.

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



# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YLM-A(-BS)



## ► Specifications

Model	PURY-EP200YLM-A (-BS)		PURY-EP250YLM-A (-BS)		PURY-EP300YLM-A (-BS)	
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1	kW	22.4		33.5	
	*1	BTU / h	76,400		114,300	
		Power input kW	5.48		9.20	
		Current input A	9.2-8.7-8.4		15.5-14.7-14.2	
		EER kW / kW	4.08		3.64	
Temp. range of cooling	*3	Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)	
		Outdoor D.B.	-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)	
Heating capacity (Nominal)	*2	kW	25.0		37.5	
	*2	BTU / h	85,300		128,000	
		Power input kW	6.41		9.97	
		Current input A	10.8-10.2-9.9		16.8-15.9-15.4	
		COP kW / kW	3.90		3.76	
Temp. range of heating	*3	Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)	
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)	
Indoor unit connectable	Total capacity		50~150%		50~150% of outdoor unit capacity	
	Model / Quantity		P15~P250/1~20		P15~P250/1~25	
Sound pressure level (measured in anechoic room)	dB <A>		59		60	
Sound power level (measured in anechoic room)	dB <A>		82.5		83.5	
Refrigerant piping diameter	High pressure mm (in.)		15.88 (5/8) Brazed		19.05 (3/4) Brazed	
	Low pressure mm (in.)		19.05 (3/4) Brazed		22.2 (7/8) Brazed	
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Air flow rate	m <sup>3</sup> /min	185		230	
		L/s	3,083		3,833	
		cfm	6,532		8,121	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output kW		0.92 x 1		0.92 x 1	
*4 External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter		Inverter	
	Motor output kW		5.6		6.9	
	Case heater kW		-		-	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm		1,710 (1,650 without legs) x 920 x 740		1,710 (1,650 without legs) x 1,220 x 740	
	in.		67-3/8 (65 without legs) x 36-1/4 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		-		-	
	Fan motor		-		-	
Refrigerant	Type x original charge		R410A x 8.5 kg (19 lbs)		R410A x 9.3 kg (21 lbs)	
Net weight	kg (lbs)		218 (481)		260 (574)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	

### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1, \*2 are subject to JIS B8615-1.

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

# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YLM-A(-BS)



#### ► Specifications

Model		PURY-EP350YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP450YLM-A (-BS)	PURY-EP500YLM-A (-BS)	
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1 kW	40.0	45.0	50.0	56.0	
	*1 BTU / h	136,500	153,500	170,600	191,100	
	Power input kW	12.57	12.56	14.83	18.30	
	Current input A	21.2-20.1-19.4	21.2-20.1-19.4	25.0-23.7-22.9	30.8-29.3-28.2	
	EER kW / kW	3.18	3.58	3.37	3.06	
Temp. range of cooling	*3 Indoor W.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	
	Outdoor D.B.	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)	-5.0-46.0°C (23-115°F)	
Heating capacity (Nominal)	*2 kW	45.0	50.0	56.0	63.0	
	*2 BTU / h	153,500	170,600	191,100	215,000	
	Power input kW	12.93	13.40	15.86	19.54	
	Current input A	21.8-20.7-19.9	22.6-21.4-20.7	26.7-25.4-24.5	32.9-31.3-30.2	
	COP kW / kW	3.48	3.73	3.53	3.22	
Temp. range of heating	*3 Indoor D.B.	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	15.0-27.0°C (59-81°F)	
	Outdoor W.B.	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)	-20.0-15.5°C (-4-60°F)	
Indoor unit connectable	Total capacity	50-150% of outdoor unit capacity	50-150% of outdoor unit capacity	50-150% of outdoor unit capacity	50-150% of outdoor unit capacity	
	Model / Quantity	P15-P250/1-35	P15-P250/1-40	P15-P250/1-45	P15-P250/1-50	
Sound pressure level (measured in anechoic room)	dB <A>	62.5	62.5	62.5	63.5	
Sound power level (measured in anechoic room)	dB <A>	86	86	86	87	
Refrigerant piping diameter	High pressure mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	
	Low pressure mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	230	320	320	380
		L/s	3,833	5,333	5,333	6,333
		cfm	8,121	11,299	11,299	13,418
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
*4 Motor output kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2		
External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	10.5	10.9	12.4	13.4	
	Case heater kW	-	-	-	0.045 (240 V)	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor	-	-	-	-	
	Fan motor	-	-	-	-	
Refrigerant	Type x original charge	R410A x 9.3 kg (21 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	
Net weight	kg (lbs)	260 (574)	338 (746)	338 (746)	351 (774)	
Heat exchanger		Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	
Optional parts		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104,105,106,108, 1010,1013,1016V-G1 Main BC controller: CMB-P108,1010, 1013,1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1,CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1,CMB-P1016V-HB1	

#### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT R2 Series - High COP PURY-EP YSLM-A(-BS)



## ► Specifications

Model		PURY-EP550YSLM-A (-BS)	PURY-EP600YSLM-A (-BS)
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1 kW	63.0	69.0
	*1 BTU / h	215,000	235,400
	Power input kW	17.35	19.54
	Current input A	29.2-27.8-26.8	32.9-31.3-30.2
	EER kW / kW	3.63	3.53
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2 kW	69.0	76.5
	*2 BTU / h	235,400	261,000
	Power input kW	18.44	20.34
	Current input A	31.1-29.5-28.5	34.3-32.6-31.4
	COP kW / kW	3.74	3.76
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity
	Model / Quantity	P15~P250/2~50	P15~P250/2~50
Sound pressure level (measured in anechoic room)	dB <A>	64.5	65.5
Sound power level (measured in anechoic room)	dB <A>	88	89
Refrigerant piping diameter	High pressure mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
	Low pressure mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed

Set Model		PURY-EP250YLM-A (-BS)	PURY-EP300YLM-A (-BS)	PURY-EP300YLM-A (-BS)	PURY-EP300YLM-A (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	185	230	230	230
		L/s	3,083	3,833	3,833	3,833
		cfm	6,532	8,121	8,121	8,121
	Driving mechanism	Inverter-control, Direct-driven by motor				
	*4 Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
External static press.	0 Pa (0 mmH <sub>2</sub> O)					
Compressor	Type x Quantity	Inverter scroll hermetic compressor				
	Starting method	Inverter		Inverter		
	Motor output kW	6.9	8.1	8.1	8.1	
	Case heater kW	-	-	-	-	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710 (1,650 without legs) x 920 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	1,710 (1,650 without legs) x 1,220 x 740	
	in.	67-3/8 (65 without legs) x 36-1/4 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	67-3/8 (65 without legs) x 48-1/16 x 29-3/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection				
	Compressor	-				
	Fan motor	-				
Refrigerant	Type x original charge	R410A x 8.5 kg (19 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	R410A x 9.3 kg (21 lbs)	
Net weight	kg (lbs)	218 (481)	260 (574)	260 (574)	260 (574)	
Heat exchanger		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	High pressure mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4)	
	Low pressure mm (in.)	22.2 (7/8) Brazed	-	22.2 (7/8) Brazed	-	
Optional parts		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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



Outdoor Unit



# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YSLM-A(-BS)



## ► Specifications

Model		PURY-EP650YSLM-A (-BS)		PURY-EP700YSLM-A (-BS)		PURY-EP750YSLM-A (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW	73.0		80.0		85.0		
	*1 BTU / h	249,100		273,000		290,000		
	Power input kW	22.12		25.97		25.99		
	Current input A	37.3-35.4-34.1		43.8-41.6-40.1		43.8-41.6-40.1		
EER	kW / kW	3.30		3.08		3.27		
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		15.0~24.0°C (59~75°F)		
	Outdoor D.B.	-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		-5.0~46.0°C (23~115°F)		
Heating capacity (Nominal)	*2 kW	81.5		88.0		95.0		
	*2 BTU / h	278,100		300,300		324,100		
	Power input kW	22.51		25.28		26.38		
	Current input A	38.0-36.1-34.7		42.6-40.5-39.0		44.5-42.3-40.7		
COP	kW / kW	3.62		3.48		3.60		
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		15.0~27.0°C (59~81°F)		
	Outdoor W.B.	-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		-20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity	50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity		
	Model / Quantity	P15-P250/2-50		P15-P250/2-50		P15-P250/2-50		
Sound pressure level (measured in anechoic room)	dB <A>	65.5		65.5		65.5		
Sound power level (measured in anechoic room)	dB <A>	89		89		89		
Refrigerant piping diameter	High pressure mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
	Low pressure mm (in.)	28.58 (1-1/8) Brazed		34.93 (1-3/8) Brazed		34.93 (1-3/8) Brazed		
<b>Set Model</b>								
Model		PURY-EP300YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP350YLM-A (-BS)	PURY-EP400YLM-A (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	230		230		230	
		L/s	3,833		3,833		3,833	
		cfm	8,121		8,121		8,121	
Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			
Motor output kW	0.92 x 1		0.92 x 1		0.92 x 1			
External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	8.1		10.5		10.5		
	Case heater kW	-		-		-		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		1,710 (1,650 without legs) x 1,220 x 740		
	in.	67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		67-3/8 (65 without legs) x 48-1/16 x 29-3/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	-		-		-		
	Fan motor	-		-		-		
Refrigerant	Type x original charge	R410A x 9.3 kg (21 lbs)		R410A x 9.3 kg (21 lbs)		R410A x 9.3 kg (21 lbs)		
Net weight	kg (lbs)	260 (574)		260 (574)		260 (574)		
Heat exchanger		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
Pipe between unit and distributor	High pressure mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed		19.05 (3/4) Brazed		
	Low pressure mm (in.)	22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
Outdoor parts		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1, \*2 are subject to JIS B8615-1.

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



# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YSLM-A(-BS)



## ► Specifications

Model			PURY-EP800YSLM-A (-BS)	PURY-EP850YSLM-A (-BS)	PURY-EP900YSLM-A (-BS)				
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	90.0	96.0	101.0				
	*1	BTU / h	307,100	327,600	344,600				
		Power input kW	25.93	28.48	30.98				
		Current input A	43.7-41.5-40.0	48.0-45.6-44.0	52.2-49.6-47.8				
		EER	3.47	3.37	3.26				
Temp. range of cooling	*3	Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)				
		Outdoor D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)				
Heating capacity (Nominal)	*2	kW	100.0	108.0	113.0				
	*2	BTU / h	341,200	368,500	385,600				
		Power input kW	26.80	29.75	32.01				
		Current input A	45.2-42.9-41.4	50.2-47.7-45.9	54.0-51.3-49.4				
		COP	3.73	3.63	3.53				
Temp. range of heating	*3	Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)				
		Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity		50~150% of outdoor unit capacity	50~150% of outdoor unit capacity	50~150% of outdoor unit capacity				
	Model / Quantity		P15-P250/2-50	P15-P250/2-50	P15-P250/2-50				
Sound pressure level (measured in anechoic room)		dB <A>	65.5	65.5	65.5				
Sound power level (measured in anechoic room)		dB <A>	89	89	89				
Refrigerant piping diameter	High pressure	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed				
	Low pressure	mm (in.)	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed				
<b>Set Model</b>									
Model			PURY-EP400YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP400YLM-A (-BS)	PURY-EP450YLM-A (-BS)	PURY-EP450YLM-A (-BS)	PURY-EP450YLM-A (-BS)	
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 rate	m <sup>3</sup> /min	320	320	320	320	320	320	
		L/s	5,333	5,333	5,333	5,333	5,333	5,333	
		cfm	11,299	11,299	11,299	11,299	11,299	11,299	
	Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
Compressor	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	Motor output	kW	10.9	10.9	10.9	12.4	12.4	12.4	
Case heater		-		-		-		-	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm		1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	1,710 (1,650 without legs) x 1,750 x 740	
	in.		67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	67-3/8 (65 without legs) x 68-15/16 x 29-3/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor		-		-		-		
	Fan motor		-		-		-		
Refrigerant	Type x original charge	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)		
Net weight	kg (lbs)	338 (746)	338 (746)	338 (746)	338 (746)	338 (746)	338 (746)		
Heat exchanger		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube			
Pipe between unit and distributor	High pressure	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed		
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed	-	28.58 (1-1/8) Brazed	-	28.58 (1-1/8) Brazed		
Optional parts		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Outdoor Twinning kit: CMY-ER200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	

### Notes:

\*1,\*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB/24°C WB (95°F DB/75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB/68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

\*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.


\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*Nominal condition \*1,\*2 are subject to JIS B8615-1.

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






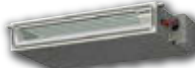












# I ndoor Unit

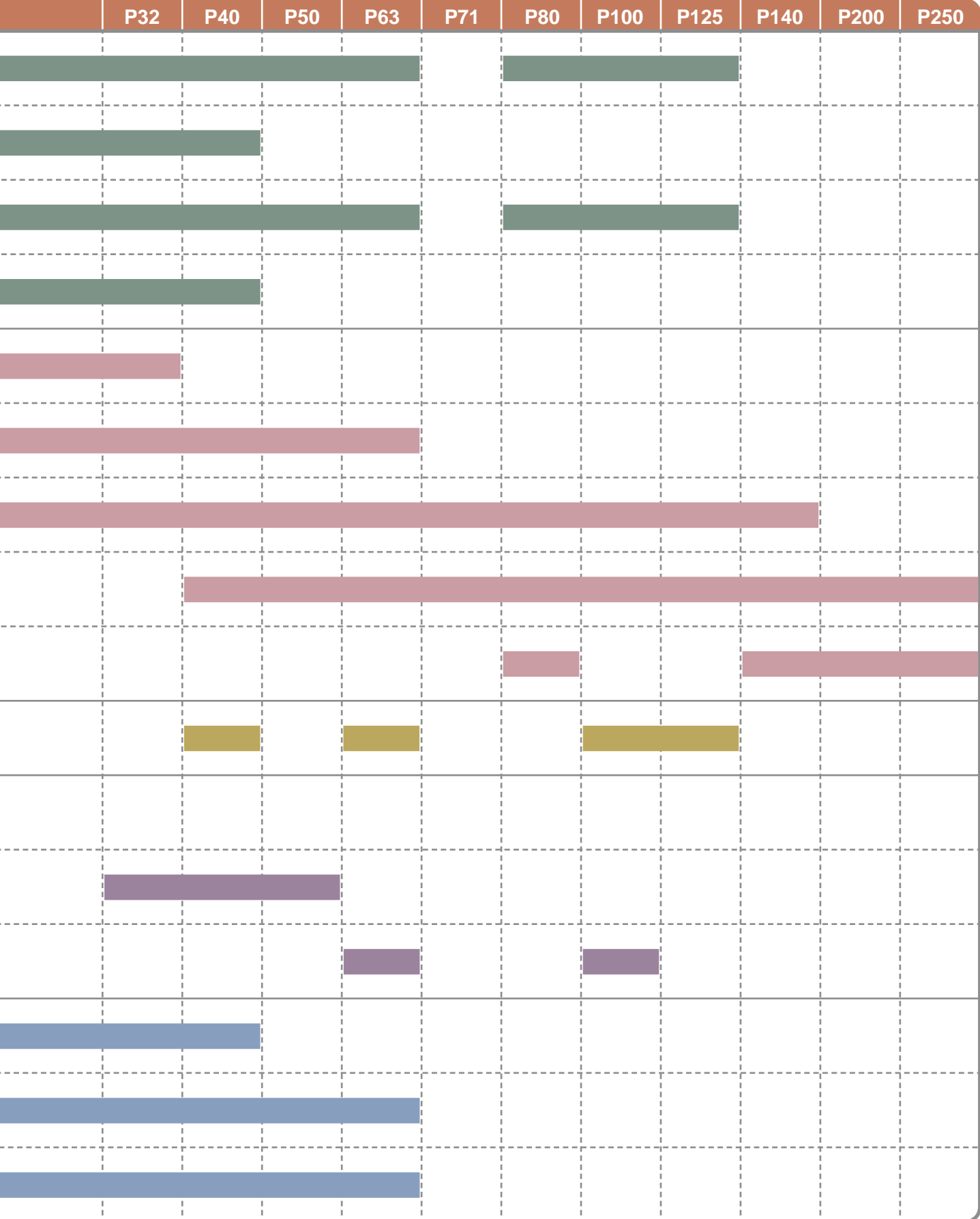
- Ceiling cassette type 4-way airflow
- Ceiling cassette type 2-way airflow
- Ceiling cassette type 1-way airflow
- Ceiling concealed type
- Fresh Air Intake type
- Ceiling suspended type
- Wall mounted type
- Floor standing exposed
- Floor mounted concealed type
- BC Controller
-  Logsnay
- OA Processing Units



# Wide Selection of Indoor Units

Type		Model name	Model	P15	P20	P25
Ceiling Cassette	4-way air flow	PLFY-P VBM-E				
		PLFY-P VCM-E2				
	2-way air flow	PLFY-P VLMD-E				
	1-way air flow	PMFY-P VBM-E				
Ceiling Concealed		PEFY-P VMR-E-L/R				
		PEFY-P VMS1(L)-E				
		PEFY-P VMA(L)-E PEFY-P VMA3-E				
		PEFY-P VMH(S)-E				
	Fresh Air Intake	PEFY-P VMH-E-F				
Ceiling Suspended		PCFY-P VKM-E				
Wall Mounted		PKFY-P VBM-E				
		PKFY-P VHM-E				
		PKFY-P VKM-E				
Floor Standing/ Floor Mounted Concealed		PFFY-P VKM-E2				
		PFFY-P VLEM-E				
		PFFY-P VLRM-E PFFY-P VLRMM-E				







# Remote Controller

- Individual Remote Controller
- Centralized Remote Controller



# The Importance of Control

The need for control is paramount in order to optimise the performance of any air conditioning system and minimize its running costs. Mitsubishi Electric offers a wide range of control options designed to meet such needs.

Operating an air conditioning system without the right control can prove costly. It's therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric have a wide range of controls available 'off-the-shelf' and individual control systems can be specifically designed to match.

Good controls will benefit any application, large or small. Air conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

## A Degree of Difference

When an air conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, whilst giving the optimum amount of control.

## The Simpler, The Better

With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air conditioning systems. From a simple hand-held controller to a AE-200E system - you are in control.



# System Controller

MITSUBISHI ELECTRIC's Air-conditioner Network System (MELANS) leads air conditioner management a PC browser and Network era.

M-NET

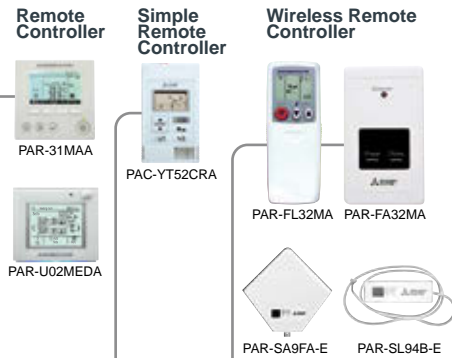
## MELANS

Use of our MELANS products enhances EFFICIENCY and QUALITY of air-conditioning, contributing to ENERGY SAVING and reduction in running cost. We offer a wide variety of MELANS products to meet all requirements - from the smallest and simplest to the largest and most complex.

We have individual remote controllers, various centralized controllers, and centralized integrated software, as well as BMS interface hardware and software etc. Above all, with AE-200E/AG-150A/EB-50GU-J/GB-50ADA-J, PC browser and long distance remote control (monitoring and operating) via communication Network is possible and easy.

### Individual Remote Controller

All of the local remote controllers feature liquid crystal and LED displays and easy to operate.



### Centralized Remote Controller

#### Advanced Touch Controller



#### ON/OFF Remote Controller



#### AHC ADAPTER



#### PI Controller



#### DIDO Controller



#### AI Controller



\*1. Advanced HVAC CONTROLLER

### CITY MULTI

#### OUTDOOR UNIT

● Y : PUHY

● R2 : PURY

#### INDOOR UNIT

● PEFY

● PMFY

● PLFY

● PCFY

● PKFY

● PFFY



BACnet<sup>®</sup> transmission line (Ethernet)

LONWORKS<sup>®</sup> transmission line

MITSUBISHI ELECTRIC's CITY MULTI can be easily connected to the building management system through BACnet<sup>®</sup>.



Ethernet

### Air-Conditioning Control System

This is a specialized air conditioning management system, in which up to 2000 indoor units can be centrally controlled.

Integrated centralized control software TG-2000A



Integrated centralized control software TG-2000A

\*Some controllers cannot be used in combination with certain models of devices.







# Centralized Remote Controller

**NEW**

## Centralized Controller AE-200E/AE-50E



**Dual Set Point**

Dimensions: 284(W) x 200(H) x 65(D) mm  
: 11-5/32(W) x 7-27/32(H) x 2-9/16(D) in.

### Control Screen for Power Consumption

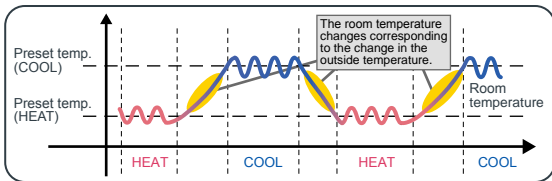


Energy consumption of applicable area is displayed by the month, day, and hour. Energy consumption of two different units, groups and blocks can be compared. Fan operation time as well as energy consumption can be displayed.

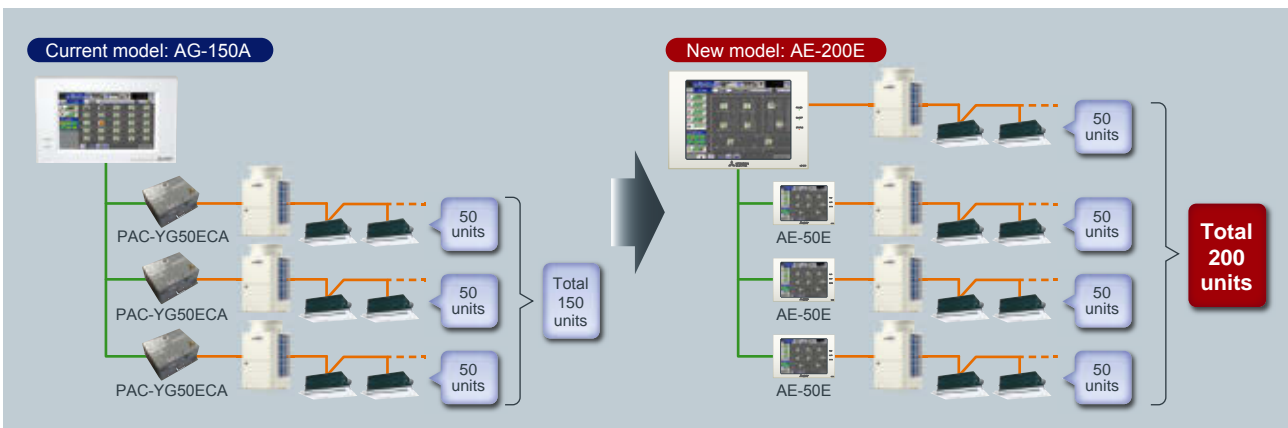


Energy consumptions of air-conditioning equipment are ranked and displayed by individual air-conditioning equipment and by area, thus visualizing high-load components. Also, comparison of energy consumption with target electric energy is possible.

### Operation pattern during Auto (dual set point) mode



### Comparison in the Number of Connectable Units



• **By comprehensively showing the energy consumption of air-conditioning equipment, it provides assistance in energy saving.**

- Energy consumption of air-conditioning equipment by individual area is displayed using graphs for easier viewing.
- Enables comparisons with the previous year's power consumption as well as with the target electric power, thus allowing users to check the operating state at a glance.
- Floor layout is displayed on the 10.4-inch LCD touch panel, facilitating easier operation of air-conditioning equipment.

• **In an easy and flexible manner, an optimum system can be established according to the scale of facilities.**

- Implements control on up to 50 indoor units of air-conditioning equipment.
- By using three units of expansion controller "AE-50E", the centralized control is implemented for the maximum of 200 indoor units.
- Connection with PC allows implementation of control on more than 200 indoor units via Web browser.<sup>\*1</sup>

\*1. Please contact your local distributor for when the feature is supported.

• **Features for operating and monitoring the hot water heat pump are also available on CAHV, PWFY, and CRHV.<sup>\*2</sup>**

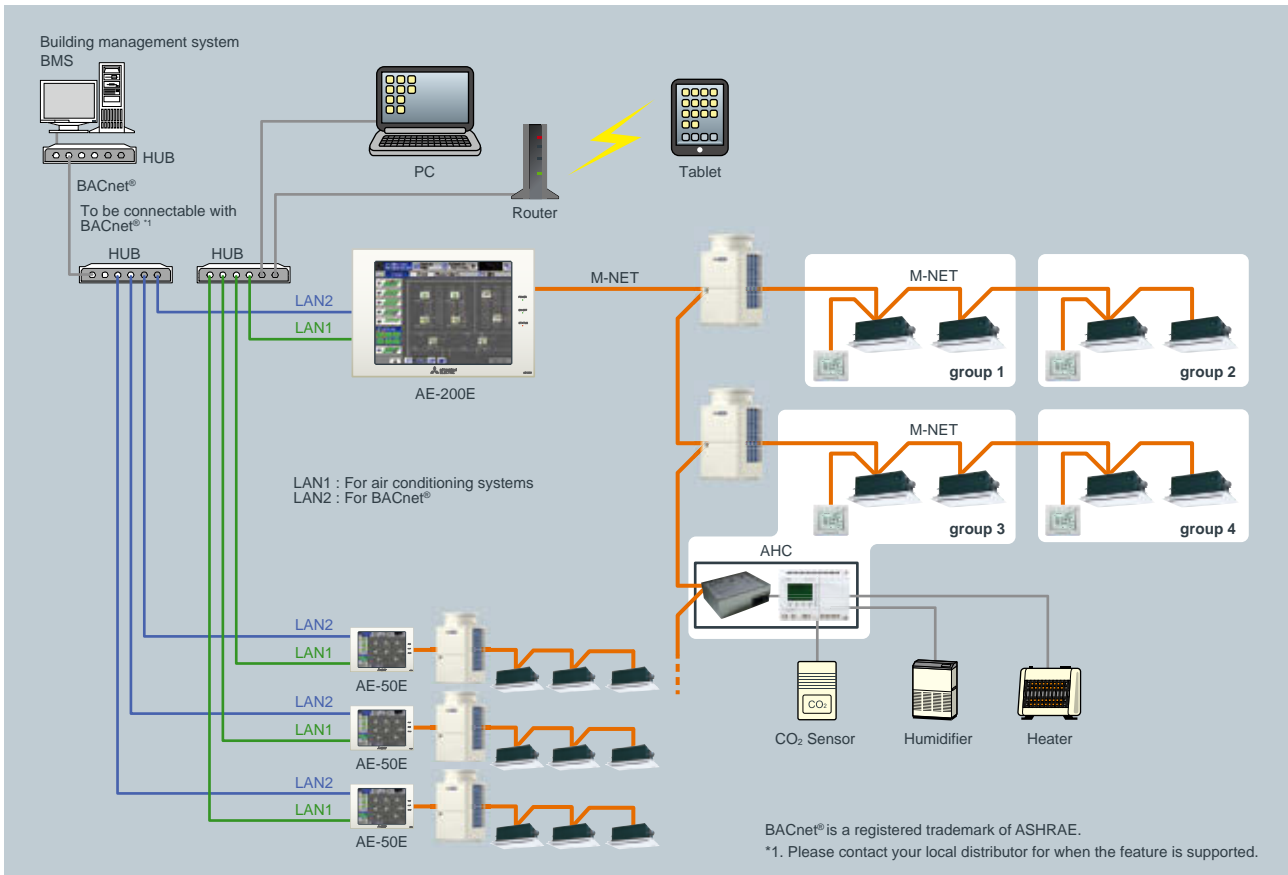
- Centralized batch control on CAHV, PWFY, and CRHV<sup>\*2</sup> is possible in addition to that on air-conditioning unit.
- \*2. Please contact your local distributor for when these features are supported on CRHV.

### • Dual set point

When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

\*Please contact your Mitsubishi Electric sales office for details.

## System Structure



## Functions

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ○ △ ●	○ ○
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto(*)/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○ ○ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] Auto : 19°C (67°F) -28°C (83°F) [17°C (63°F) -28°C (83°F)] The range of temperature depends on the air conditioning unit. [ ] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○ ○ △ ●	○
Fan speed setting	Models with 4 air flow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings : Hi/Mid/Low Models with 2 air flow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ○ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angles or 5-angles Swing, Auto (Louver cannot be set)	○ ○ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ○ △ ●	○
Permit/prohibit local operation	Individually prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ○ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioning unit, the afflicted unit and the error code are displayed.	×	□ ○
Test run	This operates air conditioning units in test run mode.	○ ○ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ○ △ ●	○
External input/output	By using optional external input/output adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	○	○
Energy Management	Bar Graph : Indoor unit Electric Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	×	□ ○ ●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	×	○
New Smart ME controller	The status of sensor on this controller can be monitored.	×	○
Smartphone/Tablet	The specified Web browser on iOS and Android OS can monitor and operate AE-200E. *1	○	○
New Web design	The web screen design is renewed for user friendly interface. *1	○ ○ △ ●	○
Initial setting software	The initial setting can be configured without the connection of AE-200E. *1	×	×
Apportionment of power consumption	Apportionment of power consumption can be calculated on AE-200 without TG-2000A. *1	●	□ ○ ●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL. *1	○	×

\*1. Please contact your local distributor for when the feature is supported.





# Optional Parts





# OPTIONAL PARTS FOR OUTDOOR UNITS

## >>For PUHY series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUHY-P400-P650YSKB / EP500-EP600YSLM
	CMY-Y200VBK2	For PUHY-P700-P900YSKB
	CMY-Y300VBK3	For PUHY-P950-P1350YSKB / EP650-EP1350YSLM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P400-P650YSKB / EP400-EP600YSLM
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
The 1st branch of P700-P1350YSKB / EP650-EP1350YSLM		
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Relay box	PAC-BH02KTY-E	Relay box should be used together with Base heater PAC-BH-EHT-E.
	PAC-BH04EHT-E	For S Module
Base heater	PAC-BH05EHT-E	For L Module
	PAC-BH06EHT-E	For XL Module

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

## >>For PURY series

Description	Model	Remarks
Twinning kit	CMY-R100VBK-A	For PURY-P400-P500YSLM
	CMY-R100VBK2	For PURY-P550-P650YSLM
	CMY-ER100VBK-A	For PURY-EP500YSLM
	CMY-R200VBK2	For PURY-P700-P800YSLM
	CMY-ER200VBK	For PURY-EP550-EP900YSLM
	CMY-R200XLVBK	For PURY-P850-900YSLM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P450-P650
Relay box	PAC-BH02KTY-E	Relay box should be used together with Base heater PAC-BH-EHT-E.
Base heater	PAC-BH04EHT-E	For S Module
	PAC-BH05EHT-E	For L Module
	PAC-BH06EHT-E	For XL Module

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

# OPTIONAL PARTS FOR CONTROL

Model	Description	Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control	PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit	PAC-YG10HA	External input/output adapter for AE-200E / AG-150A
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit	PAC-YG50ECA	Expansion controller for AG-150A
PAC-SA89TA-EP	Timer Adaptor for remote controller	PAC-SC51KUA	Power supply unit for AG-150A / GB-50ADA-J
PAC-SC37SA-E	Output signal connector	PAC-YG81TB	Mounting attachment B type for AG-150A wall-mount installations
PAC-SC36NA-E	Input signal connector	PAC-YG83UTB	Electric box for AG-150A wall-embed installations
PAC-SF46EPA	Transmission booster	PAC-YG84UTB	Electric box for AE-200E wall-embed installations
LMAPO4-E	Air conditioner interface	PAC-YG85KTb	Mounting attachment A type for AG-150A/PAC-SC51KUA wall-mount installations
PAC-YG11CDA	Electric amount count software	PAC-YG86TK	Mounting attachment for AE-200E wall-mount installations
BAC-HD150	BAC net <sup>®</sup> and M-NET adapter	PAC-YG71CBL	Black surface cover for AG-150A

# OPTIONAL EQUIPMENT FOR BC CONTROLLER

BC Controller Model	Junction pipe kit	Branch pipe
CMB-P104V-G1, GB1	CMY-R160-J1	CMY-Y102SS-G2
CMB-P105V-G1		
CMB-P106V-G1		
CMB-P108V-G1, GA1, GB1		
CMB-P1010V-G1, GA1		
CMB-P1013V-G1, GA1		
CMB-P1016V-G1, GA1, HA1, HB1		



# Installation information

## 1. General precautions

### 1-1. Usage

- ◆The air-conditioning system described in this catalogue is designed for human comfort.
- ◆This product is not designed for preservation of food, animals, plants, precision equipment, or art objects. To prevent quality loss, do not use the product for purposes other than what it is designed for.
- ◆To reduce the risk of water leakage and electric shock, do not use the product for air-conditioning vehicles or vessels.

### 1-2. Installation environment

- ◆Do not install any unit other than the dedicated unit in a place where the voltage changes a lot, large amounts of mineral oil (e.g., cutting oil) are present, cooking oil may splash, or a large quantity of steam can be generated such as a kitchen.
- ◆Do not install the unit in acidic or alkaline environment.
- ◆Installation should not be performed in the locations exposed to chlorine or other corrosive gases. Avoid near a sewer.
- ◆To reduce the risk of fire, do not install the unit in a place where flammable gas may be leaked or inflammable material is present.
- ◆This air conditioning unit has a built-in microcomputer. Take the noise effects into consideration when deciding the installation position. Especially in a place where antenna or electronic device are installed, it is recommended that the air conditioning unit be installed away from them.
- ◆Install the unit on a solid foundation according to the local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, and falling.

### 1-3. Backup system

- ◆In a place where air conditioner's malfunctions may exert crucial influence, it is recommended to have two or more systems of single outdoor units with multiple indoor units.

### 1-4. Unit characteristics

- ◆Heat pump efficiency depends on outdoor temperature. In the heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air would continue to be trapped near the ceiling and the floor level would continue to stay cold. In this case, heat pumps require a supplemental heating system or air circulator. Before purchasing them, consult your local distributor for selecting the unit and system.
- ◆When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor unit side tends to collect frost, which reduces its heating performance. To remove the frost, Auto-defrost function will be activated and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of defrost process.
- ◆Air conditioner with a heat pump requires time to warm up the whole room after the heating operation begins, because the system circulates warm air in order to warm up the whole room.
- ◆The sound levels were obtained in an anechoic room. The sound levels during actual operation are usually higher than the simulated values due to ambient noise and echoes. Refer to the section on "SOUND LEVELS" in the Data Book for the measurement location.
- ◆Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Please consider to avoid location where quietness is required.  
For BC controller, it is recommended to unit to be installed in places such as ceilings of corridor, restrooms and plant rooms.
- ◆The total capacity of the connected indoor units can be greater than the capacity of the outdoor unit. However,

when the connected indoor units operate simultaneously, each unit's capacity may become smaller than the rated capacity.

- ◆When the unit is started up for the first time within 12 hours after power on or after power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires 90 minutes maximum to complete, depending on the operation load.

#### **1-5. Relevant equipment**

- ◆Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 second or less.
- ◆Consult your local distributor or a qualified technician when installing an earth leakage breaker.
- ◆If the unit is inverter type, select an earth leakage breaker for handling high harmonic waves and surges.
- ◆Leakage current is generated not only through the air conditioning unit but also through the power wires. Therefore, the leakage current of the main power supply is greater than the total leakage current of each unit. Take into consideration the capacity of the earth leakage breaker or leakage alarm when installing one at the main power supply. To measure the leakage current simply on site, use a measurement tool equipped with a filter, and clamp all the four power wires together. The leakage current measured on the ground wire may not be accurate because the leakage current from other systems may be included to the measurement value.
- ◆Do not install a phase advancing capacitor on the unit connected to the same power system with an inverter type unit and its equipment.
- ◆If a large current flows due to the product malfunctions or faulty wiring, both the earth leakage breaker on the product side and the upstream overcurrent breaker may trip almost at the same time. Separate the power system or coordinate all the breakers depending on the system's priority level.

#### **1-6. Unit installation**

- ◆Your local distributor or a qualified technician must read the Installation Manual that is provided with each unit carefully before performing installation work.
- ◆Consult your local distributor or a qualified technician when installing the unit. Improper installation by an unqualified person may result in water leakage, electric shock, or fire.
- ◆Ensure there is enough space around each unit.

#### **1-7. Optional accessories**

- ◆Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician when installing them. Improper installation by an unqualified person may result in water leakage, electric leakage, system breakdown, or fire.
- ◆Some optional accessories may not be compatible with the air conditioning unit to be used or may not be suitable for the installation conditions. Check the compatibility when considering any accessories.
- ◆Note that some optional accessories may affect the air conditioner's external form, appearance, weight, operating sound, and other characteristics.

#### **1-8. Operation/Maintenance**

- ◆Read the Instruction Book that is provided with each unit carefully prior to use.
  - ◆Maintenance or cleaning of each unit may be risky and require expertise. Read the Instruction Book to ensure safety.
- Consult your local distributor or a qualified technician when special expertise is required such as when the indoor unit needs to be cleaned.

## 2. Precautions for Indoor unit

### 2-1. Operating environment

- ◆The refrigerant (R410A) used for air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.
- ◆If the units operate in the cooling mode at the humidity above 80%, condensation may collect and drip from the indoor units.

### 2-2. Unit characteristics

- ◆The return air temperature display on the remote controller may differ from the ones on the other thermometers.
- ◆The clock on the remote controller may be displayed with a time lag of approximately one minute every month.
- ◆The temperature using a built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- ◆Use a built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.
- ◆The room temperature may rise drastically due to Thermo OFF in the places where the air conditioning load is large such as computer rooms.
- ◆Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and the operation noise may increase.
- ◆The room temperature may rise over the preset temperature in the environment where the heating air conditioning load is small.

### 2-3. Unit installation

- ◆For simultaneous cooling/heating operation type air conditioners (R2, WR2 series), the G-type BC controller cannot be connected to the 16HP outdoor unit model or above, and the G- and GA-type BC controllers cannot be connected to the 28HP model or above. The GB- and HB-type BC controllers (sub) cannot be connected to the outdoor unit directly, and be sure to use them with GA- and HA-type BC controllers (main).
- ◆The insulation for low pressure pipe between the BC controller and outdoor unit shall be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.
- ◆Do not have any branching points on the downstream of the refrigerant pipe header.
- ◆When a field-supplied external thermistor is installed or when a device for the demand control is used, abnormal stop of the unit or damage of the electromagnetic contactor may occur. Consult your local distributor for details.
- ◆When indoor units operate a fresh air intake, install a filter in the duct (field-supplied) to remove the dust from the air.
- ◆The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" in the Data Book for the available range for fresh air intake volume.
- ◆Operating fresh air intake on the indoor unit may increase the sound pressure level.



### 3. Precautions for Fresh air intake type indoor unit

#### 3-1. Usage

- ◆ This unit mainly handles the outside air load, and is not designed to maintain the room temperature. Install other air conditioners for handling the air conditioning load in the room.

#### 3-2. Unit characteristics

- ◆ This unit cannot perform the drying operation. The unit will continue the fan operation and blow fresh air (air that is not air-conditioned) when the Heating Thermo-OFF or Cooling Thermo-OFF mode is selected.
- ◆ The fan may stop tentatively when the unit is connected to the simultaneous cooling/heating operation type outdoor unit (R2, WR2 series) or during the defrost cycle.
- ◆ This unit switches the Thermo ON or OFF depending on the room temperature. The outside air is directly supplied into the room during Thermo OFF. Take caution of the cold supply air due to low outside air temperature and of condensation in the room due to high humidity of the outside air.
- ◆ Outside air temperature ranges for the operation must be as follows:  
Cooling: 21°C D.B./15.5°C W.B. ~ 43°C D.B./35°C W.B.  
Heating: -10°C D.B. ~ 20°C D.B.  
The unit is forced to operate Thermo OFF (fan operation) when the outside air temperature is as follows.  
Cooling: 21°C D.B. or below; Heating: 20°C D.B. or above
- ◆ Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.
- ◆ If only this unit is used as an indoor unit, condensation may form at the supply air grill while the unit is operated in the cooling mode. This unit cannot operate dehumidifying.
- ◆ Use the unit in the way that the airflow rate will not exceed the 110% of the rated airflow.

## 4. Precautions for Outdoor unit/Heat source unit

### 4-1. Installation environment

- ◆Outdoor unit with salt-resistant specification is recommended to use in a place where it is subject to salt air.
- ◆Even when the unit with salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in Instructions Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to the guidelines published by JRAIA (JRA9002).
- ◆Install the unit in a place where the flow of discharge air is not obstructed. If not, the short-cycling of discharge air may occur.
- ◆Provide proper drainage around the unit base, because the condensation may collect and drip from the outdoor units.  
Provide water-proof protection to the floor when installing the units on the rooftop.
- ◆In a region where snowfall is expected, install the unit so that the outlet faces away from the direction of the wind, and install a snow guard to protect the unit from snow. Install the unit on a base approximately 50 cm higher than the expected snowfall. Close the openings for pipes and wiring, because the ingress of water and small animals may cause equipment damage. If SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and take caution for the installation to avoid the risk of corrosion.
- ◆When the unit is expected to operate continuously for a long period of time at outside air temperatures of below 0°C, take appropriate measures, such as the use of a unit base heater, to prevent icing on the unit base. (Not applicable to the PUMY series)
- ◆Install the snow guard so that the outlet/inlet faces away from the direction of the wind.
- ◆When the snow accumulates approximately 50 cm or more on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand snow loads in a place where snow accumulates.
- ◆Provide proper protection around the outdoor units in places such as schools to avoid the risk of injury.
- ◆A cooling tower and heat source water circuit should be a closed circuit that water is not exposed to the atmosphere.  
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air so that the oxygen from being dissolved in the water should be 1 mg/L or less.
- ◆Install a strainer (50 mesh or more recommended) on the water pipe inlet on the heat source unit.
- ◆Interlock the heat source unit and water circuit pump.
- ◆Note the followings to prevent the freeze bursting of pipe when the heat source unit is installed in a place where the ambient temperature can be 0°C or below.
  - ◆Keep the water circulating to prevent it from freezing when the ambient temperature is 0°C or below.
  - ◆Before a long period of non use, be sure to purge the water out of the unit.

### 4-2. Circulating water

- ◆Follow the guidelines published by JRAIA (JRA-GL02-1994) to check the water quality of the water in the heat source unit regularly.
- ◆A cooling tower and heat source water circuit should be a closed circuit that water is not exposed to the atmosphere.  
When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air so that the oxygen from being dissolved in the water should be 1 mg/L or less.

### 4-3. Unit characteristics

- ◆When the Thermo ON and OFF is frequently repeated on the indoor unit, the operation status of outdoor units may become unstable.

### 4-4. Relevant equipment

- ◆Provide grounding in accordance with the local regulations.

## 5. Precautions for Control-related items

### 5-1. Product specification

- ◆To introduce the MELANS system, a consultation with us is required in advance. Especially to introduce the electricity charge apportioning function or energy-save function, further detailed consultation is required. Consult your local distributor for details.
- ◆Billing calculation for AE-200E, AE-50E, AG-150A, EB-50GU-J, GB-50ADA-J, TG-2000A, or the billing calculation unit is unique and based on our original method. (Backup operation is included.) It is not based on the metering method, and do not use it for official business purposes. It is not the method that the amount of electric power consumption (input) by air conditioner is calculated. Note that the electric power consumption by air conditioner is apportioned by using the ratio corresponding to the operation status (output) for each air conditioner (indoor unit) in this method.
- ◆In the apportioned billing function for AE-200E, AE-50E, AG-150A, EB-50GU-J, and GB-50ADA-J, use separate watt-hour meters for A-control units, K-control units, and packaged air conditioner for City Multi air conditioners. It is recommended to use an individual watt-hour meter for the large-capacity indoor unit (with two or more addresses).
- ◆When using the peak cut function on the AE-200E, AE-50E, AG-150A, EB-50GU-J, GB-50ADA-J, note that the control is performed once every minute and it takes time to obtain the effect of the control. Take appropriate measures such as lowering the criterion value. Power consumption may exceed the limits if AE-200E, AE-50E, AG-150A, EB-50GU-J, or GB-50ADA-J, malfunctions or stops. Provide a back-up remedy as necessary.
- ◆The controllers cannot operate while the indoor unit is OFF. (No error)  
Turn ON the power to the indoor unit when operating the controllers.
- ◆When using the interlocked control function on the AE-200E, AE-50E, AG-150A, EB-50GU-J, GB-50ADA-J, PAC-YG66DCA, or PAC-YG63MCA, do not use it for the control for the fire prevention or security. (This function should never be used in the way that would put people's lives at risk.) Provide any methods or circuit that allow ON/OFF operation using an external switch in case of failure.

### 5-2. Installation environment

- ◆The surge protection for the transmission line may be required in areas where lightning strikes frequently occur.
- ◆A receiver for a wireless remote controller may not work properly due to the effect of general lighting. Leave a space of at least 1 m between the general lighting and receiver.
- ◆When the Auto-elevating panel is used and the operation is made by using a wired remote controller, install the wired remote controller to the place where all air conditioners controlled (at least the bottom part of them) can be seen from the wired remote controller. If not, the descending panel may cause damage or injury, and be sure to use a wireless remote controller designed for use with elevating panel (sold separately).
- ◆Install the wired remote controller (switch box) to the place where the following conditions are met.
  - ◆Where installation surface is flat
  - ◆Where the remote controller can detect an accurate room temperature  
The temperature sensors that detect a room temperature are installed both on the remote controller and indoor unit. When a room temperature is detected using the sensor on the remote controller, the main remote controller is used to detect a room temperature. In this case, follow the instructions below.
    - ◆Install the controller in a place where it is not subject to the heat source.  
(If the remote controller faces direct sunlight or supply air flow direction, the remote controller cannot detect an accurate room temperature.)
    - ◆ Install the controller in a place where an average room temperature can be detected.
    - ◆ Install the controller in a place where no other wires are present around the temperature sensor.  
(If other wires are present, the remote controller cannot detect an accurate room temperature.)
- ◆To prevent unauthorized access, always use a security device such as a VPN router when connecting AE-200E, AE-50E, AG-150A, EB-50GU-J, GB-50ADA-J, or TG-2000A to the Internet.

# Maintenance equipment

## Maintenance cycle [Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPS (The number of START/STOPS is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

If the following conditions are met, the equipment may not be used, or the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where the temperature and humidity are high or change dramatically
- When equipment is used in an environment where the power supply fluctuations (the distortion of voltage, frequency, and waveform) are large (Only within the allowable range)
- When equipment is used in an environment where the unit may receive vibration or mechanical shock
- When equipment is used in an environment where dust, salt, toxic gases such as sulfur dioxide and hydrogen sulfide, and oil mist are present
- When equipment starts/stops frequently and operates for a long time (24-hour air conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearing		15,000 hours	Sensor (thermistor, presser sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

- Sudden unpredictable accident may occur even if check-up is performed.

## Replacement cycle of consumable components

### [Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)







**for a greener tomorrow**

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



FM33568 / ISO 9001:2008

The Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality management for the production of refrigeration and air conditioning equipment.

**ISO Authorization System**

The ISO 9000 series is a plant authorization system relating to quality management as stipulated by the ISO. ISO 9001 certifies quality management based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.



The Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO). Registered on March 10, 1998.

**⚠ Warning**

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
  - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
  - It may also be in violation of applicable laws.
  - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air-conditioning equipments and heat pumps contain a fluorinated greenhouse gas, R410A.

**MITSUBISHI ELECTRIC CORPORATION**