MITSUBISHI ELECTRIC

Changes for the Better

AIR CONDITIONING SYSTEMS

CITY MULTI



CM26ME-E

CITY MULTI YKD1-Series

Further Enhanced Energy Saving

Saving energy is becoming ever more important all around the world.
Mitsubishi Electric is at the forefront of this development,
with advanced products that realize high-quality energy saving solutions
for customers in all fields.

Energy saving key point **1**

High rated performance

Compared to the conventional series, all models of the YKD1 series (8 to 60HP) are improved rated EER/COP. This means less energy will be consumed during peak hours, such as high-temperature periods in the daytime.

Energy saving key point **2**

High partial-load performance

The YKD1-Series surpass the conventional series not only in rated specifications but also in terms of partial-load performance. During mornings and evenings, when the temperature is lower and less cooling power is required, better efficiency also enables significant energy savings.

Energy saving key point **3**

Energy saving assist function

The functions makes it possible to optimize energy saving performance by closely matching the requirements of the installation location. This makes it possible to achieve results that surpass the specifications of the product, contributing to truly energy-saving buildings.


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CITY MULTI

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The CITY MULTI VRF System provides more satisfactory air-conditioning systems with 6 advantages.

1. Energy-saving performance

Wasteful energy use can be prevented by operating the inverter according to the load and by using an intelligent power module.

2. Self-developed Compressor

Mitsubishi Electric has focused on in-house development of the compressor, the core component of the air conditioner. We have developed compressors that meet the specifications required by the air conditioner.

3. Own system control: M-NET

Mitsubishi Electric uses “M-NET”, an original air-conditioner network system.
M-NET is a network that connects CITY MULTI air conditioners in a building through the use of transition wiring with 2 non-polar wires.
Control of air-conditioning units and fine control of each indoor unit is accomplished by connecting Mitsubishi Electric Air-conditioner Network System (MELANS) to M-NET.

4. Developed in Japan

The product concept and key parts of CITY MULTI, have been designed at Mitsubishi Electric Works in Japan. This comprises all of the highly technological developments over our long history in Japan.

5. Mitsubishi Electric Quality

CITY MULTI is produced under strict production controls. Production lines are controlled to prevent any minor errors by unique systems, such as “parts server”, “Cart Navi”.

6. Various applications

CITY MULTI can be installed in various types of buildings, such as residences, offices and hotels. A suitable model can be selected according to the situation of use.

What is Variable Refrigerant Flow (VRF)?

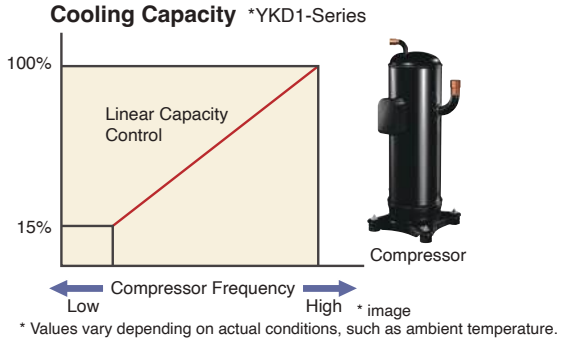
VRF is characterized by the ability to connect multiple indoor units to one outdoor unit and control the indoor units individually. The outdoor unit uses an inverter-driven compressor and can change the refrigerant flow rate according to the indoor unit load.
Since the capacity range of the indoor unit is wide, air-conditioning of even small spaces is possible. Also, indoor units can be individually started, stopped, and controlled to regulate temperature, thereby leading to energy savings.

Energy saving performance

The advantage of CITY MULTI from Mitsubishi Electric is its high energy efficiency, which leads to increased energy savings.
The energy-saving performance of CITY MULTI has been improved to a high level within the industry through technical innovation.

Smart control for saving energy

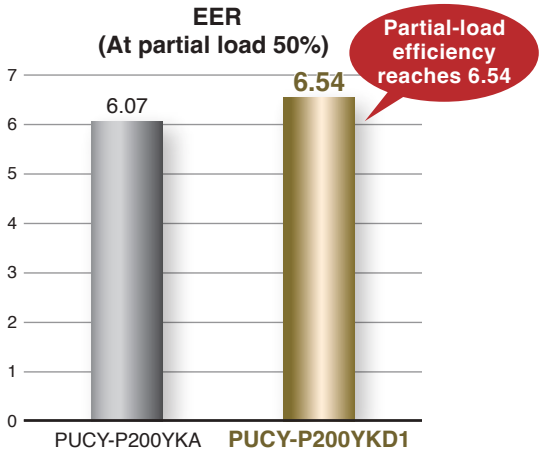
The compressor varies its speed to match the indoor cooling or heating demand, thus it only consumes the amount of energy required. When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non inverter system.

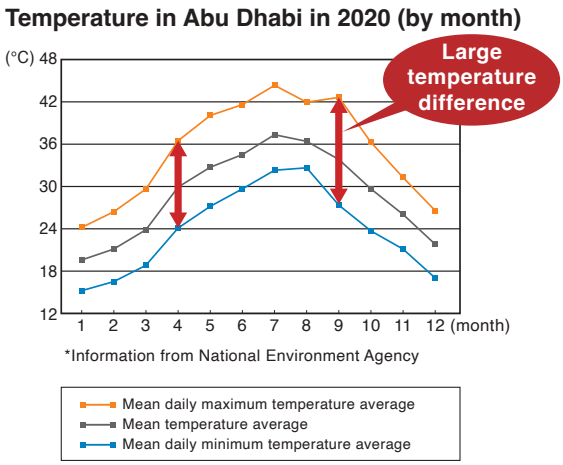


* Values vary depending on actual conditions, such as ambient temperature.

The Importance of Partial-Load Efficiency

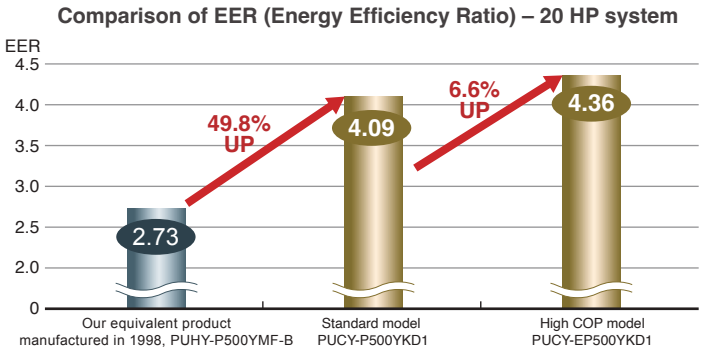
The energy efficiency ratio (EER) is an index calculated at an ambient temperature of 35°C [95°F]. Actually, the temperature difference between day and night is large, even on hot days.Therefore, it is important to save energy across various temperatures where the EER cannot be measured perfectly. **CITY MULTI can achieve true energy savings by improving efficiency not only under rated conditions, but also under partial-load conditions.**





High rated performance

CITY MULTI's distinct advantage is its high energy efficiency, which leads to increased energy savings.
One of the industry's highest level of energy-saving performance has been achieved through technical innovation.



Self-developed Compressor

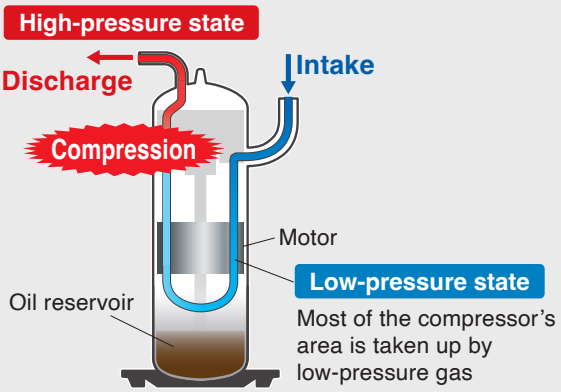
The compressor is the heart of an air conditioner, contains inverter control. Mitsubishi Electric manages all compressor production processes, from development, design, and manufacture to quality control. We develop high-performance compressors to improve performance to a higher level.



Key compressor parts designed by Mitsubishi Electric

Key parts of the compressor such as the scroll and motor (core) are designed by Mitsubishi Electric to increase the operation efficiency of the outdoor unit.
In order to achieve energy saving operation while also improving reliability, a low-pressure shell compressor is used, resulting in stable long-term running performance.

High reliable low-pressure shells



Cross section of compressor

* except PUMY series

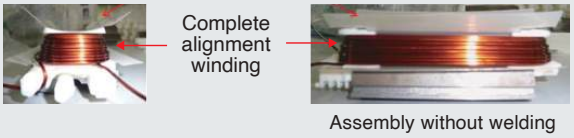
Low-pressure shell compressor for top flow models

Most of the area in the compressor is taken up by the low-pressure gas. The refrigerant is drawn in from the side of the compressor and moves to the bottom of the shell where it flows to the scroll section and is compressed. The compressed high-pressure gas is discharged from the top of the compressor.
This prevents the motor and bearings from being heated up by the compressed high-pressure gas.
The refrigerant is collected at the bottom of the shell to reduce the rate of compressor damage caused by liquid refrigerant compression.

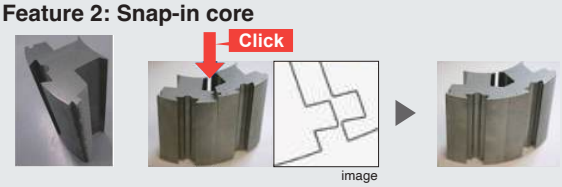
Snap-in core

Mitsubishi Electric has incorporated a new and original production process that wraps a conductor directly around the split core to create a compact and highly efficient motor.

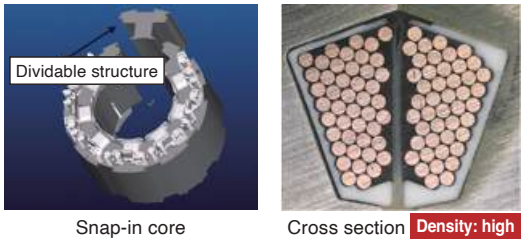
Feature 1: Coils wound around each core



Feature 2: Snap-in core



Compressor motor



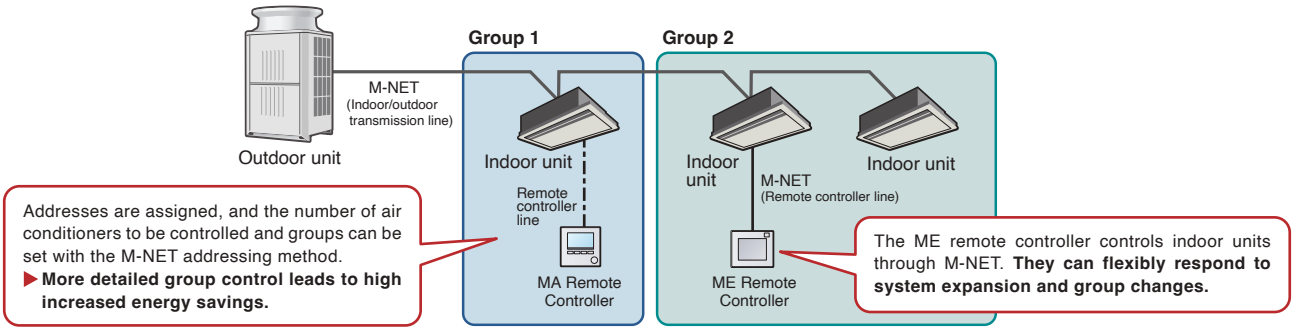
Motor efficiency is high at low speeds when coil occupancy is high, thus improving compression efficiency for low-load operation.

Own system control: M-NET

A networked system called M-NET is used to control air conditioner operation. Air conditioners can be grouped and controlled appropriately for use by MELANS (Mitsubishi Electric Air-conditioner Network System), which centrally controls air-conditioning units on the network.

Basic M-NET system

The basic M-NET system for multiple building air conditioners consists of outdoor units, indoor units and remote controllers. Outdoor units and indoor units are connected to M-NET through the “outdoor/indoor unit transmission line,” and the indoor units and remote controllers are connected through the “remote controller line”. Two types of local remote controllers are available: MA and ME. Numbers called M-NET addresses are assigned to outdoor units, indoor units, and local remote controllers, **thus allowing interaction via commands to operate the air conditioners and change settings.**

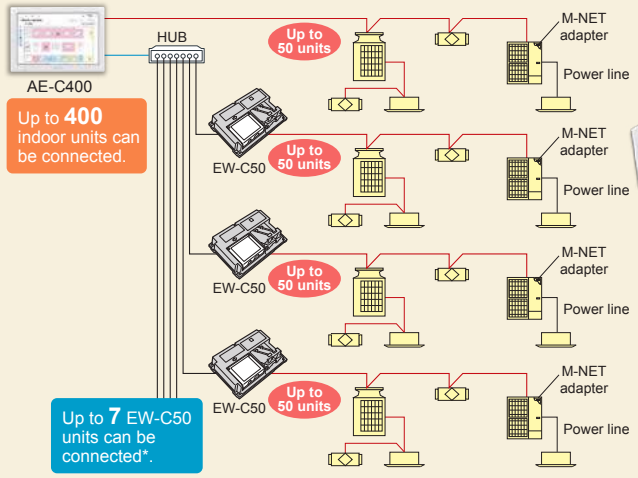


System example

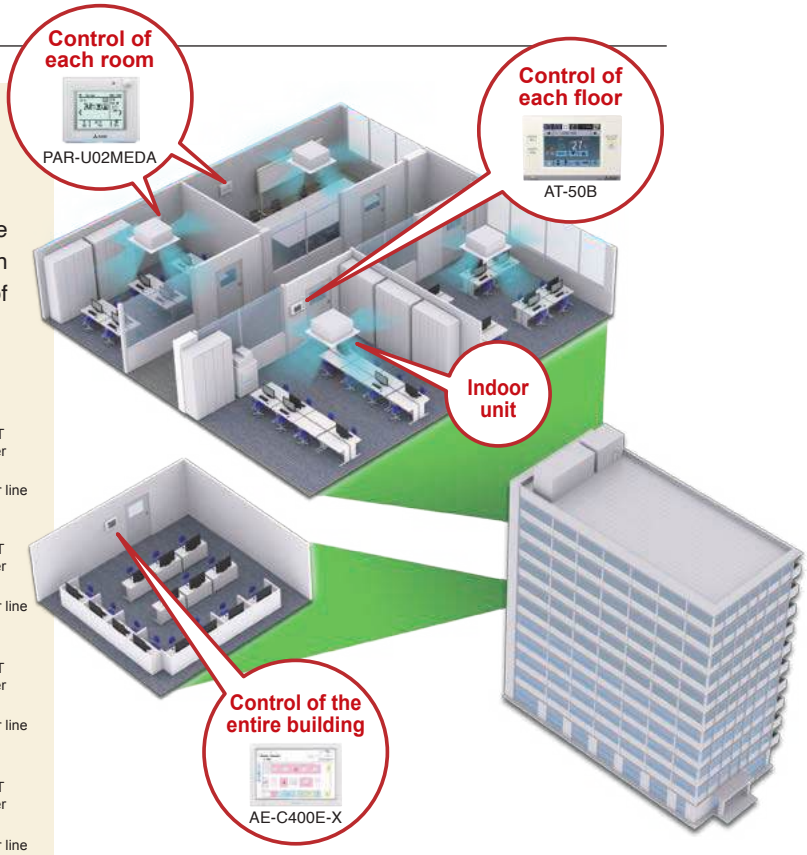
Centralized control using AE-C400E-X

When one AE-C400E-X unit is combined with the EW-C50E-X expansion controller, up to 400 indoor units can be controlled. It is also possible to control operating time of the air conditioners to reduce the power consumption.

System Structure



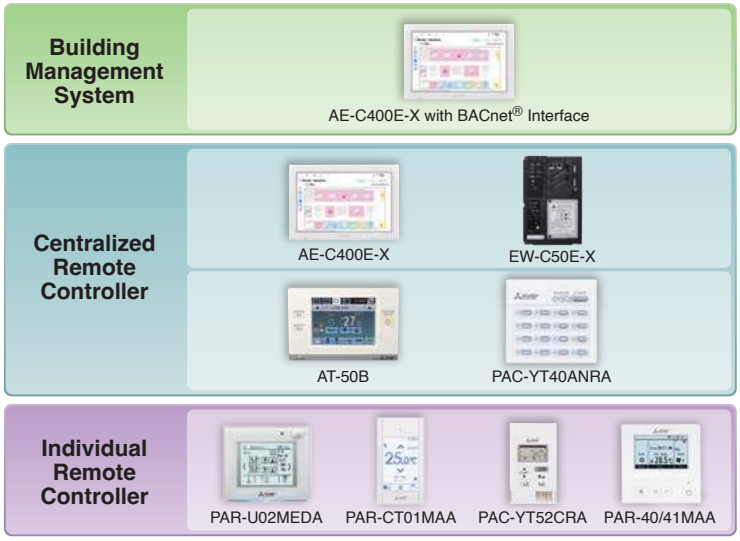
* When the M-NET of AE-C400 is not used, up to 8 sets of EW-C50 can be connected.



Controller example

There are many controller options:
They can be connected to a Building Management System using BACnet® for a high level of control.

* Optional parts or licenses may be required depending on the type of control.
For more detailed information, please contact your nearest sales office or distributor.

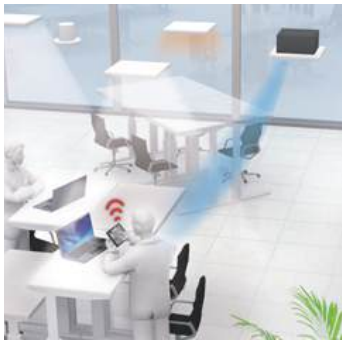


Examples of controller functions

Control using smartphone or tablet terminal* (AE-C400E-X)

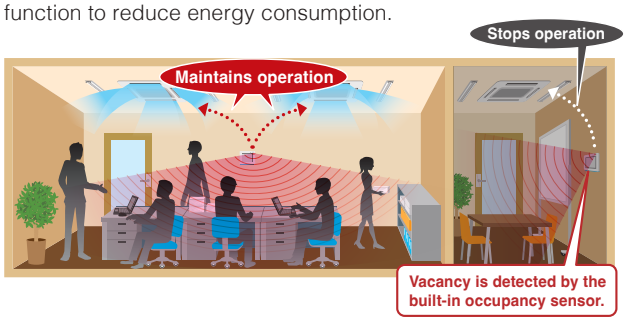
Air conditioners can be monitored and operated by using tablets and smartphones when a Wi-Fi router is connected to the LAN.

* A Wi-Fi router is required to use this function.



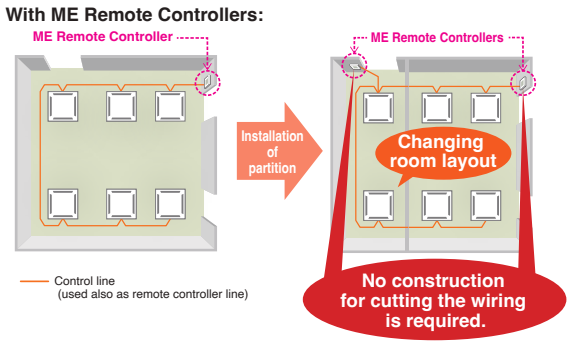
Auto-off function via the occupancy sensor (PAR-U02MEDA)

When **the built-in occupancy and brightness sensors detect vacancy in a specific zone**, the controller uses its internal function to reduce energy consumption.



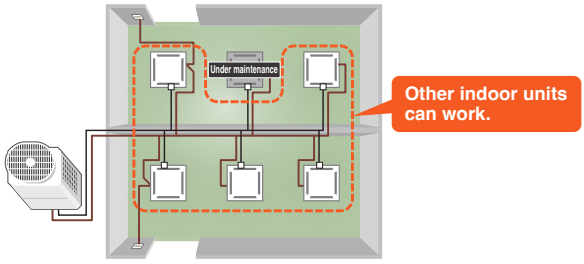
ME Controller (PAR-U02MEDA)

The ME remote controller can be operated when it is connected with any of the indoor units.
When changing the room layout, you can set the groups easily with the remote controller.



Operation can be continued even if indoor unit stops for maintenance

Mitsubishi Electric indoor units can continue to operate, even if one is under repair, because the unit's LEV is closed by supplying power from outdoor unit automatically.

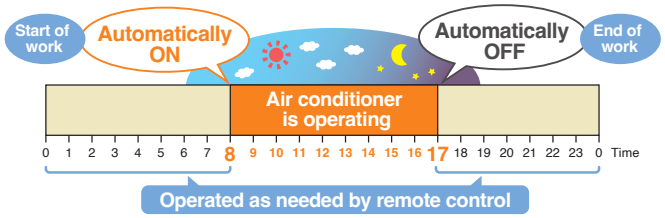


* Before starting maintenance, please confirm that LEV is closed.

Schedule-based control of temperature and operation mode

The air conditioner's start time can be scheduled according to the opening time or a fixed time. The function can be locked during working hours so that staff cannot control the air conditioners.

* Centraized Remote controller is required to use this function.



Developed in Japan

Mitsubishi Electric is renowned globally and is a household name with a solid reputation for excellent products and services. The company was founded in 1920 and is known by its present name: Mitsubishi Electric. Since our founding, we have risen to the top level of the air conditioning industry and we continue to maintain that position. The company is proud of its achievements in providing some of awarded systems on the market.

History of CITY MULTI



1984 Japan
Sales launch of "**CITY MULTI**" Series of variable refrigerant flow (VRF) air-conditioning systems.

1992
Export of CITY MULTI starts.

2011 Overseas
The model for Middle east/ Asia, YHA, was released for the first time.



2014 Overseas
Key parts are improved to create high-performance modules.





2021 Overseas
The latest in the series delivers high energy efficiency.
It also ensures excellent reliability with improved cooling capacity at high outside air temperatures.

Reliable modules appreciated

1991	CITY MULTI R2-Series (awarded "Technical Prize" by Japan Society of Refrigerating and Air Conditioning Engineers)*
2000	City Multi R2 New Refrigerant Series (awarded "Chairman Prize" of ECCJ)*
2007	"Replace Multi Air Conditioner" (awarded "Chairman Prize" by Japan Institute of Invention and Innovation)*
2010	"Replace Multi Air Conditioner" (honored by Minister of Education, Culture, Sports, Science and Technology in the science and technology category)
2011	Ceiling concealed reheat indoor unit "PEFY-AF1200CFM(R)" for North America (awarded "Product of the Year" prize at AHR Expo 2011)
2015	"Grand Multi Air Conditioner 2015" (awarded "Technical Prize" by Japan Society of Refrigerating and Air Conditioning Engineers)*
2017	City Multi Hybrid VRF (awarded "Air Conditioning Product of the Year" prize at The ACR News Awards 2017)

* The models for Japan were awarded.

Creating high-quality products with cutting-edge technologies and professional people who have deep experience in the development factory

All models of CITY MULTI to be exported around the world are examined at the development factory to ensure that they can withstand the environmental conditions in each region, and products that have passed the quality check are supplied. The marketing, unit design and quality control departments put together a team to work on developing high-quality products. Also the parts used in the units are checked for quality. We have determined the evaluation criteria for more than 300 parts and use only those that have passed the durability and safety tests.

Salt spray test

A sodium chloride solution is sprayed on the part to be tested and evaluated, and the rust generated on the surface is observed to evaluate the corrosion resistance.



In accordance with JRA90021, the standard models and BS models are subjected to this salt spray test for 480 hours and 960 hours respectively.

Heat shock test

The part is exposed to repeated temperature changes to verify its resistance to changes in ambient temperature.



All parts for CITY MULTI have been checked for quality and reliability.

Mitsubishi Electric Quality

Under its quality first principle, Mitsubishi Electric is creating products with an unwavering commitment to quality, producing air conditioning systems that provide comfortable spaces for people around the world.

Mitsubishi Electric Quality

COMFORT

Beyond creating a comfortable environment, we aim to achieve harmony between users and their surroundings.

EFFICIENCY

We strive to achieve optimum cost performance by continuously reducing energy requirements and improving eco-friendliness.

DURABILITY

Our products are subjected to rigorous testing under harsh conditions that are more extreme than that of the real world to ensure years of reliable service.



Commitment to quality on the production line

The main plant for CITY MULTI, Air-Conditioning & Refrigeration Systems Works, produces many kinds of products and has introduced several unique systems.
These systems include, for example, a “parts server” for preparing parts for assembled, a display for providing indications according to the work point, and “Cart Navi,” which prevents work from proceeding to the next process if the correct procedure and specified tools have not been used to achieve the expected process quality. The plant intends to improve both the production efficiency and quality. As the result of this, human errors can be prevented in operations requiring high skills and when handling small parts, such as screws, thus producing high-quality products. These same systems are used in our Thai plant.



Air-Conditioning & Refrigeration Systems Works



Cart Navi

On the production line for the primary product, i.e. outdoor units, an airtightness check is performed using helium to eliminate any refrigerant leakage from the piping. After the airtightness check is performed twice and the units are assembled, the units are tested to confirm normal operation. Only the units that pass this test are shipped.



Compressor also developed and manufactured by Mitsubishi Electric*
Refrigerant leak inspection process using helium gas

* Applies to CITY MULTI.

Varied applications

Various commercial and residential facilities can benefit from the advantages of Mitsubishi Electric's CITY MULTI system.

Design flexibility

Depending on building design, size and usage, the choice of air conditioning differs. The CITY MULTI series offers a wide range of solutions to match various design requirements.

Energy saving

The CITY MULTI series and system realize high energy savings with zoned comfort operating unit independently by units, room or floors.

Simple installation

Compared to a conventional chiller and fan coil system, CITY MULTI 2-pipe system does not require pumps or control panels, as these functions are integrated into the outdoor units. Moreover, maintenance is easier with less key components.

Residence

The CITY MULTI series provides homeowners with large residences with multiple bedrooms an energy efficient solution which realizes comfort living environment through daily operations. Different types of indoor units can be selected and connected to an outdoor unit

Outdoor unit

Owners

Energy saving with zoned comfort

It is possible to manage air conditioning units independently by units, room or floor.

High partial load performance

In residential applications, not all rooms are used at once.
Having an efficient operation even at partial load is a great advantage in running cost.

Low operation noise

Low noise mode offers residents a peaceful living environment.

* Capacity drops during low noise mode.



Air-cooled heat pump Y series

Up to 60HP model lineup and max. 50 indoor units connectable. Suitable to cover multi-story by single outdoor unit.



* Please do not install the outdoor unit adjacent to a room where quietness is required.

Flexible installation

External static pressure selectable (0,30,60 Pa) to match site condition.

Quiet operation mode

Low noise operation contributes to realize a peaceful living environment.

* Capacity drops during low noise mode.

(Ex) PUHY-P200YKD1 Standard 57dB* -13 dB Low noise mode 44dB

Low noise mode (night mode)

* For the details on low noise operation, refer to the note on P42.

Indoor unit

Various types of indoor units contribute to meet different room design.

Owners













Low static ceiling concealed type

Low noise level: Min. 22dB (P15)*
External static pressure: 5, 15, 35, 50 Pa

Medium static ceiling concealed type

Low noise level : Min. 22dB (P20-25)*
External static pressure: 35, 50, 70, 100,150 Pa

1-way airflow ceiling mounted type

Excellent solution for rooms with lighting equipment are at the center of the room or wall surface occupied.

* Measured in anechoic room under testing condition. Actual noise depends on installation.

Control

Local remote controller

Easy to understand and use with simple buttons.

Basic operation and status monitoring available.

* Requires wireless signal receiving unit



Wireless remote controller

Centralized remote controller

LCD color touch panel enables easy and simple operation.

Able to collectively control all indoor units (up to 50 indoor units).



Advanced touch controller

Office

Air conditioning systems supplied by Mitsubishi Electric play an important role in providing comfort to the workers, preserving flexibility, by enabling control to be maintained of the whole building, as well as independent control of floors and spaces.



Outdoor unit

Owners
Developers

Energy saving with zoned comfort

It is possible to manage air conditioning units independently by units, room or floor. Provides personal comfort for the room occupants and at the same time saves energy.



Middle/high-rise

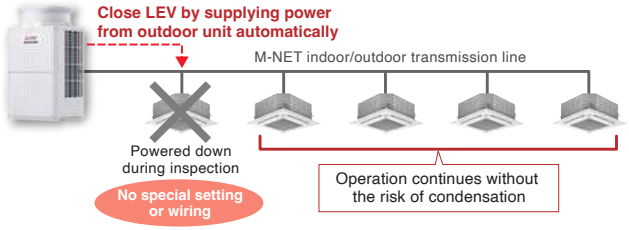
Air-cooled heat pump Y series

One outdoor unit connects up to 50 indoor units. Max total piping length of 1,000m provides flexibility to match requirement of various buildings.

Owners
Tenants

Highly reliable system

Measures in case of malfunction or maintenance leads to higher reliability.



Mitsubishi Electric's original M-NET system enables indoor units to continue operation even when one unit in the system stops due to malfunction or maintenance.

Open space

Indoor unit

Tenants

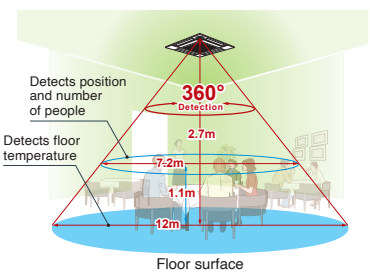
Various types of indoor units contribute to enhance air environment.

Customized airflow with i-see sensor

Realized with i-see sensor adjusting 4 vane direction (direct/indirect).



4-way
airflow type



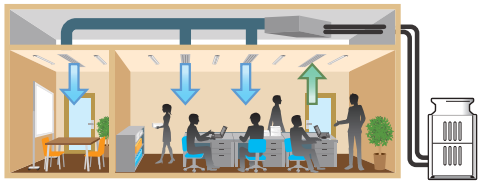
* In case of a 2.7m ceiling

Visually discreet with flexible duct design

The indoor units are concealed, and only the inlet and outlet slits can be seen. Static pressure up to 150Pa enables ducting to multiple rooms.



Medium static pressure
ceiling concealed type



Centralized Control - AE-C400E-X

Owners
Developers

Assist quick response to error

Error notification e-mail and error log / icons on the display enables quick action in case of trouble.

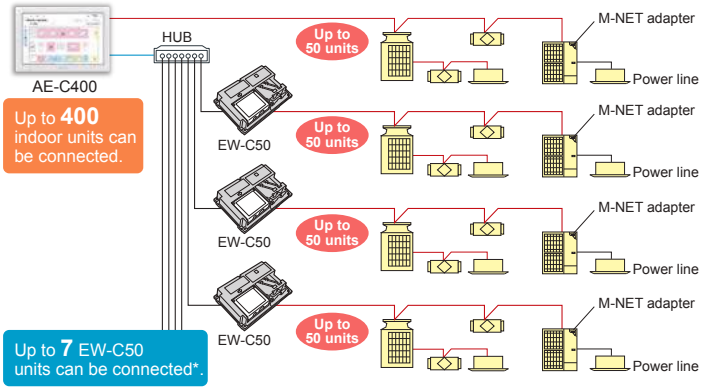
Time saving billing method

AE-C400E-X apportions the value on the WHM of the outdoor unit based on the operating time of each indoor unit.

Advanced energy saving with peakcut operation

Energy saving with outdoor unit capacity control depending on demand level or the electric energy values.

On-site or Remote control



* When the M-NET of AE-C400 is not used, up to 8 sets of EW-C50 can be connected.

AE-C400E-X is a LCD color touch screen controller monitoring and controlling up to 400 indoor units/groups. Enables on-site status monitoring, operation, scheduling, settings.

Remote management



The monitoring and control information can also be viewed remotely from a LAN-connected PC, tablet, or smartphones.

BACnet®

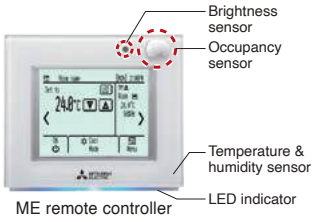
The system can be combined into the large-scaled BMS management via BACnet®.

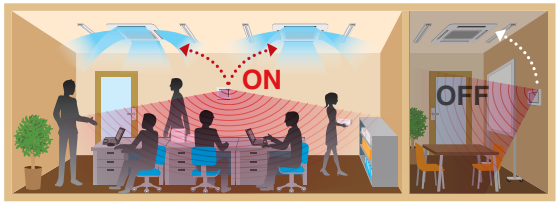
Meeting rooms

Local Control

Energy saving management with automatic OFF

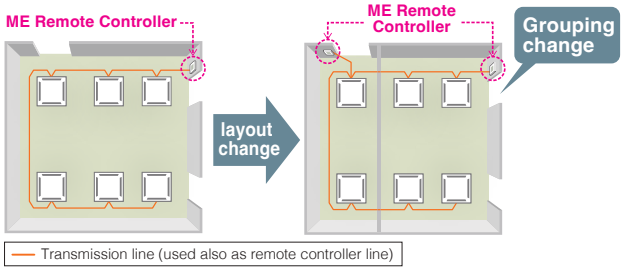
Vacancy detected by the built-in occupancy sensor.





Easy layout change with ME type controller

Able to smoothly respond to tenant requirement to change layout.



Hotels

The CITY MULTI series provides hotels a solution to realize greater comfort and energy conservation through daily operations.

Outdoor unit

Owners
Developers

Energy saving with zoned comfort

It is possible to manage air conditioning units independently by units, room or floor.

High partial load performance

In hotels, the occupancy rate depends on the season and day of the week. Having an efficient operation even at partial load is a great advantage in running cost.





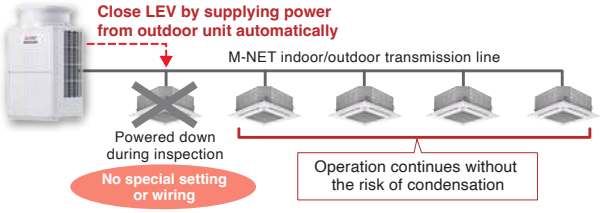
Air-cooled heat pump Y series

One outdoor unit connects up to 50 indoor units.
Max total piping length of 1,000m provides flexibility to match requirement of various buildings.

Owners
Tenants

Highly reliable system

Measures in case of malfunction or maintenance leads to higher reliability.



Local Control

Guests

Easy to use with large-sized icons and full color touch panel display.

Customized display color and control paramaters.



MA touch
remote controller



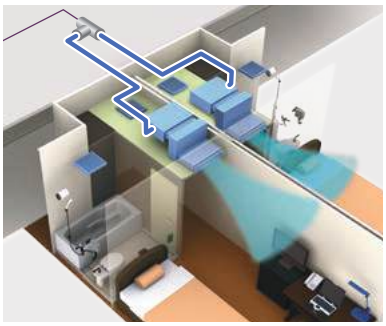
Indoor unit

Guests

Ceiling concealed low-noise type

Blends in various designed room and provide quiet sleeping atmosphere with low operation noise.



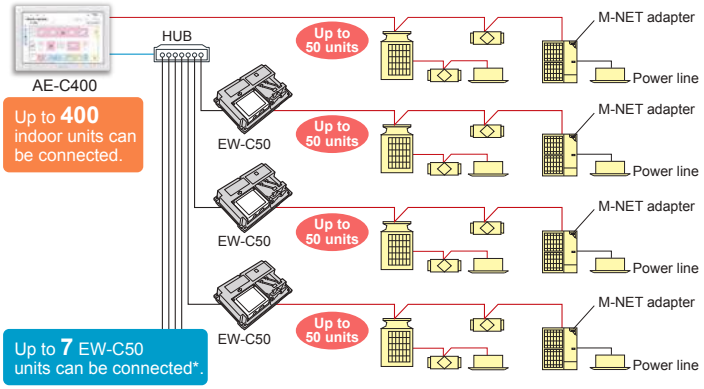


Centralized Control - AE-C400E-X

Owners

System management and control with AE-C400E-X

On-site or Remote control



* When the M-NET of AE-C400 is not used, up to 8 sets of EW-C50 can be connected.

AE-C400E-X is a LCD color touch screen controller monitoring and controlling up to 400 indoor units/groups. Enables on-site status monitoring, operation, scheduling, settings.

Remote management



Remote control/monitoring from a LAN-connected PC, tablet, or smartphone.
* A Wi-Fi router is required.

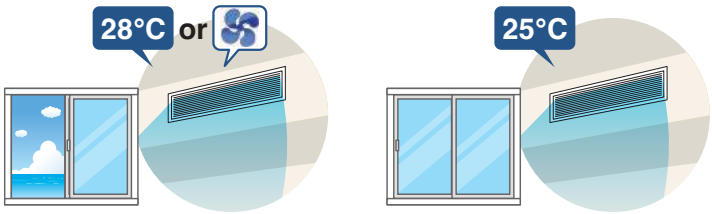
BACnet®

The system can be combined into the large-scaled BMS management via BACnet®.

Owners

Prevent unnecessary operation of the indoor unit.

Change temperature setting when window or door to the balcony opens/closes.

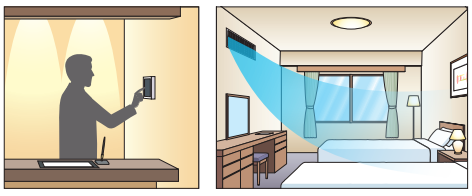


Guests

Prioritize guest comfort at all times

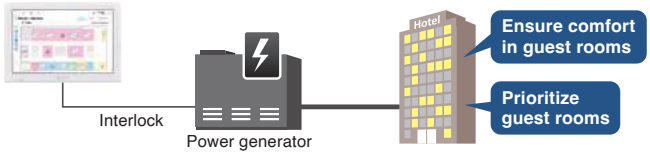
Pre-cooling / pre-heating the room

By using the centralized controller's schedule function, it is possible to pre-cool/pre-heat the room before the guest arrives.



Interlock functions to ensure comfort

By interlocking an in-house power generator and AE-C400E-X, in the case of a power shutdown, it is possible to reduce operating capacity in common areas such as the lobby or staff room.



Schools

CITY MULTI series offer energy saving optimal air environment mandatory for students to concentrate and learn better.

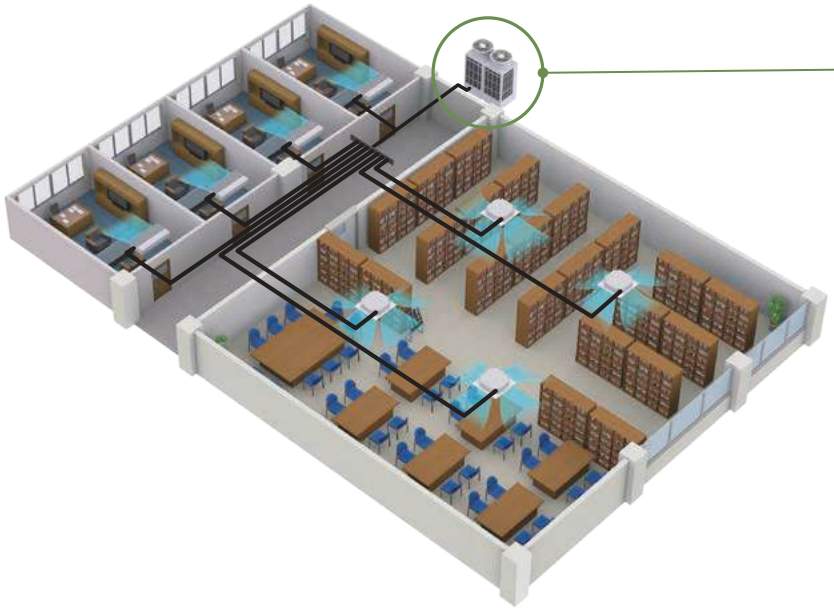
Outdoor unit

Energy saving with zoned comfort

It is possible to manage air conditioning units independently by units, room or floor.

High partial load performance

In schools, not all rooms are used at once. Having an efficient operation even at partial load is a great advantage in running cost.





The air-cooled heat pump Y series

One outdoor unit connecting up to 50 indoor units.
The unit can be installed collectively either on the roof or on the ground level depending on requirement.

Local Control



MA remote controller

Easy to use with basic controls

Schedule setting

Weekly schedule timer available. Different schedule can be set per day of week and 8 operation patterns (ON/OFF, temp)

Prevent unnecessary operation

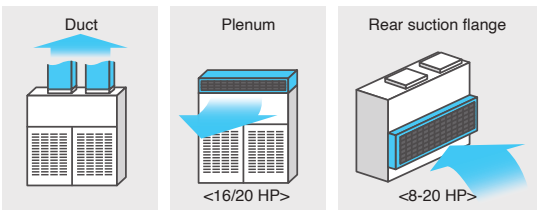
To limit the access of operation such as students, it is possible to prohibit operations such as, ON/OFF, Mode, Set temp, Menu, Fan, Louver, Vane.

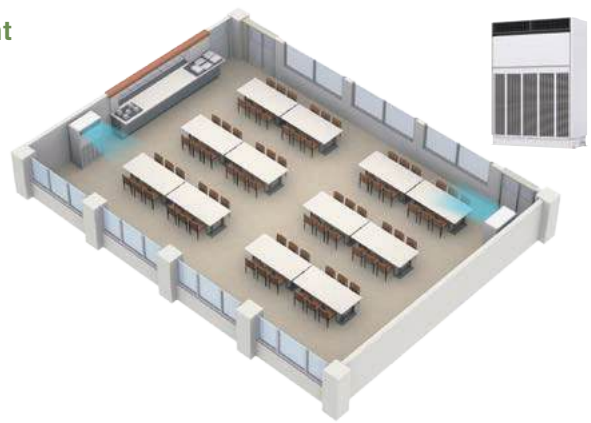
Indoor unit

Wide selection to match design requirement

Floor standing exposed types

Offers wide range of airflow rate and static pressure options. Suitable for wide open areas such as the cafeteria and sports halls.





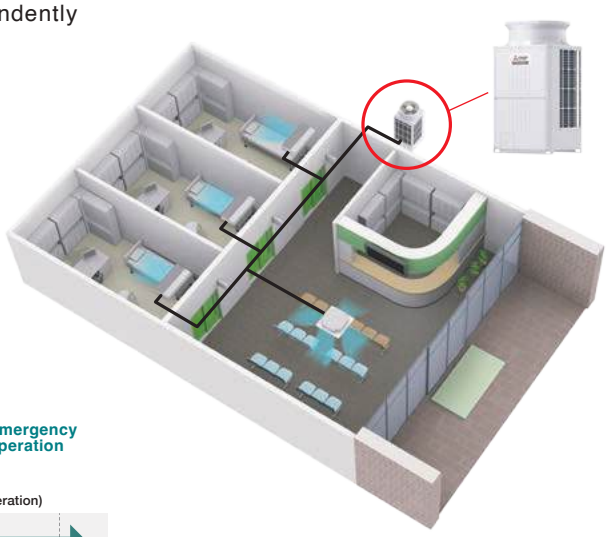
Hospitals

CITY MULTI series are energy efficient playing an important role to maintain comfortable air environment for the patients spending quality time in the facility and doctors and staff working long hours.

Outdoor unit

Energy saving with zoned comfort

It is possible to manage air conditioning units independently by units, room or floor.



Reliable operation modes

Rotation control

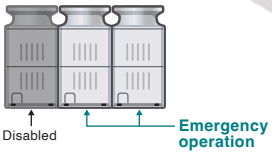
Longer service life by operating outdoor units alternately and reducing operating load.



Emergency operation mode

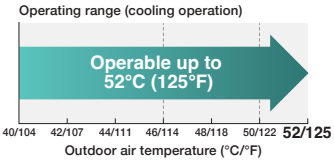
Outdoor unit temporary performs emergency operation if there is at least one module that can operate normally.

* There is a limit to the time that can be continued emergency operation.

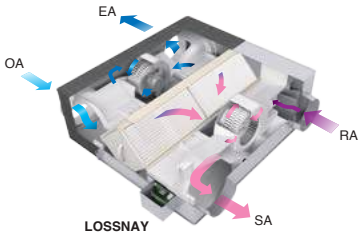


Wide operation range

High operating capacity even at 52°C outside temperature.

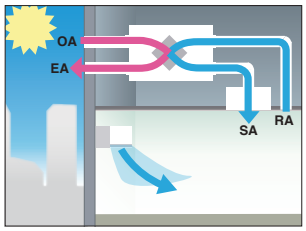


Fresh air

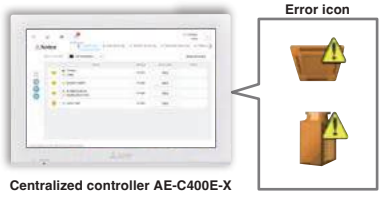


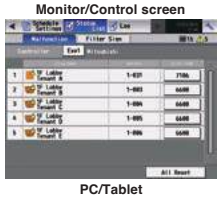
Optimized air quality with fresh air

Ventilation plays an important role to provide patients and doctors with adequate air quality throughout the day.
LOSSNAY system recovers the energy within the stale air from the inside and used to pre-cool the incoming fresh air from outside.



Control

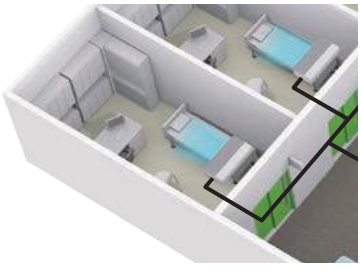




Assist quick response to error

Error notification e-mail and error log / icons on the display enables quick action in case of trouble.

Indoor unit



Comfort air distribution with low noise level



Low static ceiling concealed type

Sound pressure level: Min. 22dB (P15)*
External static pressure: 5, 15, 35, 50 Pa



Medium static ceiling concealed type

Low noise level : Min. 22dB (P20-25)*
External static pressure: 35, 50, 70, 100,150 Pa



Outdoor unit

Outdoor unit

* For the restrictions on piping, please refer to the DATABOOK.

Top flow type

- A wide lineup of up to 60 HP
- Total piping length of 1000 m [3281 ft.], height difference of 50 m [164 ft.], and high flexibility in piping work
- Features various operation modes, and the unit can be set according to the intended use
- Both standard and high-efficiency models are available



Cooling only
(8-60HP)
- PUCY-(E)P Y(S)KD1



Heat pump
(8-60HP)
- PUHY-(E)P Y(S)KD1

Side flow type

- The side flow type of outdoor including from 4HP to 12HP offers flexibility in installation in tight spaces.
- 1 fan models are more compact, 981 mm [38-5/8 in.] in height





Cooling only
(4-12HP)
- PUMY-CP VKM2-U
- PUMY-CP YKM(2)-U
- PUMY-CP YBM-U

Heat pump
(7-12HP)
- PUMY-P YKM2-U
- PUMY-P YBM-U

Wide selection of outdoor units

Refrigerant	R410A											
System	Air cooled											
Type	Cooling only						Heat pump					
Model name	Y-Series Standard			Y-Series High Efficiency			Y-Series Standard			Y-Series High Efficiency		
	PUCY-P YKD1(-BS) PUCY-P YSKD1(-BS)			PUCY-EP YSKD1(-BS)			PUHY-P YKD1(-BS) PUHY-P YSKD1(-BS)			PUHY-EP YSKD1(-BS)		
Model												
Modules / HP	S	L	XL	S	L	XL	S	L	XL	S	L	XL
8HP P200	⑧						⑧					
10HP P250	⑩						⑩					
12HP P300	⑫						⑫					
14HP P350		⑭						⑭				
16HP P400		⑯		⑧⑧				⑯		⑧⑧		
18HP P450		⑱		⑧⑩				⑱		⑧⑩		
20HP P500			⑳	⑩⑩					⑳	⑩⑩		
22HP P550	⑩⑫						⑩⑫					
24HP P600	⑩	⑭					⑩	⑭				
26HP P650	⑩	⑯		⑫	⑭		⑩	⑯		⑫	⑭	
28HP P700	⑩	⑱			⑭⑭		⑩	⑱			⑭⑭	
30HP P750	⑫	⑱		⑧⑧	⑭		⑫	⑱		⑧⑧	⑭	
32HP P800		⑯⑯		⑧⑩	⑭			⑯⑯		⑧⑩	⑭	
34HP P850		⑯⑱		⑩⑩	⑭			⑯⑱		⑩⑩	⑭	
36HP P900		⑱⑱		⑩⑫	⑭			⑱⑱		⑩⑫	⑭	
38HP P950		⑱	⑳	⑫⑫	⑭			⑱	⑳	⑫⑫	⑭	
40HP P1000			⑳⑳	⑫	⑭⑭				⑳⑳	⑫	⑭⑭	
42HP P1050	⑫⑫	⑱			⑭⑭⑭		⑫⑫	⑱			⑭⑭⑭	
44HP P1100	⑫	⑭⑱			⑭⑭⑯		⑫	⑭⑱			⑭⑭⑯	
46HP P1150		⑭⑯⑯						⑭⑯⑯				
48HP P1200		⑯⑯⑯						⑯⑯⑯				
50HP P1250		⑯⑯⑱						⑯⑯⑱				
52HP P1300		⑯⑱⑱						⑯⑱⑱				
54HP P1350		⑱⑱⑱						⑱⑱⑱				
56HP P1400		⑱⑱	⑳					⑱⑱	⑳			
58HP P1450		⑱	⑳⑳					⑱	⑳⑳			
60HP P1500			⑳⑳⑳						⑳⑳⑳			

*[ ] Indicates single modules and [ ] indicates combination modules.
*The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.

For combination modules, be sure to check the complete module's model name including the last part of the model name. Please refer to the "Set model" rows in the "SPECIFICATIONS".

Refrigerant	R410A					
System	Air cooled					
Type	Cooling only			Heat pump		
Model name	S-Series			S-Series		
	PUMY-CP VKM2-U(-BS) PUMY-CP YKM2-U(-BS)		PUMY-CP YBM-U(-BS)	PUMY-P YKM2-U(-BS)	PUMY-P YBM-U(-BS)	PUMY-P VKM7-SA(-BS)
Model	  			  		
Modules / HP	VKM2	YKM2	YBM	YKM2-U	YBM	VKM7
4HP P100	④	④				
4.5HP P112						④.⑤
5HP P125	⑤	⑤				⑤
6HP P140	⑥	⑥				⑥
7HP P175		⑦		⑦		
8HP P200		⑧		⑧		
9HP P225		⑨		⑨		
10HP P250			⑩		⑩	
12HP P300			⑫		⑫	

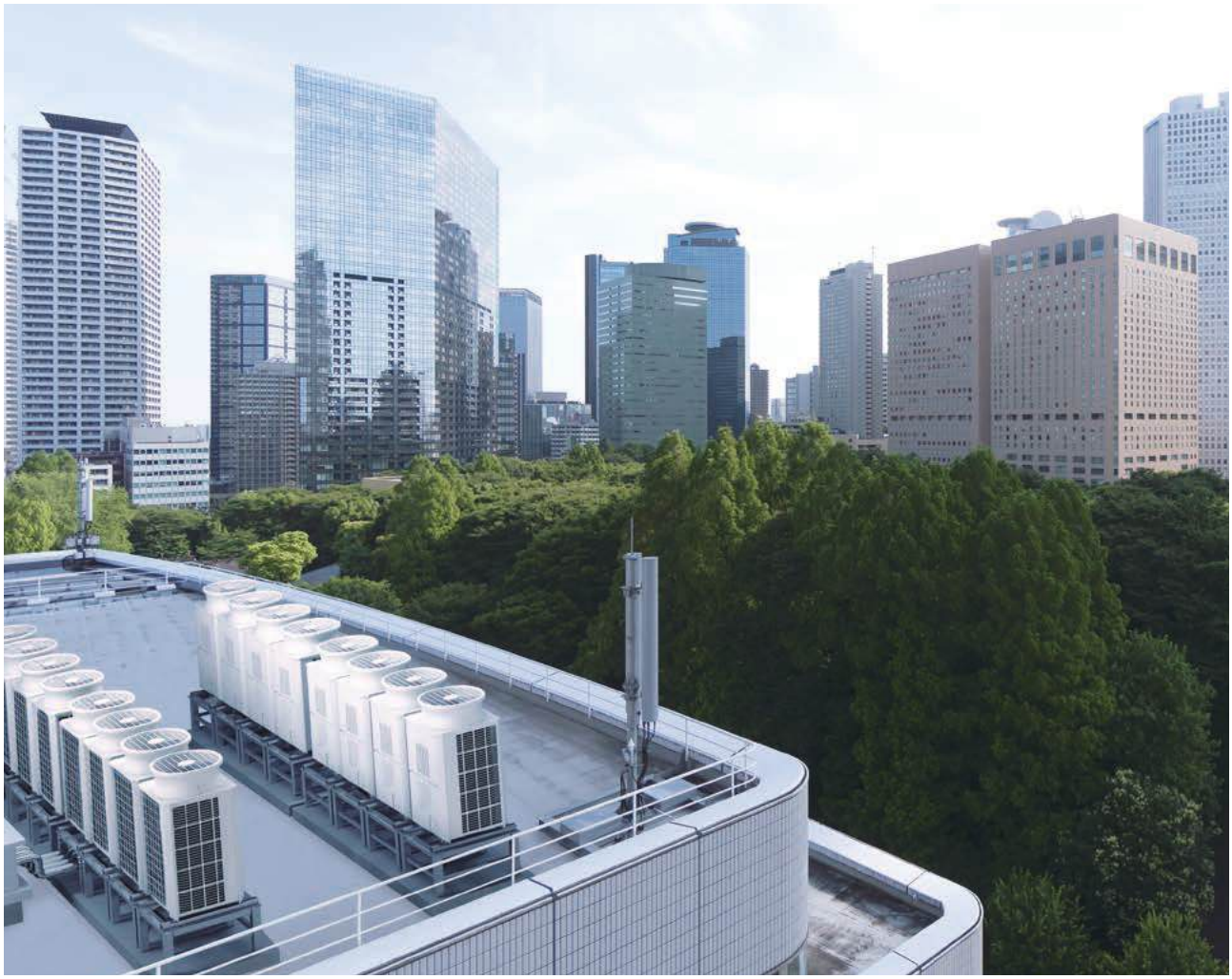
* The circled numbers in the table indicate the horse power.

Y-series



PUCY/PUHY

These models are provided with high-performance inverter compressors to achieve high energy-saving performance. A wide lineup of models with up to 60 HP can be applied to various usage.



The CITY MULTI Y-Series (for large applications) makes use of a two-pipe refrigerant system, and realizes enhanced cooling capacity at high outside air temperatures. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively. 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 engineering design options. This feature allows easy air conditioning in each area with convenient individual controllers.

System structure example

System Pipe Lengths

We use a two-pipe system. Unlike chiller system, VRF system does not require pumps or control panels, and these functions are integrated into the outdoor units. The piping can be designed appropriately to any building design by using joints and headers and flexibly adapted to many applications.

No separate transfer device such as pump required

Outdoor unit



PUCY-Series

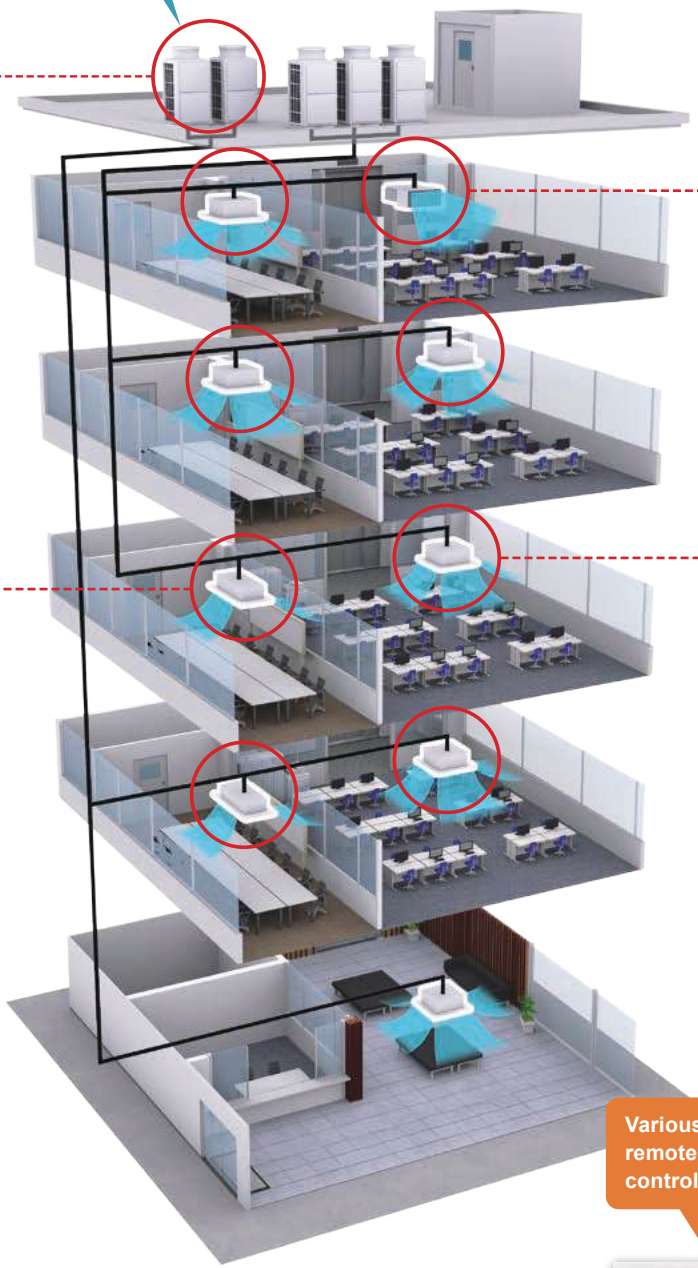
- Further enhanced energy savings
- High cooling capacity at high outdoor air temperatures
- High reliability

2-way air flow



PLFY-P VMMD-E

- Stylish design with well blended air inlet
- The unit is 290 mm [11-7/16 in.] in height and usable in corridor or a narrow room



Ceiling concealed



PEFY-P VMA(L)-E4

- Thin design with a body height of 250 mm [9-7/8 in.]
- The rear or bottom air inlet can be selected depending on the installation situation

4-way air flow



PLFY-P VEM-PA

- 3D i-see Sensor and versatile airflow variation provide comfort to all corners of the room.

Various control from local remote controllers to centralized controllers is possible



AE-C400E-X



PAR-40/41MAA

Various lineups

CITY MULTI includes various types of outdoor units, indoor units and controllers. The customers can easily select the models according to their situation. The units can be individually controlled, and it is possible to start or stop the air conditioner and set the conditions, such as temperature, in each room.

YKD1-series

The YKD1 series not only realize high energy savings and quality performance from Mitsubishi Electric, they also feature further improved reliability. This is especially important in the Middle Eastern climate which requires enhanced cooling capacity at high outside air temperatures.



S module



L module



XL module

* Product images are PUCY models

Further enhanced energy savings

- Higher rated EER in all models (compared to conventional model)
- Improved energy efficiency under partial-load conditions
- Evaporating temperature control provides further energy savings

Cooling capacity at high outdoor air temperatures

- Powerful cooling operation under high outside air temperatures
- Rapid mode reduces startup time
- Operation guaranteed up to an outside air temperature (intake temperature) of 52°C

High reliability

- Structure features a low-pressure shell compressor, polyurethane coated circuit boards and other high-reliability parts
- Emergency operation mode and rotation function, etc. contribute to enhanced operation reliability

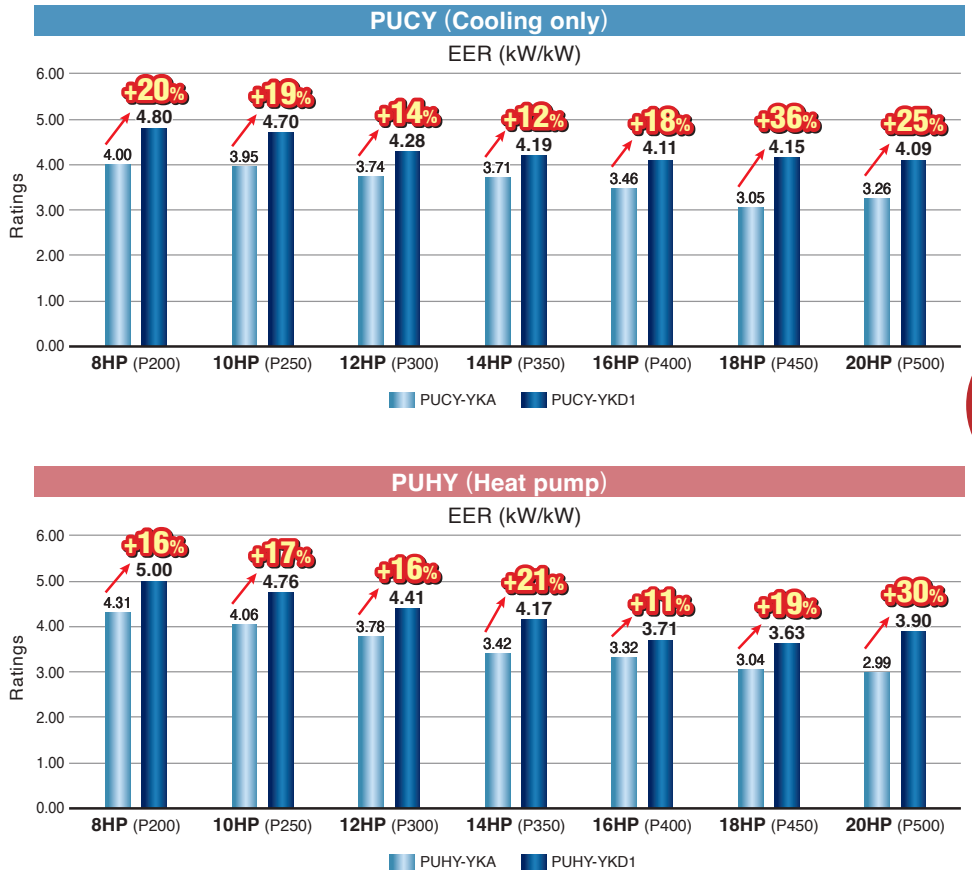
High installation flexibility

- Two-pipe system and M-NET wiring facilitate installation
- Selectable external static pressure setting to match site conditions

Further enhanced energy savings

1. Higher EER ratings

Compared to conventional products (YKA series), the YKD1 series achieves improved EER in all cooling-only models and heat pump models from 8 to 60HP.

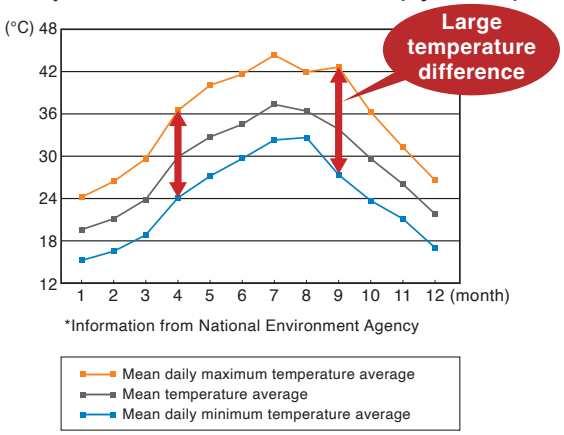


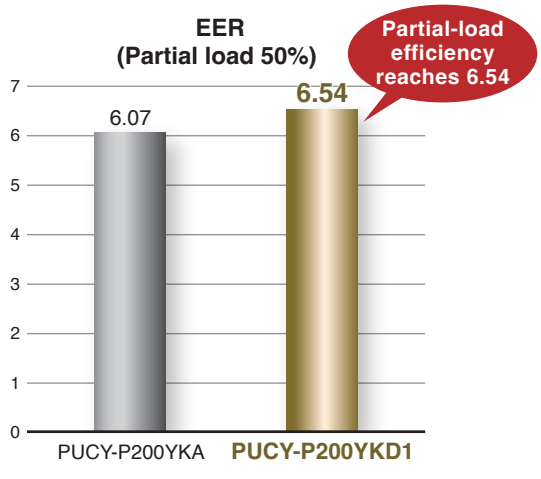
Improved ratings for all models

2. High partial-load performance

At times when the temperature difference between daytime and morning/evening is large, efficient operation also under low-load conditions is important. The multi-port design of the compressor helps to improve partial-load efficiency compared to conventional models, enabling highly efficient operation throughout the year, including season changeover periods.

Temperature in Abu Dhabi in 2020 (by month)





Further enhanced energy savings

3. Energy saving assist function

In addition to the basic energy saving design, energy saving assist functions can be activated easily via DIP switch settings. This allows matching the equipment to various installation patterns.

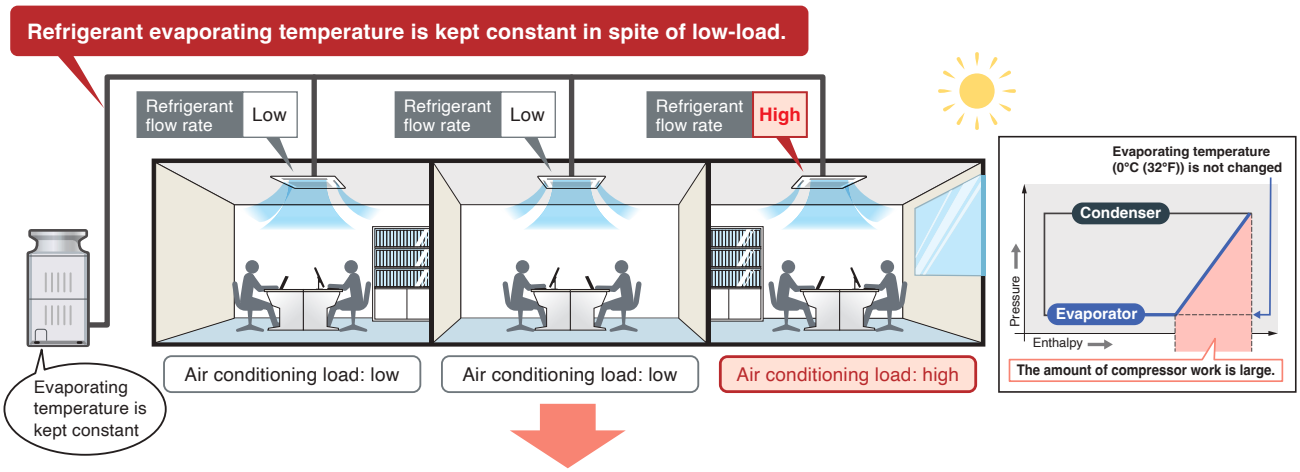
Evaporating temperature control

PUCY P PUCY EP PUHY P PUHY EP

During cooling operation, the temperature of the refrigerant can be controlled according to the air conditioning load. This helps energy efficient operation.

■ Normal mode

The evaporating temperature is kept constant regardless of the load. Even at low loads, the normal evaporating temperature does not change, which leads to energy waste during partial load operation.



■ Smart evaporation temperature control mode

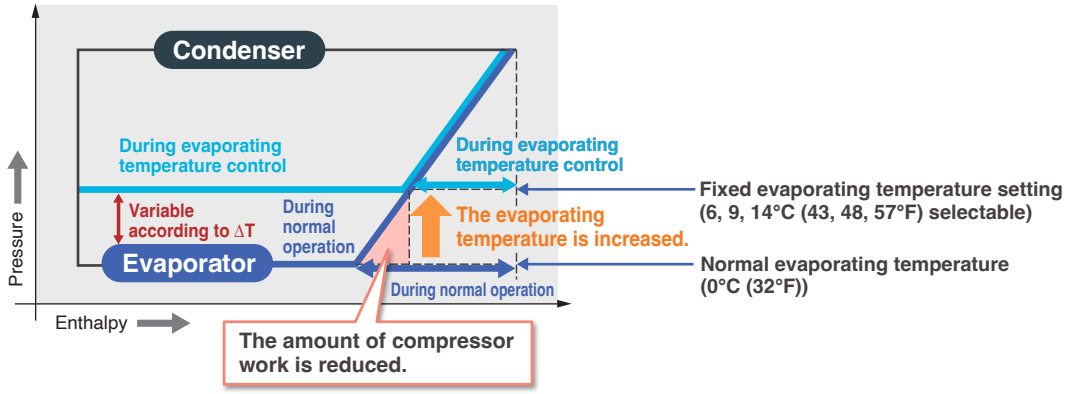
The YKD1 series supports evaporating temperature control which adjusts the refrigerant evaporating temperature. Two control methods are available: fixed control and automatic shift control.

* Changing the evaporating temperature is achieved by changing DIP switch settings on the outdoor unit. Refer to "Evaporating temperature setting method" and the Service Handbook for details.
* Raising the evaporating temperature will lower the latent heat processing capability. Select the appropriate mode for the installation location, taking factors such as ambient temperature into consideration.

1. Fixed control

The target evaporating temperature is changed and controlled to be constant. Selecting an evaporating temperature that is higher than for normal cooling will reduce the load of the compressor and improve operation efficiency.

• Concept of evaporating temperature control (fixed control)



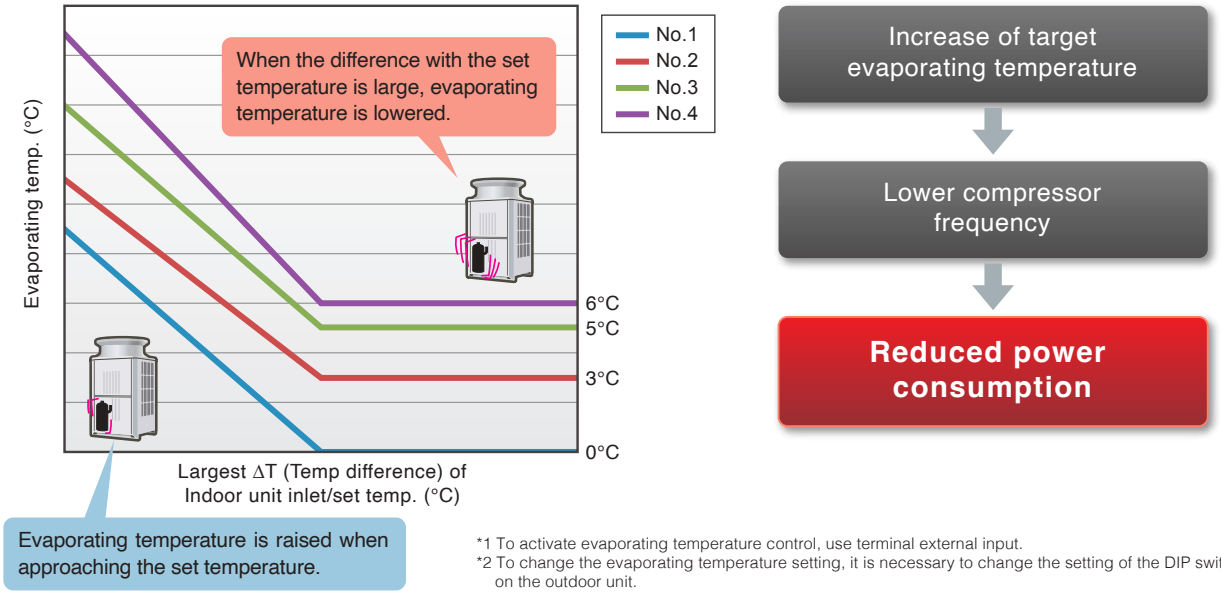
* Because evaporating temperature will constantly be higher, cooling capacity is reduced, which may result in the room not reaching the set temperature.
* To change the evaporating temperature setting, it is necessary to change the setting of the DIP switch on the outdoor unit.

2. Automatic shift control

Evaporating temperature is shifted according to the air conditioning load (ΔT). When approaching the set temperature, evaporating temperature is raised to reduce compressor workload and save energy. Four control patterns can be selected.

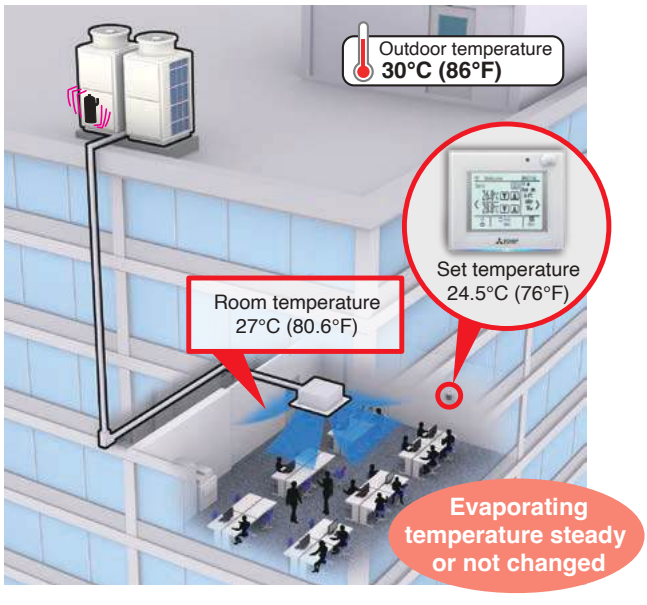
• Concept of evaporating temperature control (automatic shift control)

4 patterns for setting target evaporating temperature

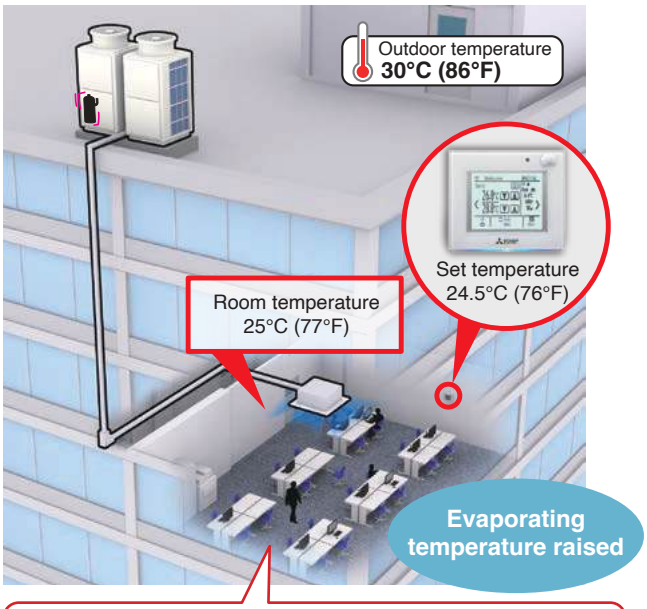


*1 To activate evaporating temperature control, use terminal external input.
*2 To change the evaporating temperature setting, it is necessary to change the setting of the DIP switch on the outdoor unit.

High load At start of operation / With many people inside the room



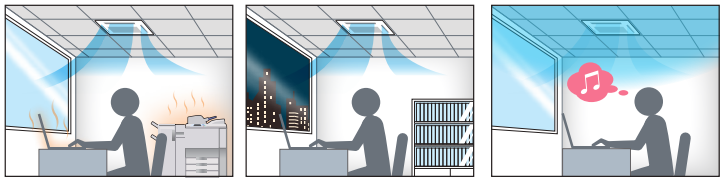
Low load As room temperature approaches set temperature



Evaporating temperature is changed according to the difference between room temperature and set temperature.

Suitable situations

(1) Locations with mainly sensible heat load by OA equipment (offices and similar)
(2) Relatively low-load conditions during air conditioning season (mornings or nights)
(3) When higher temperature of discharge air is desired in windy conditions



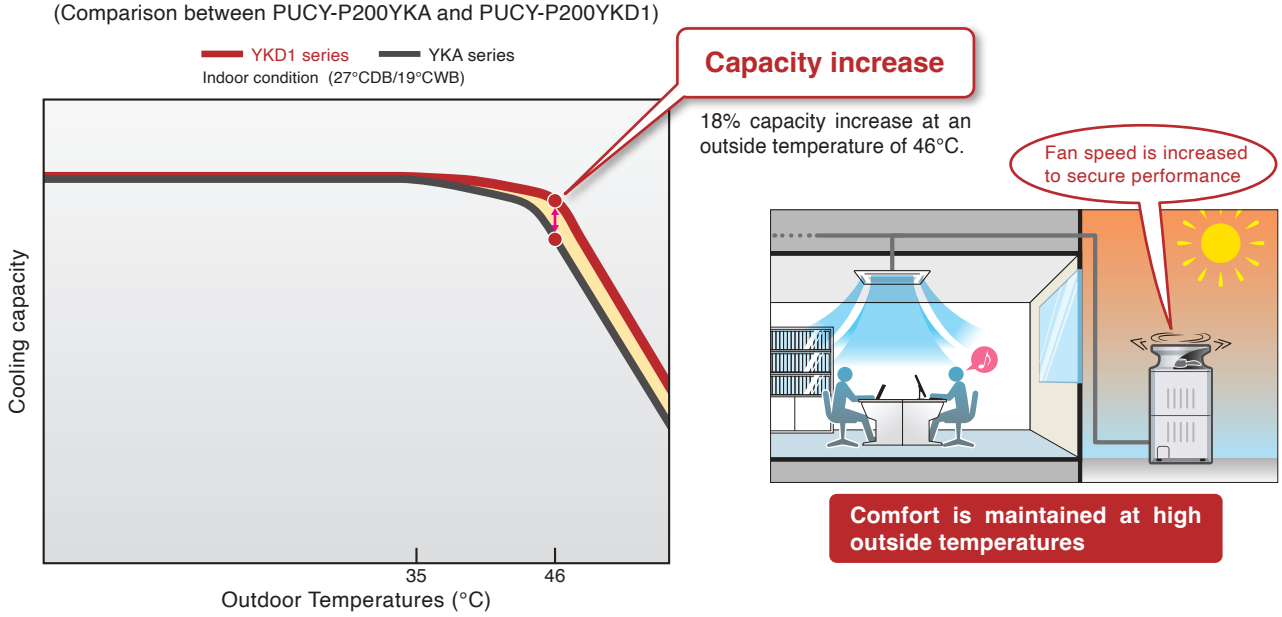
Cooling capacity at high outdoor air temperatures

1. Powerful cooling operation under high outside temperature conditions

PUCY P PUCY EP PUHY P PUHY EP

Generally, cooling capacity tends to decrease at high outside temperatures. Mitsubishi Electric has developed a technology which realizes high cooling performance under high outside temperature conditions by controlling fan speed.

Cooling capacity, with indoor units running at 100%
(Comparison between PUCY-P200YKA and PUCY-P200YKD1)



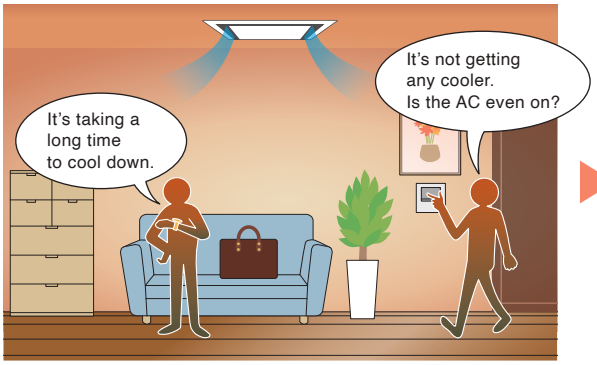
* Sound pressure level may be higher than the value under norminal conditions when the outdoor temperature exceeds 35°C D.B.
* For the details on capacity correction in accordance with outdoor temperature, please refer to DATA BOOK.

Rapid mode during startup (Quick-start up)

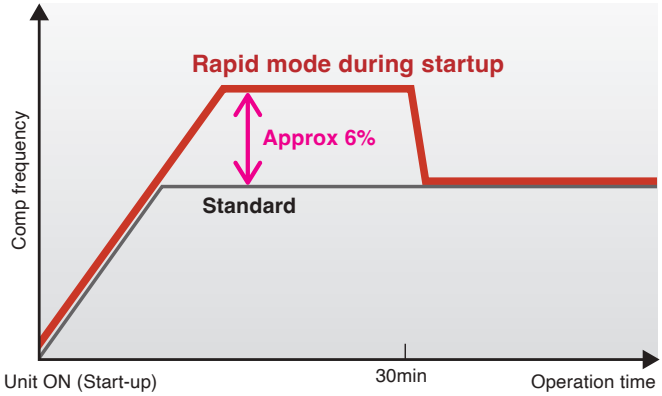
PUCY P PUCY EP PUHY P PUHY EP

The rotation speed of the compressor can be raised during the first 30 minutes after cooling startup, to quickly establish comfortable conditions when returning home or at the start of a workday. Restarting after a power outage will also be faster, to quickly cool down the room.

* Requires a DIP switch setting
* Selecting this mode may increase operation noise. Choose the mode according to installation requirements.



The room does not cool off very quickly, and it takes a while before the room becomes comfortable.



2. Cooling operation possible up to intake temperature of 52°C

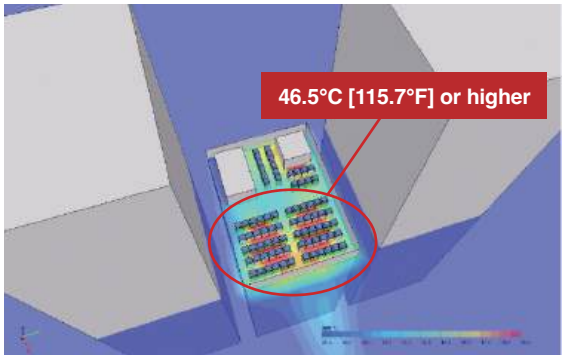
PUCY P PUCY EP PUHY P PUHY EP

In built-up areas with a high density of buildings, winds may be blocked, causing an accumulation of warm air in the vicinity of the outdoor unit. Because the operation range of the YKD1 series has been guaranteed up to 52°C (125°F), operation will remain stable even in such situations.

Example of flow analysis

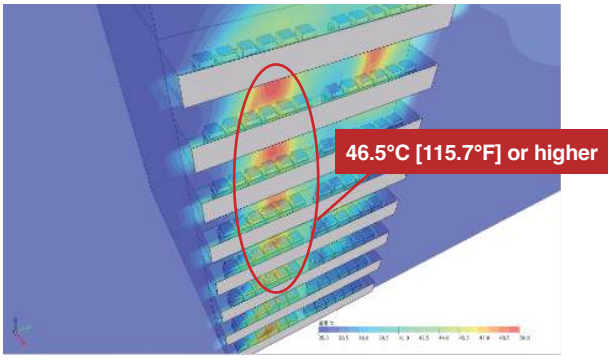
■Conditions : Outdoor air temperature = 35°C (DB), Room temperature = 27°C (DB)

Built-up area with buildings and outdoor units



If the passage of air is blocked in a built-up area, the high-temperature air discharged from the outdoor units may be kept around the units.

Installation on each floor a high-rise building



When the outdoor units are installed on balconies, the high-temperature air discharged from the units may be kept in by upper balconies.

Temperature range for cooling

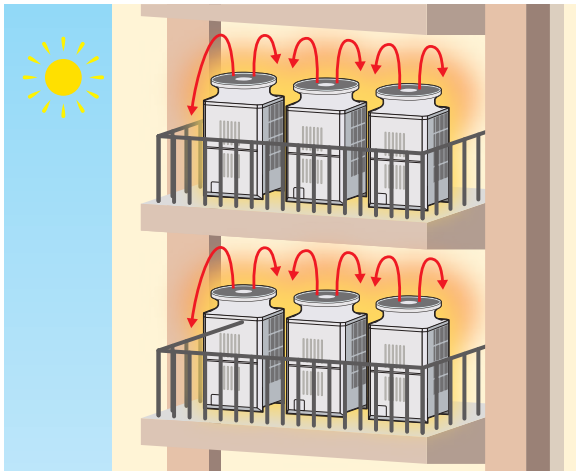
PUHY-P YKD1

–5°C [23°F] to 52°C [125°F]

* Cooling performance will drop under high outdoor temperature conditions.

Suitable situations

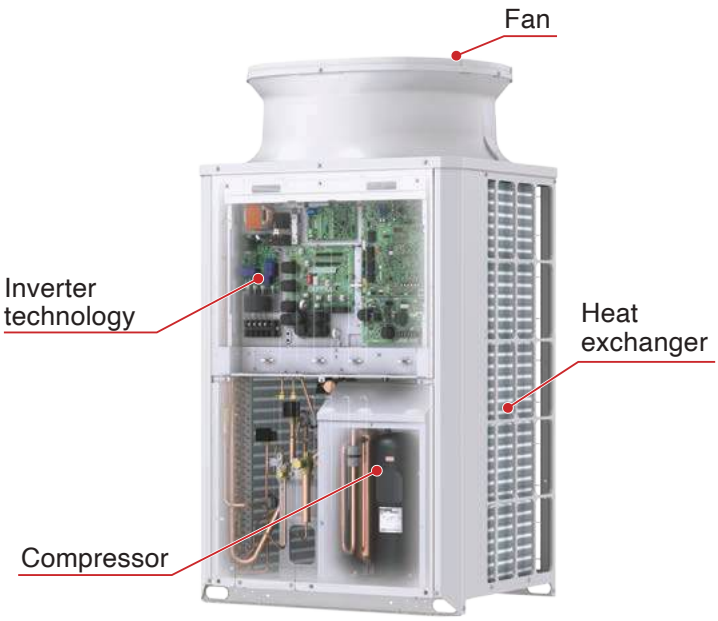
Installation in locations such as on balconies or between buildings, where high-temperature air may tend to accumulate.





Key Technologies

All major parts of YKD1 series products reflect technological excellence of Mitsubishi Electric. This results in high energy efficiency, enhanced cooling capacity at high outside air temperatures, and further improved reliability.



Inverter technology

As a manufacturer of general electric equipment, our inverter-related components are developed and manufactured using Mitsubishi Electric technology.



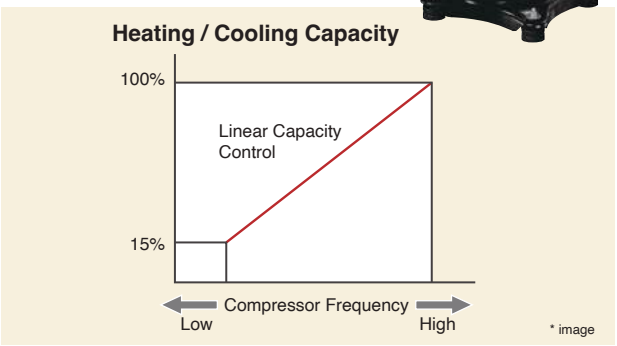
All compressors are inverter-driven type and develeoped and manufactured by Mitsubishi Electric

PUCY P PUCY EP PUHY P PUHY EP

Developed by Mitsubishi Electric

The compressor varies its speed to match the indoor cooling or heating demand, thus it only consumes the energy amount of energy 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%, although full load condition is not prevailed all time. Therefore, fixed speed systems cannot match the annual efficiency of inverter driven systems.



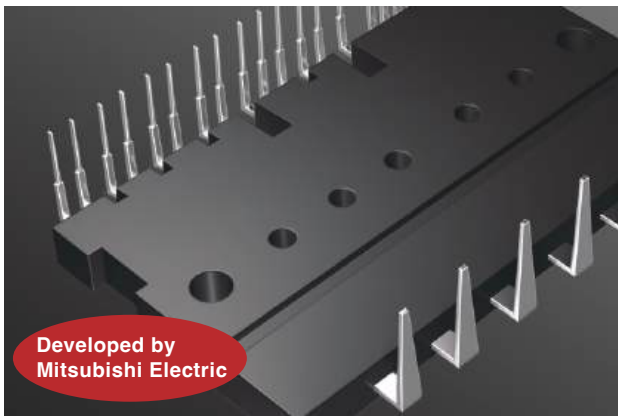
* Values vary depending on actual conditions, such as ambient temperature.

Intelligent Power Module (IPM) manufactured by Mitsubishi Electric

PUCY P PUCY EP PUHY P PUHY EP

Power modules manufactured by Mitsubishi Electric* are installed in the compressor, which is the core component, as well as in the inverter circuit board that drives the fan. Furthermore, a specialized drive circuit that ensures excellent performance make a high-quality, high-performance inverter possible .
IPM technology ensures effective operation even at lower partial load and realizes automatic control to operate the air conditioners appropriately according to the situation, resulting in energy savings.

*Except models using PUHY-P200/250YKD1 module.



Compressor

Multi-port mechanism

PUCY P PUCY EP PUHY P PUHY EP

In addition to the conventional discharge port, the new series features two sub-ports, which performes according to the air conditioning load. This prevents excessive compression and improves operation efficiency.

Conventional structure

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

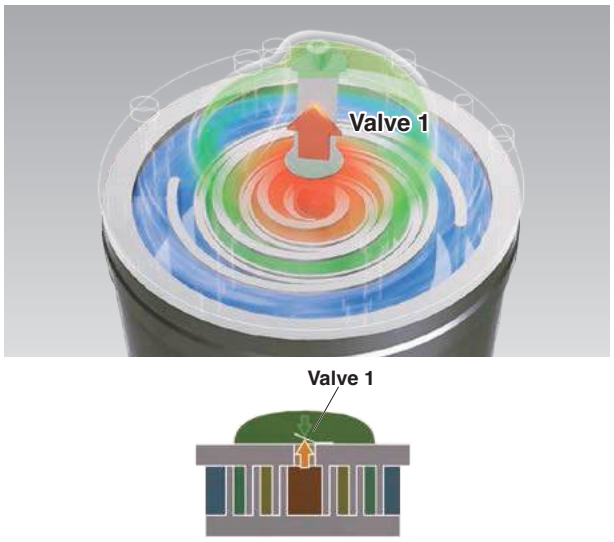
New structure with multi-port design

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve 1	Open	Open
Sub-port	Valve 2/3	Open	Closed

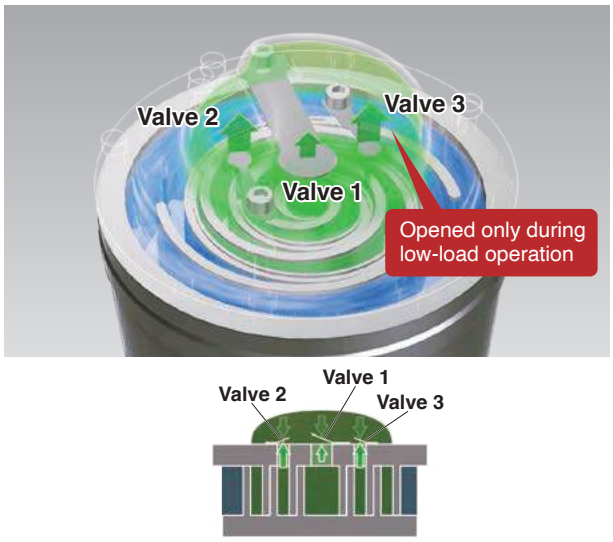
The sub-port is opened during partial load operation to discharge the over-compressed gas.

In case of partial load operation

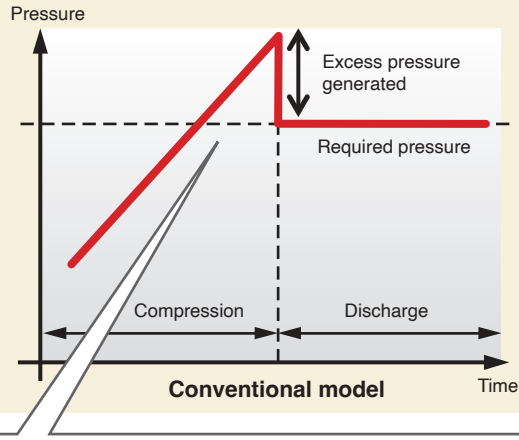
Conventional structure



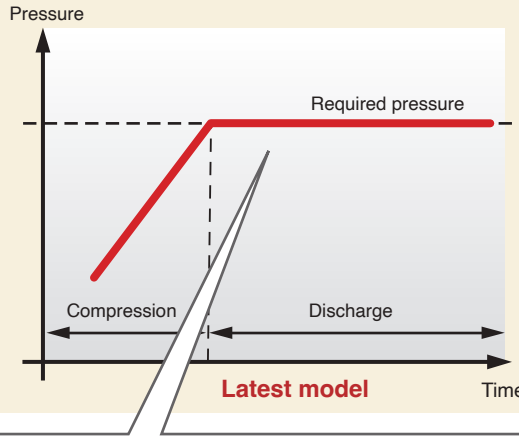
New structure with multi-port design



■ Concept of refrigerant pressure (during partial-load operation, etc.)



■ Concept of refrigerant pressure



Conventional model

Because there is only one discharge port, compression capacity is first raised regardless of load, and then lowered to the target discharge pressure. This results in operation loss due to over-compression.

Multi-port

When the target discharge pressure is reached, the multi-ports are opened to release refrigerant gas.
This reduces operation loss due to over-compression.

Compressor

Snap-in core

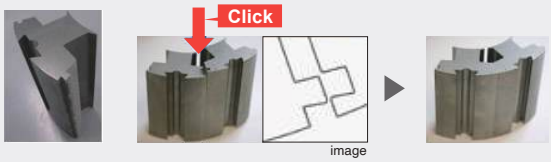
PUCY P PUCY EP PUHY P PUHY EP

Mitsubishi Electric has incorporated a new and original production process that wraps a conductor directly around the split core to create a compact and highly efficient motor.

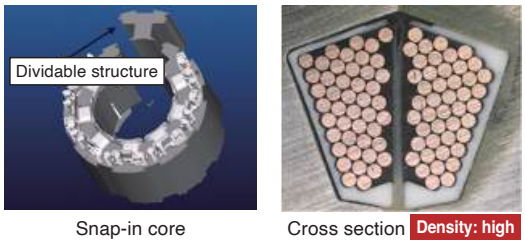
Feature 1: Coils wound around each core



Feature 2: Snap-in core



Compressor motor

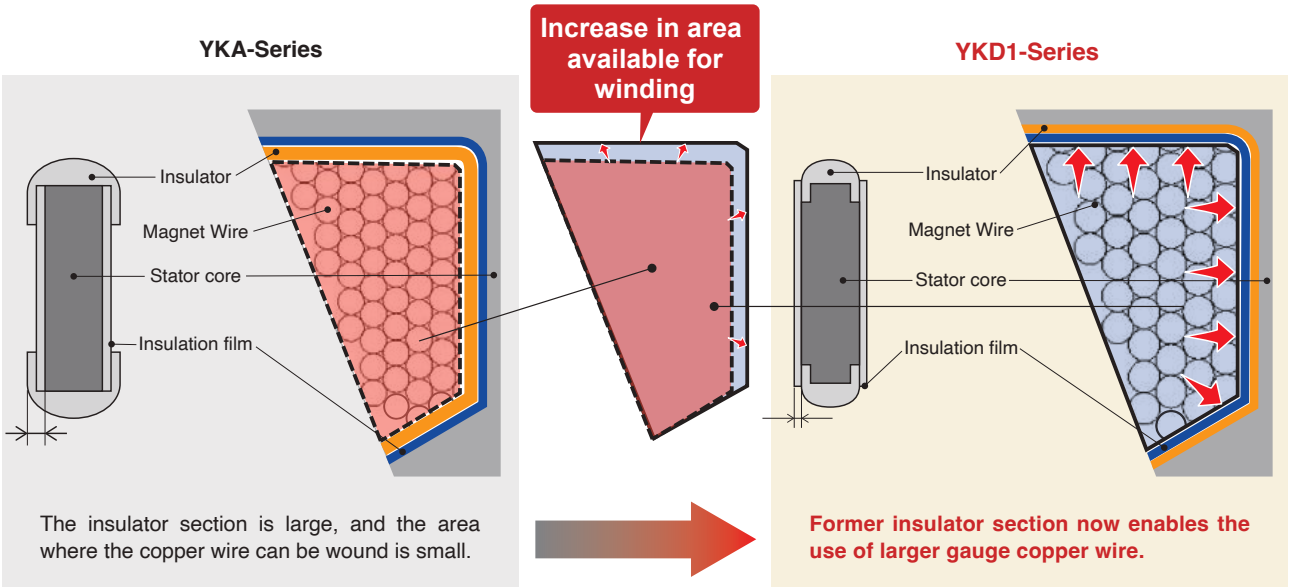


Motor efficiency is high at low speeds when coil occupancy is high, thus improving compression efficiency for low-load operation.

Improved high-efficiency motor

PUCY P PUCY EP PUHY P PUHY EP *Except for models using PUCY/PUHY-P200-350 YKD1 module.

Whereas the motor core of the conventional model had dead space between the insulator and insulation film, the YKD1 model has a smaller insulator with film on the inside. Consequently, the area for copper wire winding has increased by 9%. The wire diameter also was increased by two sizes, resulting in lower resistance and reduced insulation distance. This boosts motor efficiency, thus also improving compressor efficiency.



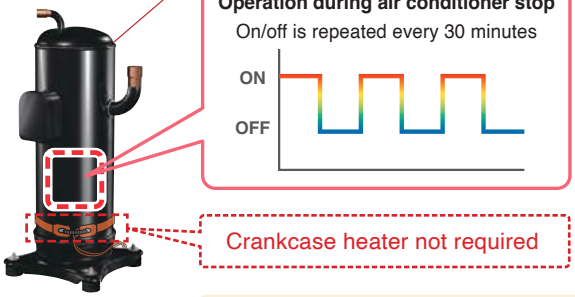
IH (induction heating) warmer

PUCY P PUCY EP PUHY P PUHY EP

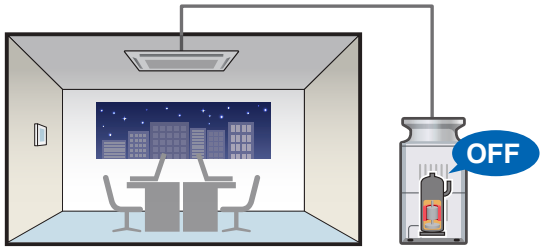
In order to prevent refrigerant and oil from mixing while the air conditioner is stopped, it is necessary to always warm the compressor. Mitsubishi Electric provides the required heating by energizing the windings of the compressor (using a voltage that does not drive the compressor motor) instead of a belt type heater that applies heat from the outside, resulting in reduced loss and lower power consumption. In addition, remains on for 30 minutes after operation is stopped, and subsequently is switched on and off every 30 minutes. Standby power consumption therefore is lower than with a belt heater that is constantly powered.

* Normally, the compressor is heated while the outdoor unit is stopped to prevent liquid refrigerant from remaining in the compressor and to evaporate the liquid refrigerant in the compressor.

IH warmer
(without crankcase heater)



Standby power consumption can be reduced when the air conditioner is stopped overnight in offices or other locations.

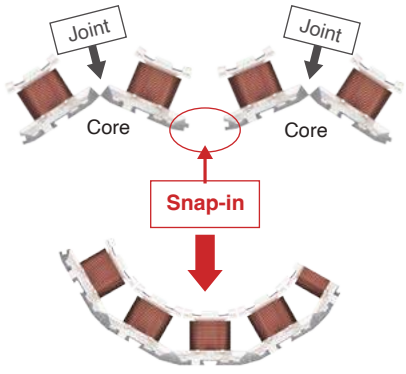


Internal heating reduces power consumption during standby.
This provides an advantage over designs that are constantly powered.

Fan motor

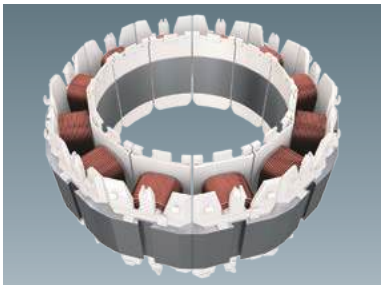
Combination of a joint lapping technology and snap-in core realizes higher efficiency

Mitsubishi Electric has developed an original motor that combines a joint lapping technology and snap-in core to realize high efficiency and reliability.



Stator coil assembly process

1. Coil winding:
   Joint lapping technology enables high density coil winding by bending the core.
2. Connect:
   Cores are connected by a snap-in core technology.



These two patented technologies lead to high efficiency and reliability of our fan motor.

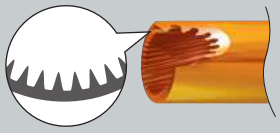
Heat exchanger

Grooves are formed in the copper pipe to improve the heat exchange performance.

PUCY P PUCY EP PUHY P PUHY EP

The grooved structure in the copper pipe of the heat exchanger increases the heat exchange area to contact with refrigerant.

Sectional view of copper pipe



Pipe image

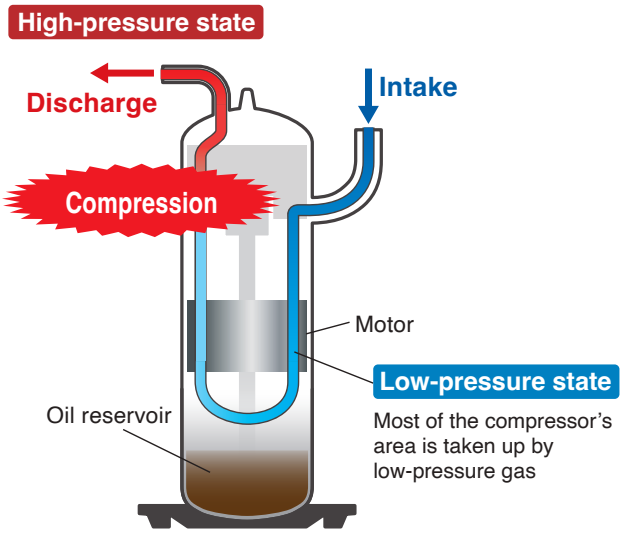
Reliable components

1. Compressor

Liquid and gas refrigerants are separated beforehand by the accumulator to prevent liquid refrigerant from flowing into the compressor. Moreover, compressor structure is filled with low-pressure gas refrigerant. If liquid backflow occurs, the liquid will not enter the scroll of the compressed part directly.

Low-pressure shells

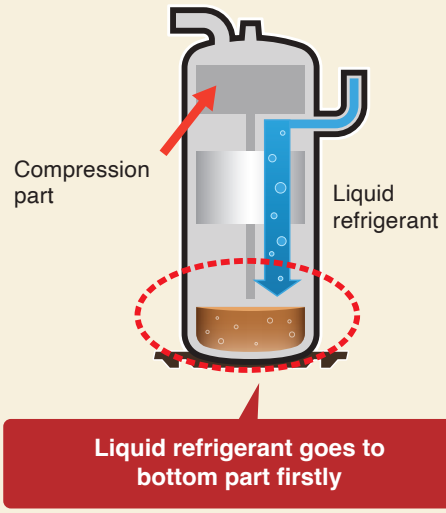
PUCY P PUCY EP PUHY P PUHY EP



Cross section of compressor

Most of the area in the compressor is taken up by the low-pressure gas. This prevents the motor and bearings from being heated up by the compressed high-pressure gas. The refrigerant is collected at the bottom of the shell to reduce the rate of compressor damage caused by liquid refrigerant compression.

When liquid backflow has occurred



Liquid refrigerant doesn't go to compression part directly so that compressor itself is protected from malfunction due to liquid back .

Operation with one compressor up to 20HP.

PUCY P PUCY EP PUHY P PUHY EP

Outdoor units can be operated by one compressor, which contributes to improve service with less refrigerant piping work and compornents.

1 compressor model



S module

Lower number of required key parts reduces maintenance requirements



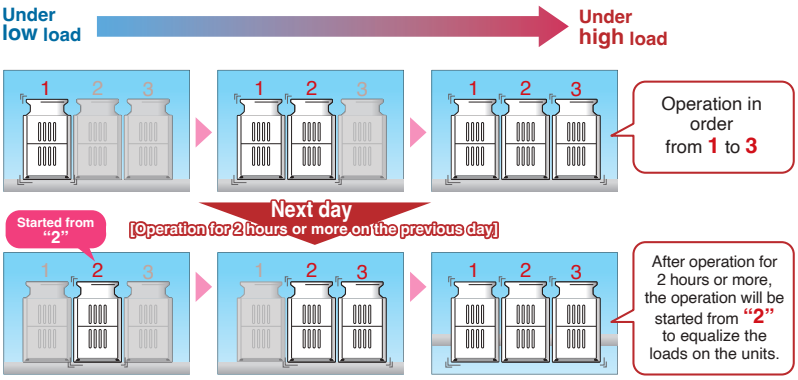
No need for our model

XL module

Rotation control

PUCY P PUCY EP PUHY P PUHY EP

With the combination model, the outdoor units operate alternately. This reduces the operating load and leads to a longer service life.
After operation for 2 hours or more, the next operation will be started from the outdoor unit “2.” The unit to be started first is changed to equalize the operating time of the units.

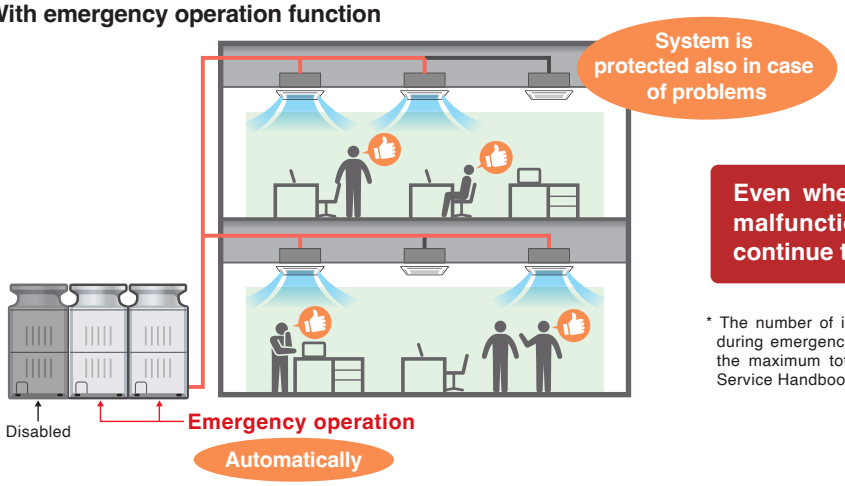


Emergency operation mode

PUCY P PUCY EP PUHY P PUHY EP

Emergency operation is possible with the indoor unit's remote control. With the combination model, if there is at least one module that can operate normally, the other outdoor unit temporaly performs emergency operation.

With emergency operation function



Even when one unit has fell in a malfunction, other outdoor units continue to operate.

* The number of indoor units that can continue to operate during emergency operation is limited. For information on the maximum total capacity of indoor units, refer to the Service Handbook for the outdoor unit.

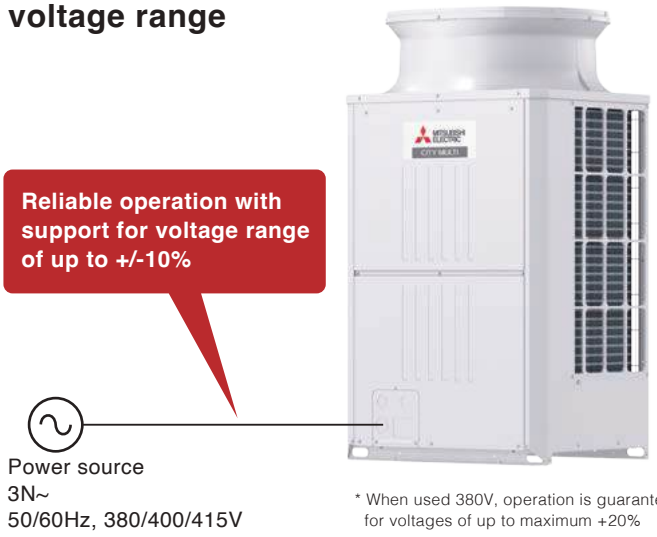
Reliable components

2. Electric parts

Allowable operating up to ±10% voltage range

PUCY P PUCY EP PUHY P PUHY EP

Operation of this model is guaranteed even for voltages up to 10% more or less than the indicated allowable voltage.

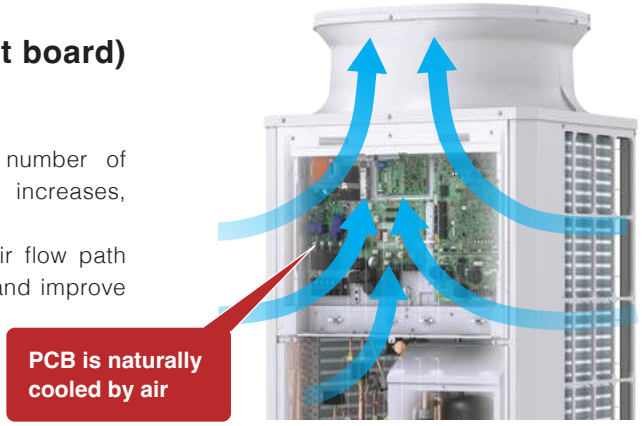


* When used 380V, operation is guaranteed even for voltages of up to maximum +20%

Naturally cooled PCB (Print circuit board)

PUCY P PUCY EP PUHY P PUHY EP

PCBs (printed circuit boards) carry a large number of electronic components. When operation load increases, suitable cooling measures are required.
Mitsubishi Electric places PCBs in the natural air flow path which enables air cooling to maintain efficiency and improve reliability of each electronic component.



Access from front panel

PUCY P PUCY EP PUHY P PUHY EP

Electrical parts are concentrated in the upper part of the panel which can be opened for easy replacement of PCBs if required.
Because the compressor is located in the lower right when the panel is opened, the service technician can easily perform maintenance from the front.



* Arrange a qualified technician for maintenance or service.

3. Corrosion resistance

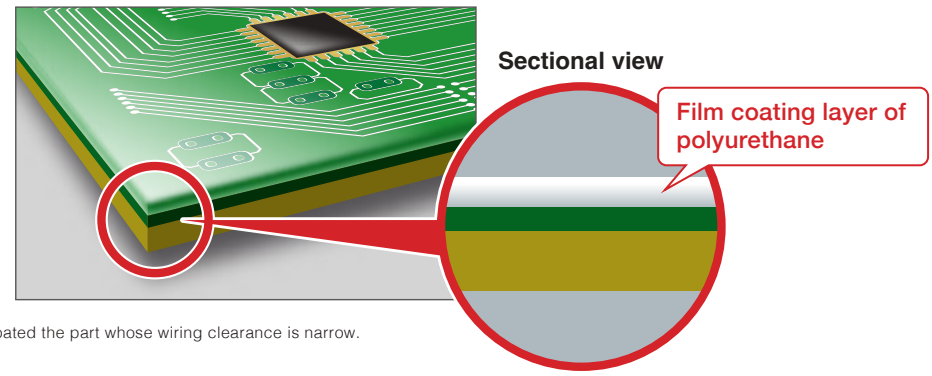
Even in installation environments near coastal areas, Mitsubishi Electric products reduce the effects of corrosion due to salt damage by using a special coating designed for outdoor units.

* Effectiveness varies depending on the installation location.

Film coating on PCB (Print circuit board)

PUCY P PUCY EP PUHY P PUHY EP

The printed circuit boards are protected by a film coating of polyurethane that covers the entire board to ensure resistance against salt corrosion.

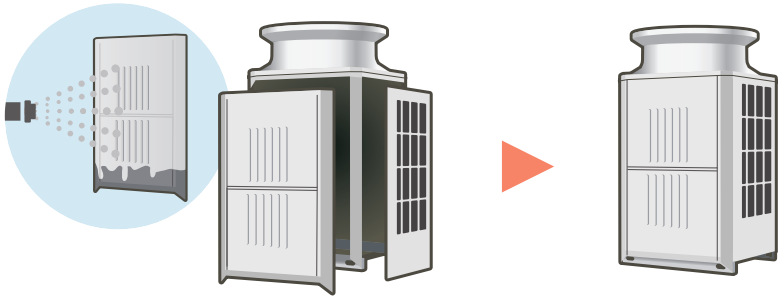


* Standard model is only coated the part whose wiring clearance is narrow.

Polyester coated sheet

PUCY P PUCY EP PUHY P PUHY EP

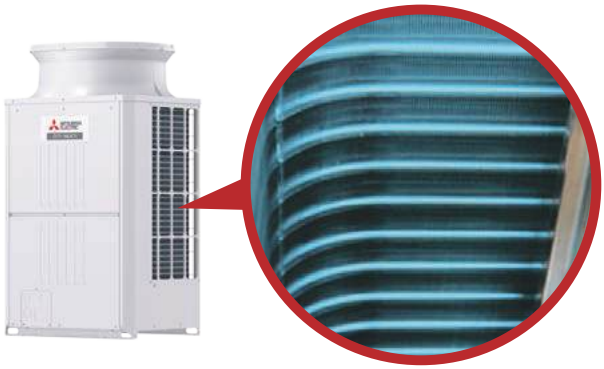
To prevent corrosion of the unit even in locations subject to the influence of sea breezes, the outdoor units are made with polyester coated steel sheets compliant with the JRA 9002 standard. The panel coating is used both on standard models and BS models, while BS models also include a thicker coating.



Fin treatment on heat exchanger

PUCY P PUCY EP PUHY P PUHY EP

The anti-corrosion fin treatment on the heat exchanger is especially effective in urban environments where traffic pollutions can damage the aluminum fins, reducing the capacity and life expectancy of the unit. All YKD1 series feature this Fin treatment.



Reliable function

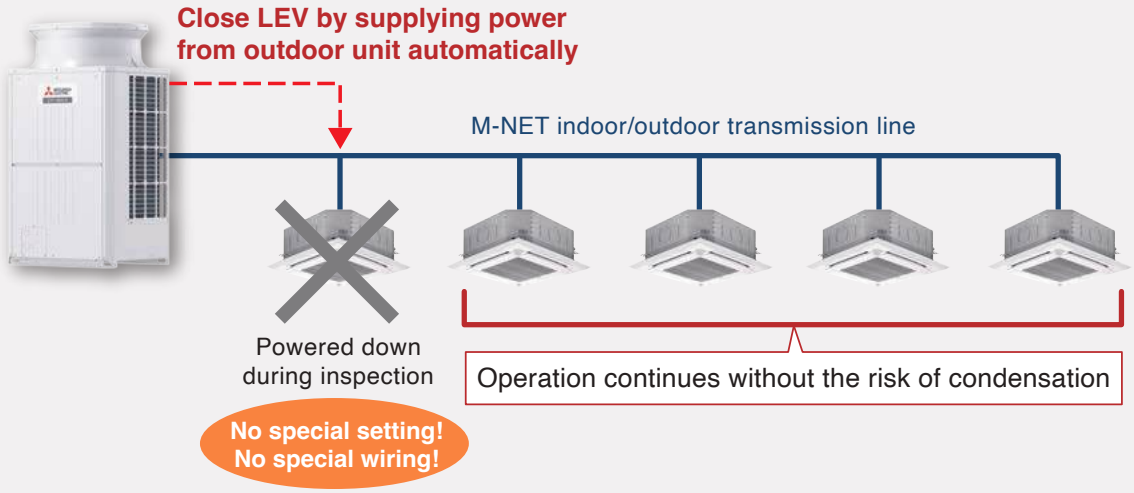
Operation support function

Without requiring any special settings or control steps, Mitsubishi Electric's original M-NET system enables other indoor units to continue operation even when one unit has stopped due to malfunction.

* Support for PUMY models available.

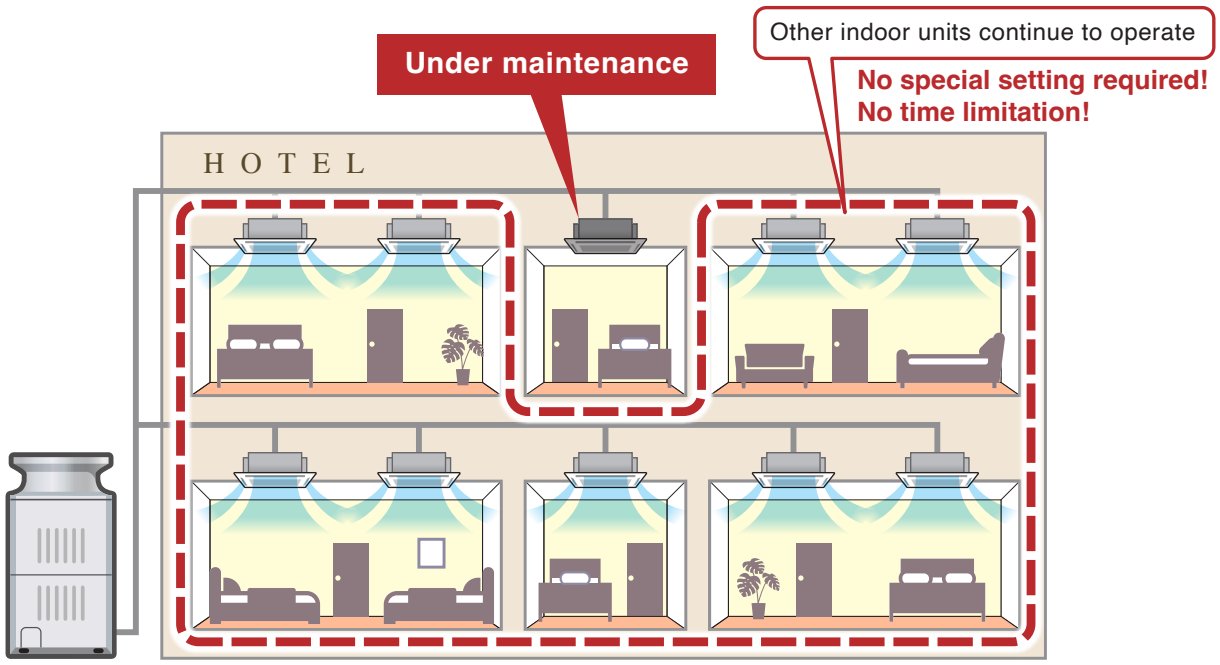
With M-NET indoor/outdoor unit communication function (CITY MULTI)

Because Mitsubishi Electric's M-NET transmission line can also supply power, it is possible to close the LEV of indoor units that has caused problem through control command from outdoor unit. This eliminates the risk of condensation and enables the other units to keep working.



For hotel application

Even if the system in one guest room cannot be used, air conditioning in other rooms does not need to be shut down, allowing business to continue.



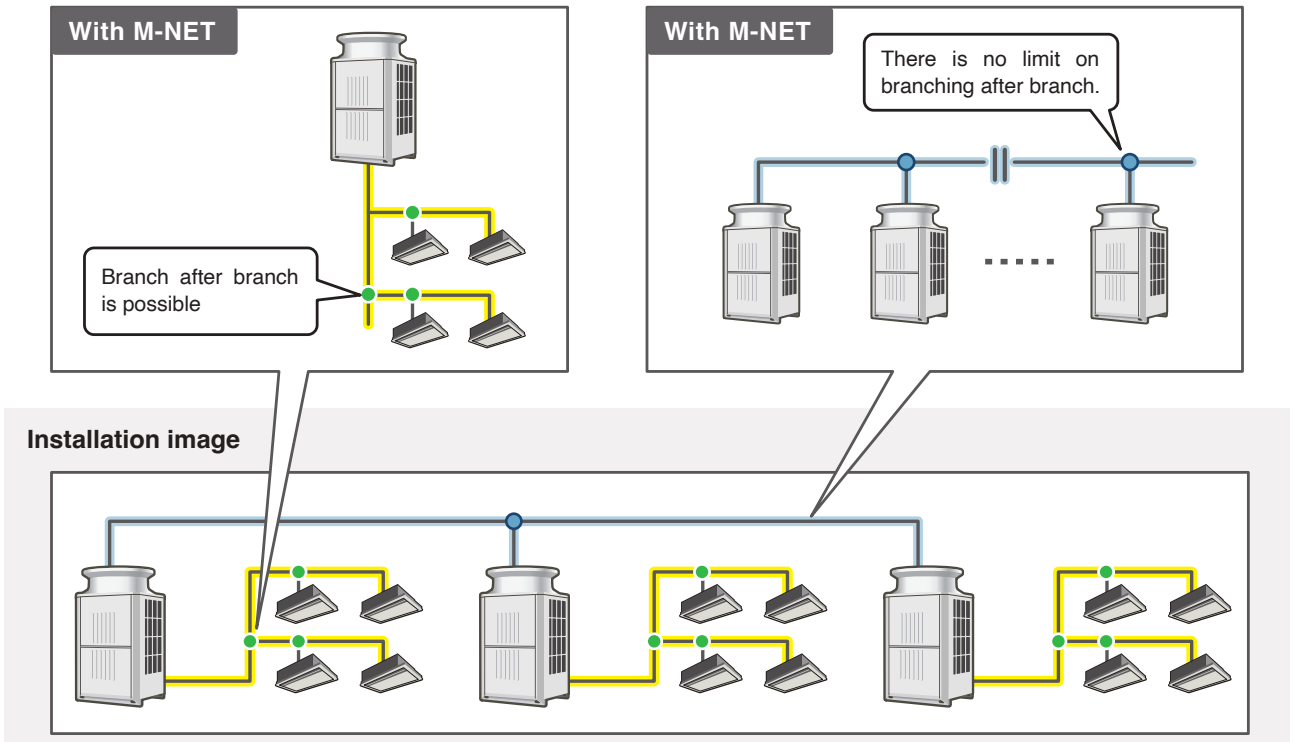
High installation flexibility

1. Flexible wiring design

Flexible M-NET design

PUCY P PUCY EP PUHY P PUHY EP

The total wiring length of the original M-NET system connecting the CITY MULTI units of Mitsubishi Electric is unlimited. The system also supports multiple branching levels which greatly increases design flexibility for various buildings.



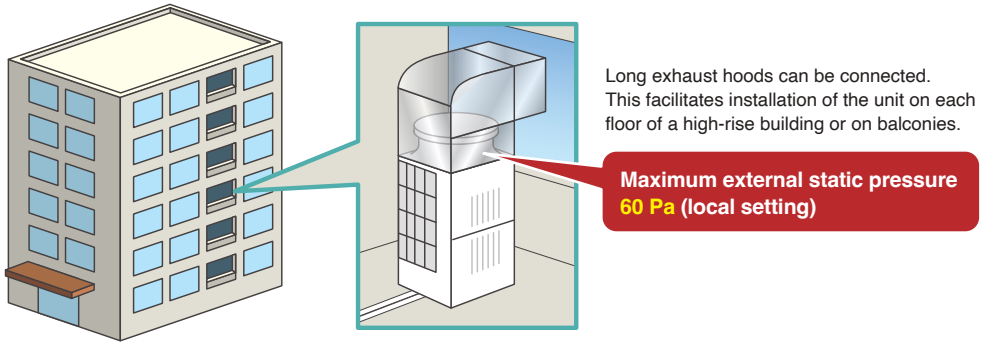
* The maximum power-supply distance of M-NET communication is 200 meters, a booster unit is required over 200 meters.
Regarding maximum distance to the farthest device, please refer to "Explanatory material for M-NET 1000 m."

2. Flexible external static pressure setting

Selectable external static pressure of the outdoor unit

PUCY P PUCY EP PUHY P PUHY EP

The static pressure specification of the outdoor unit can be selected (0, 30, 60 Pa).*
This facilitates installation of the unit on each floor of a high-rise building or on balconies.

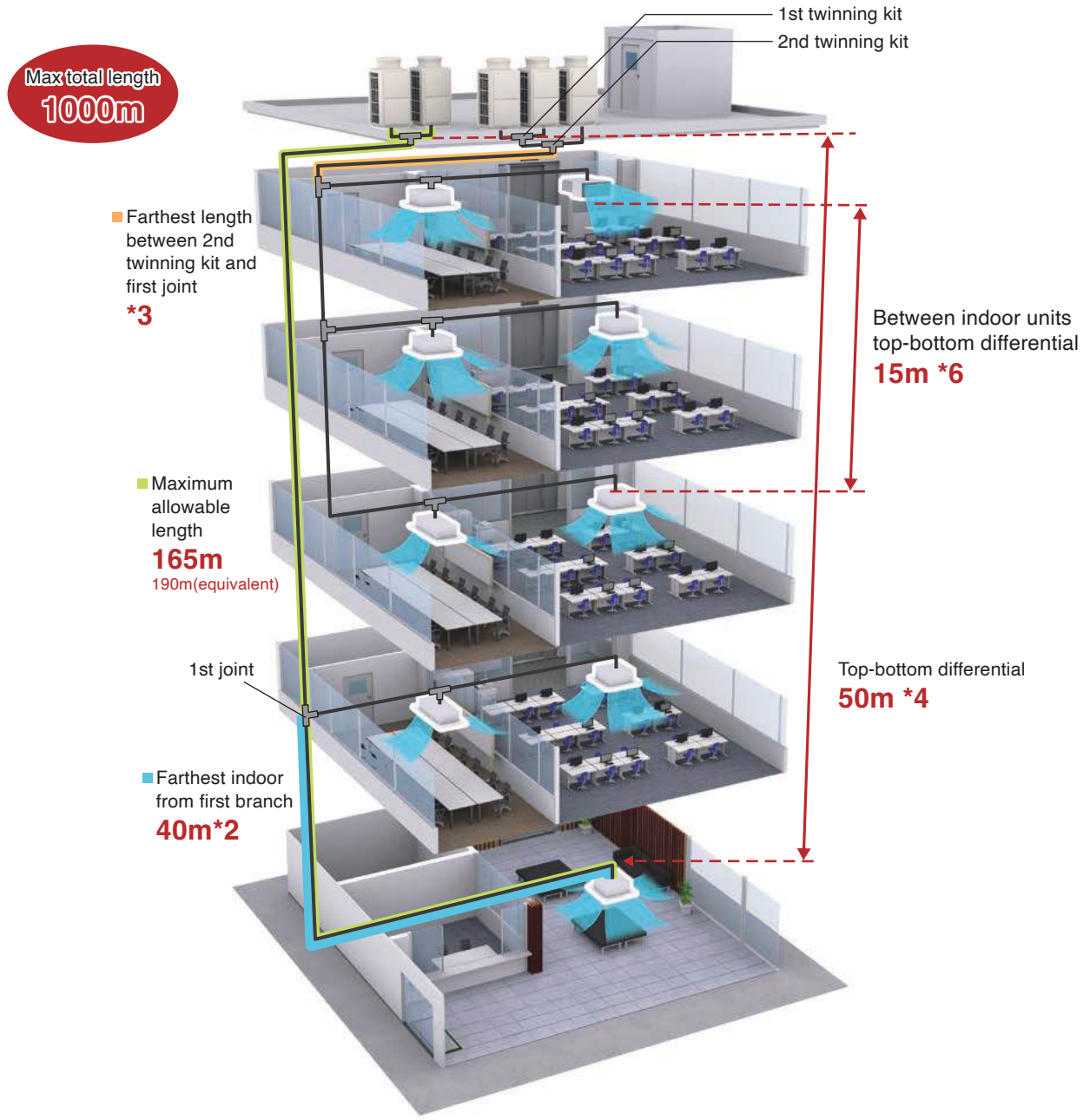


* Reter to the capacity table in DATABOOK for details.

High installation flexibility

3. Long piping length

Piping design also provides the flexibility to match the requirements of various buildings. With CITY MULTI, even large-scale building installations are no problem.



Refrigerant Piping Lengths	Maximum meters [feet]
Total length	1,000 [3,280]*1
Maximum allowable length	165 (190 equivalent) [541 (623)]
Farthest indoor from first branch	40 [131]*2
Farthest length between 2nd twinning kit and first joint	*3

Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]*4
Indoor/outdoor (outdoor lower)	40 [131]*5
Indoor/indoor	15 [49]*6

*1 The maximum total piping length in systems with model units P1400 through P1500 800 m [2625 ft.].
*2 90m is available. When the piping length exceeds 40m, use one size larger liquid pipe starting with the section of piping where 40m is exceeded and all piping after that point.
[for PUCY-P-YKD1(-BS) / PUCY-EP-YKD1(-BS)]
*3 In systems with model units P1400 through P1500, pipe length restrictions apply to the main pipes as follows:
P1400: 110 m [360 ft.] max.
P1450: 90 m [295 ft.] max.
P1500: 60 m [197 ft.] max.
*4 Depending on the model and installation conditions, top-bottom differential 90m [295ft]. For more detailed information, please contact your nearest sales office or distributor.
*5 4 m [13 ft.] or less in cooling at outdoor temperature 10°C [50°F] or lower for heat pump series.
*6 30m is available. If the height difference between indoor units exceeds 15 m [49 ft.] (but does not exceed 30 m [98 ft.]), use pipes that are one size larger for indoor unit liquid pipes.
[for PUCY-P-YKD1(-BS) / PUCY-EP-YKD1(-BS) / PUHY-(E)P-YKD1(-BS)]

Other useful information

Low noise mode (night mode)

PUCY P PUCY EP PUHY P PUHY EP

This mode reduces noise by limiting the compressor frequency and the number of rotations made by the outdoor fan.
The user can select their preferred level.

* Cooling/heating capacity drops significantly during low-noise mode operation. During cooling operation, please use this mode under a situation which there is a substantial capacity such as at night.
* This function can be set by change of dip switch.



PUHY-P200YKD1

standard 57dB

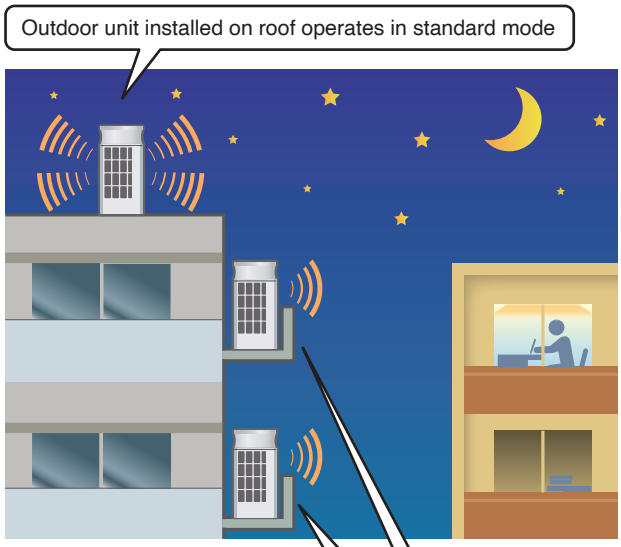
13 dB down

Low noise mode 44dB*

* Operation noise may increase due to the installation environment or the operation status.
* The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard.

- Increased adaptability and model selection range for buildings where low noise is essential
- Low noise mode can also be selected after delivery using DIP switches

Changing low noise mode to suit the installation location allows adaptation to the surrounding environment.





AE-C400E-X

Low noise mode can be scheduled from the Web browser of AE-C400E-X by connecting the PC.

System changeover (for heat pump)

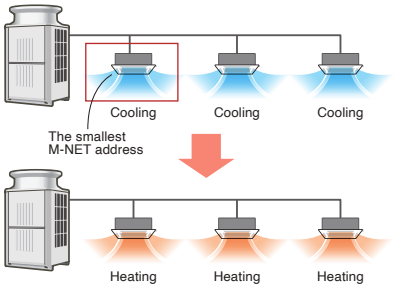
PUHY P PUHY EP

Normal switching between cooling and heating

With CITY MULTI's switchable cooling/heating models, in order to switch from cooling to heating, the operation mode of all indoor units performing cooling operation needs to be manually switched.

Using system-changeover to switch between cooling and heating

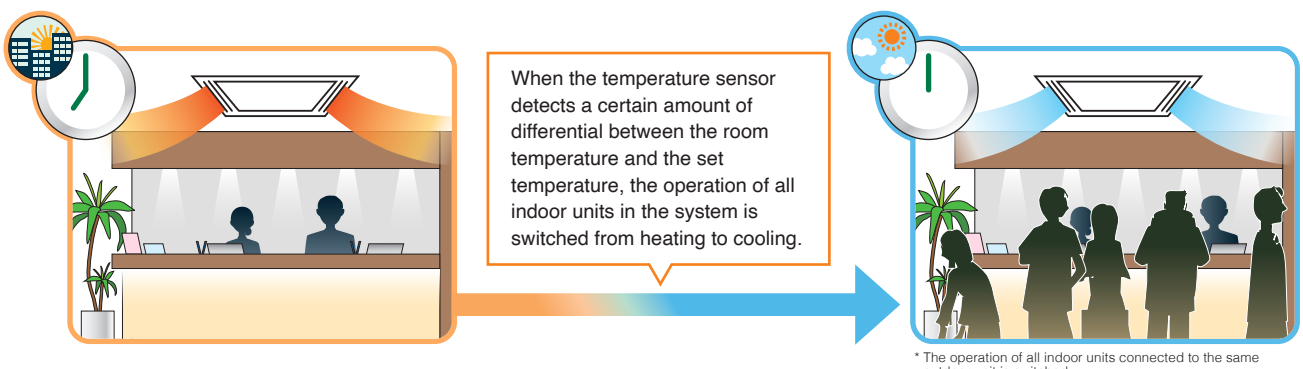
Depending on the dip switch settings, all indoor units can automatically switch their operation mode according to the operation mode of a specific indoor unit (the unit with the smallest M-NET address). Operation can be automatically switched between cooling and heating according to the temperature difference between the preset temperature on a specific indoor unit and the room temperature.



* Please avoid the indoor unit with the smallest number address to group with other indoor units.

Suitable situations

When both cooling and heating operations are required in a single day due to an extreme differences between the hottest and coldest parts of the day.



* The operation of all indoor units connected to the same outdoor unit is switched.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YKD1 (-BS)



Specifications

Model			PUCY-P200YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity *1		kW	22.5	28.2	33.6	40.0
		BTU/h	77,000	96,000	115,000	136,000
	Power input	kW	4.68	6.00	7.85	9.54
	Current input	A	7.9-7.5-7.2	10.1-9.6-9.2	13.2-12.5-12.1	16.1-15.2-14.7
	EER	kW/kW	4.80	4.70	4.28	4.19
Cooling capacity *5*6 Outdoor 35°C DB (T1)		kW	22.5	28.2	33.6	40.0
		BTU/h	77,000	96,000	115,000	136,000
	Power input system *7	kW	5.51	7.04	9.09	10.99
	Power factor	%	90	90	90	90
	EER system *8	Btu-h/W	13.95	13.60	12.65	12.35
Cooling capacity *2*6 Outdoor 46°C DB (T3)		kW	19.2	24.0	27.3	34.0
		BTU/h	65,500	81,900	93,100	116,000
	Power input	kW	5.69	7.05	7.96	9.65
	EER	Btu-h/W	11.51	11.61	11.69	12.02
Cooling capacity *6*9 Outdoor 48°C DB		kW	16.4	20.3	23.0	28.7
		BTU/h	56,000	69,300	78,500	97,900
	Power input system *7	kW	5.74	7.03	8.03	10.14
	EER system *8	Btu-h/W	9.75	9.85	9.77	9.65
CSPF for T3 condition *2		BTU/h/W	20.4	20.3	18	18.2
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)	15.0~24.0 °C (59~75 °F)
	Outdoor	D.B.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P250/1~17	P15~P250/1~21	P15~P250/1~26	P15~P400/1~30
Sound pressure level *3 (measured in anechoic room)		dB <A>	57	58	61	61
Sound pressure level *2 (measured in anechoic room, T3 condition)		dB <A>	62	62.5	62.5	62.5
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	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	210
		L/s	2,917	2,917	2,917	3,500
		cfm	6,179	6,179	6,179	7,415
	Air flow rate (T3 condition) *2	m^3/min	222	222	222	246
		L/s	3,700	3,700	3,700	4,100
		cfm	7,839	7,839	7,839	8,686
	Control, 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
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	6.9	8.1	10.4
	Case heater	kW	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 5.5 kg (13 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit
Net weight		kg (lbs)	174 (384)	183 (404)	200 (441)	236 (521)
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
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,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 The sound pressure level measured by the conventional method in JIS for reference purpose.
*4 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O).
Refer to the capacity table in DATABOOK for details.

*5 Outdoor 35ºC DB (T1) conditions (subject to ISO15042). As per QCC.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*6 Verified by 3rd party institute (Intertek).
*7 Outdoor input + Indoor input.
*8 Capacity / Power input system.
*9 Outdoor 48ºC DB conditions (subject to MEW/R-6/2018). As per MEW.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	26.6ºC DB/19.4ºC WB (80ºF DB/67ºF WB)	48ºC DB (118ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)

OUTDOOR UNIT

YKD1-series - Cooling-only

PUCY-P YKD1 (-BS)



Specifications

Model			PUCY-P400YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P500YKD1 (-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 *1		kW	43.5	47.0	55.5
		BTU/h	148,000	160,000	190,000
	Power input	kW	10.58	11.30	13.55
	Current input	A	17.8-16.9-16.3	19.0-18.1-17.4	22.8-21.7-20.9
	EER	kW/kW	4.11	4.15	4.09
Cooling capacity *5*6 Outdoor 35°C DB (T1)		kW	43.5	47.0	55.5
		BTU/h	148,000	160,000	190,000
	Power input system *7	kW	12.24	13.17	15.63
	Power factor	%	90	90	90
	EER system *8	Btu-h/W	12.05	12.10	12.15
Cooling capacity *2*6 Outdoor 46°C DB (T3)		kW	37.0	37.6	47.2
		BTU/h	126,200	128,300	161,000
	Power input	kW	11.74	11.96	17.10
	EER	Btu-h/W	10.74	10.72	9.41
Cooling capacity *6*9 Outdoor 48°C DB		kW	30.0	32.0	36.0
		BTU/h	102,400	109,200	122,800
	Power input system *7	kW	11.78	12.41	14.22
	EER system *8	Btu-h/W	8.69	8.79	8.63
CSPF for T3 condition *2		BTU/h/W	17.8	17.8	15.7
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level *3 (measured in anechoic room)		dB <A>	63	63	65
Sound pressure level *2 (measured in anechoic room, T3 condition)		dB <A>	63	63	65
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
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	210	210	320
		L/s	3,500	3,500	5,333
		cfm	7,415	7,415	11,299
	Air flow rate (T3 condition) *2	m^3/min	246	246	419
		L/s	4,100	4,100	6,983
		cfm	8,686	8,686	14,795
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2
*4	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	13.3
	Case heater	kW	-	-	-
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit
Net weight		kg (lbs)	236 (521)	236 (521)	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 The sound pressure level measured by the conventional method in JIS for reference purpose.
*4 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O).
Refer to the capacity table in DATABOOK for details.

*5 Outdoor 35ºC DB (T1) conditions (subject to ISO15042). As per QCC.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*6 Verified by 3rd party institute (Intertek).
*7 Outdoor input + Indoor input.
*8 Capacity / Power input system.
*9 Outdoor 48ºC DB conditions (subject to MEW/R-6/2018). As per MEW.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	26.6ºC DB/19.4ºC WB (80ºF DB/67ºF WB)	48ºC DB (118ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P550YSKD1 (-BS)	PUCY-P600YSKD1 (-BS)	PUCY-P650YSKD1 (-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 *1		kW	61.5	68.0	72.0
		BTU/h	210,000	232,000	246,000
	Power input	kW	14.04	15.34	17.73
	Current input	A	23.7-22.5-21.7	25.8-24.6-23.7	29.9-28.4-27.4
	EER	kW/kW	4.38	4.43	4.06
Cooling capacity *2		kW	62.5	69.1	73.2
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~47	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	63	63	64.5
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	65.5	65.5	66
Refrigerant piping diameter	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

Set Model

Model			PUCY-P250YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P400YKD1 (-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
	Air flow rate	m^3/min	175	175	175	210	175	210
		L/s	2,917	2,917	2,917	3,500	2,917	3,500
		cfm	6,179	6,179	6,179	7,415	6,179	7,415
	Air flow rate (T3 condition) *3	m^3/min	222	222	222	246	222	246
		L/s	3,700	3,700	3,700	4,100	3,700	4,100
		cfm	7,839	7,839	7,839	8,686	7,839	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	10.4	6.9	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	183 (404)	200 (441)	183 (404)	236 (521)	183 (404)	236 (521)
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	9.52 (3/8) Brazed	15.88 (5/8) 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-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only

PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P700YSKD1 (-BS)	PUCY-P750YSKD1 (-BS)	PUCY-P800YSKD1 (-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 *1		kW	76.0	81.5	88.0
		BTU/h	260,000	278,000	300,000
	Power input	kW	19.24	21.79	25.00
	Current input	A	32.4-30.8-29.7	36.7-34.9-33.6	42.2-40.0-38.6
	EER	kW/kW	3.95	3.74	3.52
Cooling capacity *2		kW	77.2	82.8	89.4
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	64.5	65.5	66
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	66	66	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	34.93 (1-3/8) Brazed

Set Model

Model			PUCY-P250YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-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
	Air flow rate	m^3/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
	Air flow rate (T3 condition) *3	m^3/min	222	246	222	246	246	246
		L/s	3,700	4,100	3,700	4,100	4,100	4,100
		cfm	7,839	8,686	7,839	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4	8.1	12.4	10.8	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	183 (404)	236 (521)	200 (441)	236 (521)	236 (521)	236 (521)
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	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P850YSKD1 (-BS)	PUCY-P900YSKD1 (-BS)	PUCY-P950YSKD1 (-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 *1		kW	92.0	96.0	104.0
		BTU/h	314,000	328,000	356,000
	Power input	kW	26.97	29.00	31.51
	Current input	A	45.5-43.2-41.6	48.9-46.5-44.8	53.1-50.5-48.7
	EER	kW/kW	3.41	3.31	3.30
Cooling capacity *2		kW	93.5	97.6	105.7
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	66	66	67.5
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	66	66	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUCY-P400YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P500YKD1 (-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 2
	Air flow rate	m^3/min	210	210	210	210	210	320
		L/s	3,500	3,500	3,500	3,500	3,500	5,333
		cfm	7,415	7,415	7,415	7,415	7,415	11,299
	Air flow rate (T3 condition) *3	m^3/min	246	246	246	246	246	419
		L/s	4,100	4,100	4,100	4,100	4,100	6,983
		cfm	8,686	8,686	8,686	8,686	8,686	14,795
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	12.4	12.4	12.4	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.5 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)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)	304 (671)
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.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Flare	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-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P1000YSKD1 (-BS)	PUCY-P1050YSKD1 (-BS)	PUCY-P1100YSKD1 (-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 *1		kW	112.0	115.0	122.0
		BTU/h	382,000	392,000	415,000
	Power input	kW	34.04	29.63	31.12
	Current input	A	57.4-54.5-52.6	50.0-47.5-45.8	52.5-49.9-48.1
	EER	kW/kW	3.29	3.88	3.92
Cooling capacity *2		kW	113.9	116.9	124.0
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~50	P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *4		dB <A>	68	66.5	66.5
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	68	67.5	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUCY-P500YKD1 (-BS)	PUCY-P500YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P450YKD1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	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^3/min	320	320	175	175	210	175	210	210
		L/s	5,333	5,333	2,917	2,917	3,500	2,917	3,500	3,500
		cfm	11,299	11,299	6,179	6,179	7,415	6,179	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	419	419	222	222	246	222	246	246
		L/s	6,983	6,983	3,700	3,700	4,100	3,700	4,100	4,100
		cfm	14,795	14,795	7,839	7,839	8,686	7,839	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	13.3	13.3	8.1	8.1	12.4	8.1	10.4	12.4
	Case heater	kW	-	-	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	304 (671)	304 (671)	200 (441)	200 (441)	236 (521)	200 (441)	236 (521)	236 (521)
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.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	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	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	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P1150YSKD1 (-BS)	PUCY-P1200YSKD1 (-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 *1		kW	128.0	132.0
		BTU/h	435,000	450,000
	Power input	kW	33.95	37.50
	Current input	A	57.3-54.4-52.4	63.3-60.1-57.9
	EER	kW/kW	3.77	3.52
Cooling capacity *2		kW	130.1	134.2
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *4		dB <A>	67.5	68
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	68	68
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

Set Model

Model			PUCY-P350YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	10.8	10.8	10.8	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)
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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P1250YSKD1 (-BS)	PUCY-P1300YSKD1 (-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 *1		kW	136.0	140.0
		BTU/h	465,000	480,000
	Power input	kW	39.42	41.54
	Current input	A	66.5-63.2-60.9	70.1-66.6-64.2
	EER	kW/kW	3.45	3.37
Cooling capacity *2		kW	138.3	142.3
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *4		dB <A>	68	68
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	68	68
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

Set Model

Model			PUCY-P400YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P400YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	10.8	12.4	10.8	12.4	12.4
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)
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	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P1350YSKD1 (-BS)	PUCY-P1400YSKD1 (-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 *1		kW	144.0	152.0
		BTU/h	490,000	520,000
	Power input	kW	43.63	46.06
	Current input	A	73.6-69.9-67.4	77.7-73.8-71.1
	EER	kW/kW	3.30	3.30
Cooling capacity *2		kW	146.4	154.5
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *4		dB <A>	68	68.5
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	68	68.5
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

Set Model

Model			PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P450YKD1 (-BS)	PUCY-P500YKD1 (-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 2
	Air flow rate	m^3/min	210	210	210	210	210	320
		L/s	3,500	3,500	3,500	3,500	3,500	5,333
		cfm	7,415	7,415	7,415	7,415	7,415	11,299
	Air flow rate (T3 condition) *3	m^3/min	246	246	246	246	246	419
		L/s	4,100	4,100	4,100	4,100	4,100	6,983
		cfm	8,686	8,686	8,686	8,686	8,686	14,795
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4	12.4	12.4	12.4	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)	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	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only
PUCY-P YSKD1 (-BS)



Specifications

Model			PUCY-P1450YSKD1 (-BS)	PUCY-P1500YSKD1 (-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 *1		kW	160.0	168.0
		BTU/h	545,000	575,000
	Power input	kW	48.63	51.06
	Current input	A	82.0-77.9-75.1	86.1-81.8-78.9
	EER	kW/kW	3.29	3.29
Cooling capacity *2		kW	162.7	170.8
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level *4 (measured in anechoic room)		dB <A>	69.5	70
Sound pressure level *3 (measured in anechoic room, T3 condition)		dB <A>	69.5	70
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

Set Model

Model			PUCY-P450YKD1 (-BS)	PUCY-P500YKD1 (-BS)	PUCY-P500YKD1 (-BS)	PUCY-P500YKD1 (-BS)	PUCY-P500YKD1 (-BS)	PUCY-P500YKD1 (-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^3/min	210	320	320	320	320	320
		L/s	3,500	5,333	5,333	5,333	5,333	5,333
		cfm	7,415	11,299	11,299	11,299	11,299	11,299
	Air flow rate (T3 condition) *3	m^3/min	246	419	419	419	419	419
		L/s	4,100	6,983	6,983	6,983	6,983	6,983
		cfm	8,686	14,795	14,795	14,795	14,795	14,795
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	13.3	13.3	13.3	13.3	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 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)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	236 (521)	304 (671)	304 (671)	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	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency

PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP400YSKD1 (-BS)	PUCY-EP450YSKD1 (-BS)	PUCY-EP500YSKD1 (-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 *1		kW	45.0	50.5	56.0
		BTU/h	154,000	172,000	192,000
	Power input	kW	9.97	11.39	12.84
	Current input	A	16.8-15.9-15.4	19.2-18.2-17.6	21.6-20.5-19.8
	EER	kW/kW	4.51	4.43	4.36
Cooling capacity *2		kW	45.5	51.2	56.9
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level (measured in anechoic room) *4		dB <A>	60	60.5	61
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	65	65.5	65.5
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

Set Model

Model			PUCY-P200YKD1 (-BS)	PUCY-P200YKD1 (-BS)	PUCY-P200YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P250YKD1 (-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
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179	6,179	6,179
	Air flow rate (T3 condition) *3	m^3/min	222	222	222	222	222	222
		L/s	3,700	3,700	3,700	3,700	3,700	3,700
		cfm	7,839	7,839	7,839	7,839	7,839	7,839
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	6.9	6.9	6.9
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	174 (384)	174 (384)	174 (384)	183 (404)	183 (404)	183 (404)
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	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	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-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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency
PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP650YSKD1 (-BS)	PUCY-EP700YSKD1 (-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 *1		kW	73.5	80.0
		BTU/h	250,000	274,000
	Power input	kW	18.32	19.75
	Current input	A	30.9-29.3-28.3	33.3-31.6-30.5
	EER	kW/kW	4.01	4.05
Cooling capacity *2		kW	74.7	81.3
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	64	64
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	65.5	65.5
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

Set Model

Model			PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-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^3/min	175	210	210	210
		L/s	2,917	3,500	3,500	3,500
		cfm	6,179	7,415	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	222	246	246	246
		L/s	3,700	4,100	4,100	4,100
		cfm	7,839	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.4	10.4	10.4
	Case heater	kW	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	200 (441)	236 (521)	236 (521)	236 (521)
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	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
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency

PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP750YSKD1 (-BS)	PUCY-EP800YSKD1 (-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 *1		kW	85.0	90.5
		BTU/h	290,000	308,000
	Power input	kW	19.49	20.99
	Current input	A	32.9-31.2-30.1	35.4-33.6-32.4
	EER	kW/kW	4.36	4.31
Cooling capacity *2		kW	86.2	91.9
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	64	64
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	67	67.5
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

Set Model

Model			PUCY-P200YKD1 (-BS)	PUCY-P200YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P200YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P350YKD1 (-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
	Air flow rate	m^3/min	175	175	210	175	175	210
		L/s	2,917	2,917	3,500	2,917	2,917	3,500
		cfm	6,179	6,179	7,415	6,179	6,179	7,415
	Air flow rate (T3 condition) *3	m^3/min	222	222	246	222	222	246
		L/s	3,700	3,700	4,100	3,700	3,700	4,100
		cfm	7,839	7,839	8,686	7,839	7,839	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	10.4	5.5	6.9	10.4
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	174 (384)	174 (384)	236 (521)	174 (384)	183 (404)	236 (521)
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	9.52 (3/8) Brazed	12.7 (1/2) Brazed	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	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency

PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP850YSKD1 (-BS)	PUCY-EP900YSKD1 (-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 *1		kW	96.0	101.5
		BTU/h	328,000	346,000
	Power input	kW	22.53	24.57
	Current input	A	38.0-36.1-34.8	41.4-39.4-37.9
	EER	kW/kW	4.26	4.13
Cooling capacity *2		kW	97.6	103.2
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	64	65
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	67.5	67.5
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

Set Model

Model			PUCY-P250YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P250YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-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
	Air flow rate	m^3/min	175	175	210	175	175	210
		L/s	2,917	2,917	3,500	2,917	2,917	3,500
		cfm	6,179	6,179	7,415	6,179	6,179	7,415
	Air flow rate (T3 condition) *3	m^3/min	222	222	246	222	222	246
		L/s	3,700	3,700	4,100	3,700	3,700	4,100
		cfm	7,839	7,839	8,686	7,839	7,839	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	6.9	10.4	6.9	8.1	10.4
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	183 (404)	183 (404)	236 (521)	183 (404)	200 (441)	236 (521)
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	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
	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency
PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP950YSKD1 (-BS)	PUCY-EP1000YSKD1 (-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 *1		kW	107.0	113.5
		BTU/h	366,000	388,000
	Power input	kW	26.81	28.80
	Current input	A	45.2-42.9-41.4	48.6-46.1-44.5
	EER	kW/kW	3.99	3.94
Cooling capacity *2		kW	108.8	115.4
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *4		dB <A>	66	66
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	67.5	67.5
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

Set Model

Model			PUCY-P300YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P300YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-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
	Air flow rate	m^3/min	175	175	210	175	210	210
		L/s	2,917	2,917	3,500	2,917	3,500	3,500
		cfm	6,179	6,179	7,415	6,179	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	222	222	246	222	246	246
		L/s	3,700	3,700	4,100	3,700	4,100	4,100
		cfm	7,839	7,839	8,686	7,839	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	10.4	8.1	10.4	10.4
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	200 (441)	200 (441)	236 (521)	200 (441)	236 (521)	236 (521)
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	12.7 (1/2) 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	28.58 (1-1/8) Brazed	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		

Notes:

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

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - Cooling-only High Efficiency
PUCY-EP YSKD1 (-BS)



Specifications

Model			PUCY-EP1050YSKD1 (-BS)	PUCY-EP1100YSKD1 (-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 *1		kW	120.0	124.0
		BTU/h	410,000	425,000
	Power input	kW	29.62	32.37
	Current input	A	50.0-47.5-45.7	54.6-51.9-50.0
	EER	kW/kW	4.05	3.83
Cooling capacity *2		kW	122.0	126.1
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.	10.0~52.0 °C (50~126 °F)	10.0~52.0 °C (50~126 °F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *4		dB <A>	66	67
Sound pressure level (measured in anechoic room, T3 condition) *3		dB <A>	67.5	67.5
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

Set Model

Model			PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P350YKD1 (-BS)	PUCY-P400YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *3	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.4	10.4	10.4	10.4	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)	236 (521)
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	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	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 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B. /24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.
*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series

PUHY-P YKD1 (-BS)



Specifications

Model			PUHY-P200YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity *1		kW	22.5	28.2	33.6	40.0
		BTU/h	77,000	96,000	115,000	136,000
	Power input	kW	4.50	5.92	7.61	9.59
	Current input	A	7.5-7.2-6.9	9.9-9.4-9.1	12.8-12.2-11.7	16.1-15.3-14.8
	EER	kW/kW	5.00	4.76	4.41	4.17
Cooling capacity *6*7 Outdoor 35°C DB (T1)		kW	22.5	28.2	33.6	40.0
		BTU/h	77,000	96,000	115,000	136,000
	Power input system *8	kW	5.33	6.96	8.85	11.04
	Power factor	%	90	90	90	90
	EER system *9	Btu-h/W	14.40	13.75	12.95	12.30
Cooling capacity *2*7 Outdoor 46°C DB (T3)		kW	20.4	24.4	27.3	32.6
		BTU/h	69,600	83,300	93,100	111,200
	Power input	kW	6.43	7.67	7.82	9.09
	EER	Btu-h/W	10.82	10.86	11.90	12.23
Cooling capacity *7*10 Outdoor 48°C DB		kW	17.3	19.3	21.5	26.1
		BTU/h	59,000	65,900	73,400	89,100
	Power input system *8	kW	6.02	6.87	7.82	9.60
	EER system *9	Btu-h/W	9.80	9.59	9.38	9.28
CSPF for T3 condition *2		BTU/h/W	20.7	20.5	18.3	17.1
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)	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)	-5.0~52.0 °C (23~126 °F)
Heating capacity *3		kW	22.4	28.0	33.5	40.0
		BTU/h	76,400	95,500	114,300	136,500
	Power input	kW	5.05	6.33	8.11	9.61
	Current input	A	8.5-8.0-7.8	10.6-10.1-9.7	13.6-13.0-12.5	16.2-15.4-14.8
	COP	kW/kW	4.43	4.42	4.13	4.16
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)	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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P250/1~17	P15~P250/1~21	P15~P250/1~26	P15~P400/1~30
Sound pressure level *4 (measured in anechoic room)		dB <A>	57	58	61	61
Sound pressure level *2 (measured in anechoic room, T3 condition)		dB <A>	62.5	62.5	62.5	62.5
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	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	185	210
		L/s	2,917	2,917	3,083	3,500
		cfm	6,179	6,179	6,532	7,415
	Air flow rate (T3 condition) *2	m^3/min	222	222	222	246
		L/s	3,700	3,700	3,700	4,100
		cfm	7,839	7,839	7,839	8,686
	Control, 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
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	5.5	6.9	8.1	10.4
	Case heater	kW	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit
Net weight		kg (lbs)	191 (422)	191 (422)	204 (450)	243 (536)
Heat exchanger			Salt-resistant cross fin & copper 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, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.

*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

*6 Outdoor 35ºC DB (T1) conditions (subject to ISO15042). As per QCC.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*7 Verified by 3rd party institute (Intertek).

*8 Outdoor input + Indoor input.

*9 Capacity / Power input system.

*10 Outdoor 48ºC DB conditions (subject to MEW/R-6/2018). As per MEW.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	26.6ºC DB/19.4ºC WB (80ºF DB/67ºF WB)	48ºC DB (118ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)

OUTDOOR UNIT

YKD1-series

PUHY-P YKD1 (-BS)



Specifications

Model			PUHY-P400YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P500YKD1 (-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 *1		kW	44.5	47.0	55.0
		BTU/h	152,000	160,000	188,000
	Power input	kW	11.99	12.93	14.07
	Current input	A	20.2-19.2-18.5	21.8-20.7-19.9	23.7-22.5-21.7
	EER	kW/kW	3.71	3.63	3.90
Cooling capacity *6*7 Outdoor 35°C DB (T1)		kW	44.5	47.0	55.0
		BTU/h	152,000	160,000	188,000
	Power input system *8	kW	13.65	14.80	16.15
	Power factor	%	90	90	90
	EER system *9	Btu-h/W	11.10	10.80	11.60
Cooling capacity *2*7 Outdoor 46°C DB (T3)		kW	34.8	35.5	40.5
		BTU/h	118,700	121,100	138,200
	Power input	kW	12.88	14.37	15.16
	EER	Btu-h/W	9.21	8.42	9.11
Cooling capacity *7*10 Outdoor 48°C DB		kW	28.0	28.8	29.2
		BTU/h	95,500	98,300	99,600
	Power input system *8	kW	10.57	10.82	11.29
	EER system *9	Btu-h/W	9.03	9.08	8.82
CSPF for T3 condition *2		BTU/h/W	16.2	16	15.5
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 *3		kW	45.0	48.0	55.0
		BTU/h	153,500	163,800	187,700
	Power input	kW	10.92	13.33	15.71
	Current input	A	18.4-17.5-16.8	22.5-21.3-20.6	26.5-25.1-24.2
	COP	kW/kW	4.12	3.60	3.50
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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level *4 (measured in anechoic room)		dB <A>	63	63	65
Sound pressure level *2 (measured in anechoic room, T3 condition)		dB <A>	63	63	65
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
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m^3/min	210	210	360
		L/s	3,500	3,500	6,000
		cfm	7,415	7,415	12,712
	Air flow rate (T3 condition) *2	m^3/min	246	246	433
		L/s	4,100	4,100	7,217
		cfm	8,686	8,686	15,289
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 2
*5	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	13.3
	Case heater	kW	-	-	-
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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	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)
	Control		LEV and HIC circuit	LEV and HIC circuit	LEV and HIC circuit
Net weight		kg (lbs)	241 (532)	241 (532)	285 (629)
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		

Notes:

*1, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 The sound pressure level measured by the conventional method in JIS for reference purpose.

*5 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

*6 Outdoor 35ºC DB (T1) conditions (subject to ISO15042). As per QCC.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC DB/19ºC WB (81ºF DB/66ºF WB)	35ºC DB/24ºC WB (95ºF DB/75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*7 Verified by 3rd party institute (Intertek).

*8 Outdoor input + Indoor input.

*9 Capacity / Power input system.

*10 Outdoor 48ºC DB conditions (subject to MEW/R-6/2018). As per MEW.

	Indoor	Outdoor	Pipe length	Level difference
Cooling	26.6ºC DB/19.4ºC WB (80ºF DB/67ºF WB)	48ºC DB (118ºF DB)	7.5m (24-9/16ft.)	0m (0ft.)

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P550YSKD1 (-BS)	PUHY-P600YSKD1 (-BS)	PUHY-P650YSKD1 (-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 *1		kW	63.0	68.0	73.0
		BTU/h	216,000	232,000	250,000
	Power input	kW	14.25	15.34	17.80
	Current input	A	24.0-22.8-22.0	25.8-24.6-23.7	30.0-28.5-27.5
	EER	kW/kW	4.42	4.43	4.10
Cooling capacity *2		kW	63.9	69.4	74.5
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 *3		kW	63.0	68.0	73.0
		BTU/h	215,000	232,000	249,100
	Power input	kW	15.51	16.70	18.02
	Current input	A	26.1-24.8-23.9	28.1-26.7-25.8	30.4-28.8-27.8
	COP	kW/kW	4.06	4.07	4.05
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~P500/1~47	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	63	63	64.5
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	65.5	65.5	66
Refrigerant piping diameter	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

Set Model

Model			PUHY-P250YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P400YKD1 (-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
	Air flow rate	m^3/min	175	185	175	210	175	210
		L/s	2,917	3,083	2,917	3,500	2,917	3,500
		cfm	6,179	6,532	6,179	7,415	6,179	7,415
	Air flow rate (T3 condition) *4	m^3/min	222	222	222	246	222	246
		L/s	3,700	3,700	3,700	4,100	3,700	4,100
		cfm	7,839	7,839	7,839	8,686	7,839	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	10.4	6.9	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 8.0 kg (18 lbs)	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)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	191 (422)	204 (450)	191 (422)	243 (536)	191 (422)	241 (532)
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	9.52 (3/8) Brazed	15.88 (5/8) 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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P700YSKD1 (-BS)	PUHY-P750YSKD1 (-BS)	PUHY-P800YSKD1 (-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 *1		kW	76.0	81.5	90.0
		BTU/h	260,000	278,000	308,000
	Power input	kW	19.24	21.39	25.56
	Current input	A	32.4-30.8-29.7	36.1-34.3-33.0	43.1-40.9-39.5
	EER	kW/kW	3.95	3.81	3.52
Cooling capacity *2		kW	77.6	83.2	91.3
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 *3		kW	76.0	81.5	90.0
		BTU/h	259,300	278,100	307,100
	Power input	kW	20.00	22.20	23.01
	Current input	A	33.7-32.0-30.9	37.4-35.6-34.3	38.8-36.9-35.5
	COP	kW/kW	3.80	3.67	3.91
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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	64.5	65.5	66
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	66	66	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P250YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-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
	Air flow rate	m^3/min	175	210	185	210	210	210
		L/s	2,917	3,500	3,083	3,500	3,500	3,500
		cfm	6,179	7,415	6,532	7,415	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	222	246	222	246	246	246
		L/s	3,700	4,100	3,700	4,100	4,100	4,100
		cfm	7,839	8,686	7,839	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4	8.1	12.4	10.8	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	191 (422)	241 (532)	204 (450)	241 (532)	241 (532)	241 (532)
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	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P850YSKD1 (-BS)	PUHY-P900YSKD1 (-BS)	PUHY-P950YSKD1 (-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 *1		kW	93.0	96.0	103.0
		BTU/h	318,000	328,000	352,000
	Power input	kW	27.27	29.00	31.30
	Current input	A	46.0-43.7-42.1	48.9-46.5-44.8	52.8-50.1-48.3
	EER	kW/kW	3.41	3.31	3.29
Cooling capacity *2		kW	94.4	97.4	105.2
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 *3		kW	93.0	96.0	103.0
		BTU/h	317,300	327,600	351,400
	Power input	kW	25.40	28.07	30.56
	Current input	A	42.8-40.7-39.2	47.3-45.0-43.3	51.5-49.0-47.2
	COP	kW/kW	3.66	3.42	3.37
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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	66	66	67.5
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	66	66	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P400YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P500YKD1 (-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 2
	Air flow rate	m^3/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
	Air flow rate (T3 condition) *4	m^3/min	246	246	246	246	246	433
		L/s	4,100	4,100	4,100	4,100	4,100	7,217
		cfm	8,686	8,686	8,686	8,686	8,686	15,289
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	12.4	12.4	12.4	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.5 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)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	241 (532)	241 (532)	241 (532)	241 (532)	241 (532)	285 (629)
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.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P1000YSKD1 (-BS)	PUHY-P1050YSKD1 (-BS)	PUHY-P1100YSKD1 (-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 *1		kW	110.0	115.0	122.0
		BTU/h	376,000	392,000	415,000
	Power input	kW	33.63	29.26	30.96
	Current input	A	56.7-53.9-51.9	49.3-46.9-45.2	52.2-49.6-47.8
	EER	kW/kW	3.27	3.93	3.94
Cooling capacity *2		kW	112.3	117.4	124.6
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 *3		kW	110.0	115.0	121.5
		BTU/h	375,300	392,400	414,600
	Power input	kW	33.13	31.50	33.80
	Current input	A	55.9-53.1-51.2	53.1-50.5-48.6	57.0-54.2-52.2
	COP	kW/kW	3.32	3.65	3.59
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~P500/1~50	P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	68	66.5	66.5
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	68	67.5	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P500YKD1 (-BS)	PUHY-P500YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P450YKD1 (-BS)
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	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^3/min	360	360	185	185	210	185	210	210
		L/s	6,000	6,000	3,083	3,083	3,500	3,083	3,500	3,500
		cfm	12,712	12,712	6,532	6,532	7,415	6,532	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	433	433	222	222	246	222	246	246
		L/s	7,217	7,217	3,700	3,700	4,100	3,700	4,100	4,100
		cfm	15,289	15,289	7,839	7,839	8,686	7,839	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2	0.92 x 2	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	13.3	13.3	8.1	8.1	12.4	8.1	10.4	12.4
	Case heater	kW	-	-	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 8.0 kg (18 lbs)	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)
	Control		LEV and HIC circuit		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	285 (629)	285 (629)	204 (450)	204 (450)	241 (532)	204 (450)	243 (536)	241 (532)
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.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	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	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	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-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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P1150YSKD1 (-BS)	PUHY-P1200YSKD1 (-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 *1		kW	130.0	135.0
		BTU/h	445,000	460,000
	Power input	kW	34.90	38.35
	Current input	A	58.9-55.9-53.9	64.7-61.5-59.2
	EER	kW/kW	3.72	3.52
Cooling capacity *2		kW	132.7	137.8
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 *3		kW	130.0	135.0
		BTU/h	443,600	460,600
	Power input	kW	35.51	37.70
	Current input	A	59.9-56.9-54.8	63.6-60.4-58.2
	COP	kW/kW	3.66	3.58
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~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	67.5	68
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	68	68
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

Set Model

Model			PUHY-P350YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	10.8	10.8	10.8	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	243 (536)	241 (532)	241 (532)	241 (532)	241 (532)	241 (532)
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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series

PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P1250YSKD1 (-BS)	PUHY-P1300YSKD1 (-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 *1		kW	138.0	141.0
		BTU/h	470,000	480,000
	Power input	kW	40.00	41.83
	Current input	A	67.5-64.1-61.8	70.6-67.0-64.6
	EER	kW/kW	3.45	3.37
Cooling capacity *2		kW	140.9	144.0
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 *3		kW	138.0	141.0
		BTU/h	470,900	481,100
	Power input	kW	40.35	42.98
	Current input	A	68.1-64.7-62.3	72.5-68.9-66.4
	COP	kW/kW	3.42	3.28
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~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	68	68
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	68	68
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

Set Model

Model			PUHY-P400YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P400YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	10.8	12.4	10.8	12.4	12.4
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	241 (532)	241 (532)	241 (532)	241 (532)	241 (532)	241 (532)
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	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P1350YSKD1 (-BS)	PUHY-P1400YSKD1 (-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 *1		kW	144.0	151.0
		BTU/h	490,000	515,000
	Power input	kW	43.63	45.89
	Current input	A	73.6-69.9-67.4	77.4-73.5-70.9
	EER	kW/kW	3.30	3.29
Cooling capacity *2		kW	147.0	154.2
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 *3		kW	144.0	151.0
		BTU/h	491,300	515,200
	Power input	kW	46.15	49.50
	Current input	A	77.9-74.0-71.3	83.5-79.3-76.5
	COP	kW/kW	3.12	3.05
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~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	68	68.5
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	68	68.5
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

Set Model

Model			PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P450YKD1 (-BS)	PUHY-P500YKD1 (-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 2
	Air flow rate	m^3/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
	Air flow rate (T3 condition) *4	m^3/min	246	246	246	246	246	433
		L/s	4,100	4,100	4,100	4,100	4,100	7,217
		cfm	8,686	8,686	8,686	8,686	8,686	15,289
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4	12.4	12.4	12.4	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	241 (532)	241 (532)	241 (532)	241 (532)	241 (532)	285 (629)
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	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series
PUHY-P YSKD1 (-BS)



Specifications

Model			PUHY-P1450YSKD1 (-BS)	PUHY-P1500YSKD1 (-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 *1		kW	158.0	165.0
		BTU/h	540,000	565,000
	Power input	kW	48.17	50.45
	Current input	A	81.3-77.2-74.4	85.1-80.9-77.9
	EER	kW/kW	3.28	3.27
Cooling capacity *2		kW	161.3	168.5
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 *3		kW	158.0	165.0
		BTU/h	539,100	563,000
	Power input	kW	52.49	56.12
	Current input	A	88.6-84.1-81.1	94.7-90.0-86.7
	COP	kW/kW	3.01	2.94
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~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	69.5	70
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	69.5	70
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

Set Model

Model			PUHY-P450YKD1 (-BS)	PUHY-P500YKD1 (-BS)	PUHY-P500YKD1 (-BS)	PUHY-P500YKD1 (-BS)	PUHY-P500YKD1 (-BS)	PUHY-P500YKD1 (-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^3/min	210	360	360	360	360	360
		L/s	3,500	6,000	6,000	6,000	6,000	6,000
		cfm	7,415	12,712	12,712	12,712	12,712	12,712
	Air flow rate (T3 condition) *4	m^3/min	246	433	433	433	433	433
		L/s	4,100	7,217	7,217	7,217	7,217	7,217
		cfm	8,686	15,289	15,289	15,289	15,289	15,289
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	13.3	13.3	13.3	13.3	13.3
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 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)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	241 (532)	285 (629)	285 (629)	285 (629)	285 (629)	285 (629)
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	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - High Efficiency
PUHY-EP YSKD1 (-BS)



Specifications

Model			PUHY-EP400YSKD1 (-BS)	PUHY-EP450YSKD1 (-BS)	PUHY-EP500YSKD1 (-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 *1		kW	45.0	50.5	56.0
		BTU/h	154,000	172,000	192,000
	Power input	kW	9.25	10.56	11.91
	Current input	A	15.6-14.8-14.2	17.8-16.9-16.3	20.1-19.1-18.4
	EER	kW/kW	4.86	4.78	4.70
Cooling capacity *2		kW	45.6	51.2	56.8
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 *3		kW	44.8	50.4	56.0
		BTU/h	152,900	172,000	191,100
	Power input	kW	10.66	12.00	13.36
	Current input	A	17.9-17.0-16.4	20.2-19.2-18.5	22.5-21.4-20.6
	COP	kW/kW	4.20	4.20	4.19
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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level (measured in anechoic room) *5		dB <A>	60	60.5	61
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	65.5	65.5	65.5
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

Set Model

Model			PUHY-P200YKD1 (-BS)	PUHY-P200YKD1 (-BS)	PUHY-P200YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P250YKD1 (-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
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179	6,179	6,179
	Air flow rate (T3 condition) *4	m^3/min	222	222	222	222	222	222
		L/s	3,700	3,700	3,700	3,700	3,700	3,700
		cfm	7,839	7,839	7,839	7,839	7,839	7,839
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	6.9	6.9	6.9
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
	Control		LEV and HIC circuit		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	191 (422)	191 (422)	191 (422)	191 (422)	191 (422)	191 (422)
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	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	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-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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - High Efficiency

PUHY-EP YSKD1 (-BS)



Specifications

Model			PUHY-EP650YSKD1 (-BS)	PUHY-EP700YSKD1 (-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 *1		kW	73.5	80.0
		BTU/h	252,000	274,000
	Power input	kW	17.83	19.75
	Current input	A	30.0-28.5-27.5	33.3-31.6-30.5
	EER	kW/kW	4.12	4.05
Cooling capacity *2		kW	75.0	81.2
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 *3		kW	73.5	80.0
		BTU/h	250,800	273,000
	Power input	kW	18.70	20.25
	Current input	A	31.5-29.9-28.9	34.1-32.4-31.3
	COP	kW/kW	3.93	3.95
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~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	64	64
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	65.5	65.5
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

Set Model

Model			PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-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^3/min	185	210	210	210
		L/s	3,083	3,500	3,500	3,500
		cfm	6,532	7,415	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	222	246	246	246
		L/s	3,700	4,100	4,100	4,100
		cfm	7,839	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.4	10.4	10.4
	Case heater	kW	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight		kg (lbs)	204 (450)	243 (536)	243 (536)	243 (536)
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	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
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-Y100VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - High Efficiency

PUHY-EP YSKD1 (-BS)



Specifications

Model			PUHY-EP750YSKD1 (-BS)	PUHY-EP800YSKD1 (-BS)	PUHY-EP850YSKD1 (-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 *1		kW	85.0	90.5	96.0
		BTU/h	290,000	310,000	328,000
	Power input	kW	19.23	20.85	22.53
	Current input	A	32.4-30.8-29.7	35.1-33.4-32.2	38.0-36.1-34.8
	EER	kW/kW	4.42	4.34	4.26
Cooling capacity *2		kW	86.8	92.4	98.0
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 *3		kW	84.8	90.4	96.0
		BTU/h	289,300	308,400	327,600
	Power input	kW	20.58	21.99	23.35
	Current input	A	34.7-33.0-31.8	37.1-35.2-33.9	39.4-37.4-36.0
	COP	kW/kW	4.12	4.11	4.11
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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	64	64	64
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	67.5	67.5	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P200YKD1 (-BS)	PUHY-P200YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P200YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P250YKD1 (-BS)	PUHY-P350YKD1 (-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	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	210	175	175	210	175	175	210
		L/s	2,917	2,917	3,500	2,917	2,917	3,500	2,917	2,917	3,500
		cfm	6,179	6,179	7,415	6,179	6,179	7,415	6,179	6,179	7,415
	Air flow rate (T3 condition) *4	m^3/min	222	222	246	222	222	246	222	222	246
		L/s	3,700	3,700	4,100	3,700	3,700	4,100	3,700	3,700	4,100
		cfm	7,839	7,839	8,686	7,839	7,839	8,686	7,839	7,839	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 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	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	10.4	5.5	6.9	10.4	6.9	6.9	10.4
	Case heater	kW	-	-	-	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 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 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	191 (422)	191 (422)	243 (536)	191 (422)	191 (422)	243 (536)	191 (422)	191 (422)	243 (536)
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	12.7 (1/2) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	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	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			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

YKD1-series - High Efficiency

PUHY-EP YSKD1 (-BS)



Specifications

Model			PUHY-EP900YSKD1 (-BS)	PUHY-EP950YSKD1 (-BS)	PUHY-EP1000YSKD1 (-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 *1		kW	101.5	107.0	113.5
		BTU/h	346,000	366,000	388,000
	Power input	kW	24.16	26.75	28.80
	Current input	A	40.7-38.7-37.3	45.1-42.9-41.3	48.6-46.1-44.5
	EER	kW/kW	4.20	4.00	3.94
Cooling capacity *2		kW	103.6	109.2	115.9
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 *3		kW	101.5	107.0	113.5
		BTU/h	346,300	365,100	387,300
	Power input	kW	25.24	27.22	28.80
	Current input	A	42.6-40.4-39.0	45.9-43.6-42.0	48.6-46.1-44.5
	COP	kW/kW	4.02	3.93	3.94
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~P500/1~50	P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room) *5		dB <A>	65	66	66
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	67.5	67.5	67.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	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	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P250YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P300YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-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	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	185	210	185	185	210	185	210	210
		L/s	2,917	3,083	3,500	3,083	3,083	3,500	3,083	3,500	3,500
		cfm	6,179	6,532	7,415	6,532	6,532	7,415	6,532	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	222	222	246	222	222	246	222	246	246
		L/s	3,700	3,700	4,100	3,700	3,700	4,100	3,700	4,100	4,100
		cfm	7,839	7,839	8,686	7,839	7,839	8,686	7,839	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 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	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	10.4	8.1	8.1	10.4	8.1	10.4	10.4
	Case heater	kW	-	-	-	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	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)
	Control		LEV and HIC circuit			LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	191 (422)	204 (450)	243 (536)	204 (450)	204 (450)	243 (536)	204 (450)	243 (536)	243 (536)
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	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) 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	28.58 (1-1/8) 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	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

OUTDOOR UNIT

YKD1-series - High Efficiency
PUHY-EP YSKD1 (-BS)



Specifications

Model			PUHY-EP1050YSKD1 (-BS)	PUHY-EP1100YSKD1 (-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 *1		kW	120.0	125.0
		BTU/h	410,000	425,000
	Power input	kW	29.62	32.55
	Current input	A	50.0-47.5-45.7	54.9-52.2-50.3
	EER	kW/kW	4.05	3.84
Cooling capacity *2		kW	122.5	127.6
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 *3		kW	120.0	125.0
		BTU/h	409,400	426,500
	Power input	kW	31.25	33.24
	Current input	A	52.7-50.1-48.3	56.1-53.3-51.3
	COP	kW/kW	3.84	3.76
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~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room) *5		dB <A>	66	67
Sound pressure level (measured in anechoic room, T3 condition) *4		dB <A>	67.5	67.5
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

Set Model

Model			PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P350YKD1 (-BS)	PUHY-P400YKD1 (-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
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	7,415
	Air flow rate (T3 condition) *4	m^3/min	246	246	246	246	246	246
		L/s	4,100	4,100	4,100	4,100	4,100	4,100
		cfm	8,686	8,686	8,686	8,686	8,686	8,686
	Control, Driving mechanism		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*6	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.4	10.4	10.4	10.4	10.8
	Case heater	kW	-	-	-	-	-	-
	Lubricant		MEL32	MEL32	MEL32	MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>		
External dimension H x W x D		mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
		in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 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)	R410A x 11.5 kg (26 lbs)
	Control		LEV and HIC circuit			LEV and HIC circuit		
Net weight		kg (lbs)	243 (536)	243 (536)	243 (536)	243 (536)	243 (536)	241 (532)
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	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	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, *3 Nominal conditions (subject to JIS B8615-2)

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

Cooling capacity (BTU/h) is calculated based on SASO 2874.

*2 Reference data under following conditons

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C D.B./19.5°C W.B. (81°F D.B./67°F W.B.)	35°C D.B. (95°F D.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*4 T3 conditions (subject to UAE.S ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C D.B./19°C W.B. (84°F D.B./66°F W.B.)	46°C D.B./24°C W.B. (115°F D.B./75°F W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.
*6 External static pressure option is available (30 Pa, 60 Pa/3.1 mmH_2O, 6.1 mmH_2O). Refer to the capacity table in DATABOOK for details.

Optional Parts for Outdoor Units

For PUCY-Series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUCY-P550-P650YSKD1, EP400-EP650YSKD1
	CMY-Y200VBK2	For PUCY-P700-P1000YSKD1, EP700YSKD1
	CMY-Y300VBK3	For PUCY-P1050-P1500YSKD1, EP750-EP1100YSKD1
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
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
		The 1st branch of P700-P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

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

For PUHY-Series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUHY-P550-P650YSKD1, EP400-EP650YSKD1
	CMY-Y200VBK2	For PUHY-P700-P1000YSKD1, EP700YSKD1
	CMY-Y300VBK3	For PUHY-P1050-P1500YSKD1, EP750-EP1100YSKD1
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
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
		The 1st branch of P700-P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

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

S-Series

PUMY

The line-up of side-flow type outdoor units includes models from 4 HP to 12 HP, which offers flexibility in installations in tight spaces. This type is suitable for small-scale offices and residences. 1-phase type (VKM) and 3-phase type (YKM/YBM) are available.



Heat pump	Cooling only
• PUMY-P YKM2-U • PUMY-P YBM-U • PUMY-P VKM7-SA	• PUMY-CP VKM2-U • PUMY-CP YKM(2)-U • PUMY-CP YBM-U

Cooling model features CP V(Y)KM

- Guaranteed operation at an outside air temperature of up to 52°C [125°F]. They can operate even at an increased temperature in the summer
- The 981 mm [38-5/8 in.] height model does not interfere with the appearance of balconies
- The units feature quiet modes. The operation mode can be selected according to the installation situation



PUMY-CP VKM2-U/YKM2-U

Installation image

Residence



Advantage of PUMY (for residences)

One outdoor unit can be connected to up to 29 indoor units (CP300). Even when indoor units are installed in many rooms, one outdoor unit can connect multiple indoor units.

↓

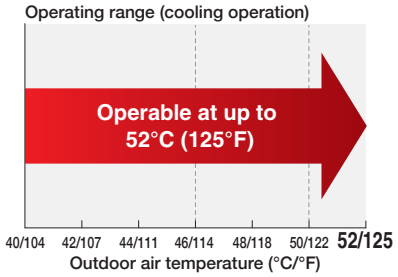
Space savings

Wide range of available according to use pattern

①Operation guaranteed at an outside air temperature of up to 52°C [125°F].*

- New inverter technology has made it possible for units to operate at an outdoor air temperature as high as 52°C [125°F].
- Performs well even in narrow spaces and in multiple installations where heated air stagnates.

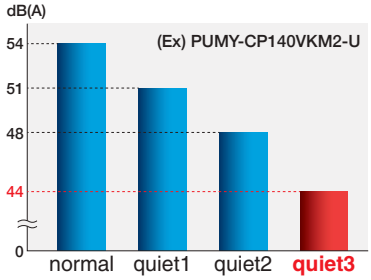
■ Operation at high temperatures (52°C/125°F)



②Quiet mode

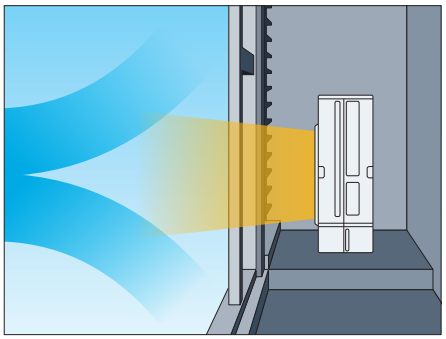
- Cooling only models have three quiet modes in addition to the normal mode, and a suitable noise mode can be selected from among the four available modes. The noise level can be set according to the application, for example, in a residential zone where noise may be an issue.

* Only CP V(Y)KM and SP V(Y)KM model
* Capacity reduction differs by mode setting.
* PAC-SC36NA-E is required this mode.
* Available during cooling only.



③External static pressure

- An external static pressure of 30 Pa allows outdoor unit to be installed on balconies in high-rise buildings or spaces near louvers.

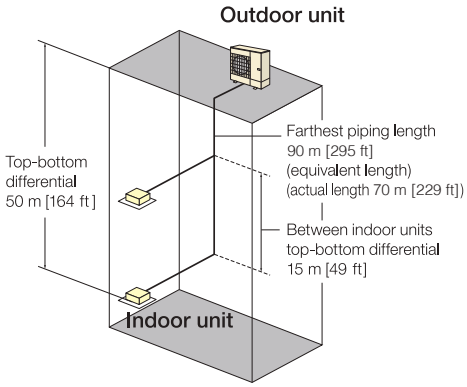


* Except P175 to P225YKM model
* To set the external static pressure on YKM4 and VKM5, an optional component (PAC-SJ71FM-E) is required.
* Noise level increase when using this function.

Flexible Piping

Mitsubishi Electric uses a two-pipe system, which is characterized by reduced numbers of pipes and piping joints.

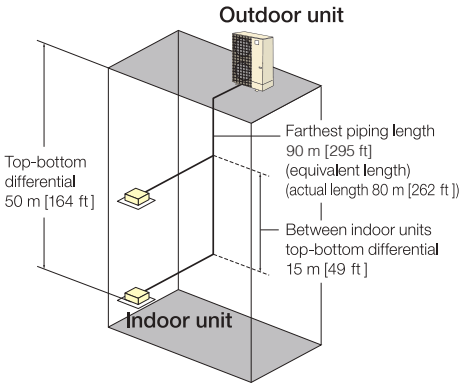
[CP100-140V/YKM2-U]



Refrigerant Piping Lengths	Maximum meters [feet]
Total length	120 [393]
Maximum allowable length	70 (90 equivalent) [229 (295)]
Farthest indoor from first branch	50 [164]*1

Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	30 [98]
Indoor/indoor	15 [49]

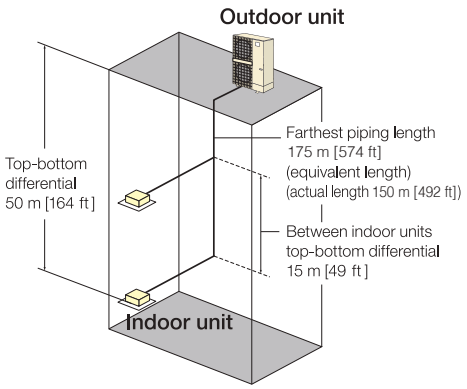
[CP175-225YKM-U] [P175-225YKM2-U]



Refrigerant Piping Lengths	Maximum meters [feet]
Total length	150 [492]
Maximum allowable length	80 (90 equivalent) [262 (295)]
Farthest indoor from first branch	30 [98]

Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]

[CP250-300YBM-U] [P250-300YBM-U]



Refrigerant Piping Lengths	Maximum meters [feet]
Total length	310 [1,017]
Maximum allowable length	150 (175 equivalent) [492 (574)]
Farthest indoor from first branch	30 [98]

Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]

*1 Use liquid pipe of ø9.52 for less than P50 indoor units, when farthest length from the first branch exceeds 30m.

OUTDOOR UNIT

S-series

PUMY-CP VKM2-U (-BS)



Specifications

Model			PUMY-CP100VKM2-U (-BS)	PUMY-CP125VKM2-U (-BS)	PUMY-CP140VKM2-U (-BS)
Power source			1-phase 220-230-240 V, 50 Hz; 1-phase 220 V, 60 Hz		
Cooling capacity (T1)	*1	kW	11.2	14.0	15.5
	*1	BTU/h	38,200	47,800	52,900
	Power input	kW	2.80	3.84	4.70
	Current input	A	12.99-12.42-11.90, 12.99	17.81-17.04-16.33, 17.81	21.80-20.85-19.98, 21.80
	EER	kW/kW	4.00	3.65	3.30
		BTU/h /W	13.65	12.45	11.26
Cooling capacity (T3)	*2	kW	9.0	11.2	12.4
	*2	BTU/h	30,700	38,200	42,300
	Power input	kW	3.23	4.01	4.70
	Current input	A	14.98-14.33-13.73, 14.98	18.60-17.79-17.05, 18.60	21.80-20.85-19.98, 21.80
	EER	kW/kW	2.78	2.79	2.64
		BTU/h /W	9.51	9.53	9.00
	CSPF	BTU/h /W	16.00	15.97	16.11
	Power factor	%	0.98	0.98	0.98
Temp. range of cooling	Indoor temp.	W.B.	15 to 24°C (59 to 75°F)		
	Outdoor temp.	D.B.	10 to 52°C (50 to 126°F)		
Indoor unit connectable	Total capacity		50 to 150% of outdoor unit capacity *3		
	Model/Quantity		P15-P125/7	P15-P140/10	P15-P140/12
Sound pressure level (measured in anechoic room)		dB <A>	52	53	54
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Flared		
	Gas pipe	mm (in.)	15.88 (5/8) Flared		
Fan	Type x Quantity		Propeller Fan × 1		
	Air flow rate	m^3/min	78.8		
		L/s	1,313		
		cfm	2,782		
*4	Motor output	kW	0.20 x 1		
Compressor	Type x Quantity		Twin rotary hermetic compressor × 1		
	Starting method		Inverter		
	Motor output	kW	2.0	2.5	3.1
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension H x W x D		mm	981 × 1050 × 330 (+25)		
		in.	38-5/8 × 41-3/8 × 13 (+1)		
Protection devices	High pressure protection		High pressure switch		
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat Sink thermistor)		
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector		
	Fan motor		Overheating, Voltage protection		
Refrigerant	Type x original charge		R410A 2.9kg		
Net weight		kg (lbs)	86 (190) *5		
Heat exchanger			Cross Fin and Copper tube		
Defrosting method			—		
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E		

Notes:

*1 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)

*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C DB/19°C WB (84°F DB/66°F WB)	46°C DB / 24°C WB (115°F DB / 75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Up to 150% can be connected. However, up to 130% for simultaneous operation.
*4 External static pressure option is available (30Pa/3.1mmH₂O).
*5 87 (192), for PUMY-CP100/125/140VKM2-U-BS.
*Nominal conditions *1 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-series
PUMY-CP YKM2-U (-BS)



Specifications

Model			PUMY-CP100YKM2-U (-BS)	PUMY-CP125YKM2-U (-BS)	PUMY-CP140YKM2-U (-BS)
Power source			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz		
Cooling capacity (T1)	*1	kW	11.2	14.0	15.5
	*1	BTU/h	38,200	47,800	52,900
	Power input	kW	2.80	3.84	4.70
	Current input	A	4.48-4.25-4.10, 4.48	6.14-5.83-5.62, 6.14	7.52-7.14-6.88, 7.52
	EER	kW/kW	4.00	3.65	3.30
		BTU/h /W	13.65	12.45	11.26
Cooling capacity (T3)	*2	kW	9.0	11.2	12.4
	*2	BTU/h	30,700	38,200	42,300
	Power input	kW	3.23	4.01	4.70
	Current input	A	5.77-5.48-5.29, 5.77	6.77-6.43-6.20, 6.77	7.93-7.54-7.27, 7.93
	EER	kW/kW	2.78	2.79	2.64
		BTU/h /W	9.51	9.53	9.00
	CSPF	BTU/h /W	16.00	15.97	16.11
	Power factor	%	0.85	0.90	0.90
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)		
	Outdoor temp.	D.B.	10 to 52.0°C (50 to 126°F)		
Indoor unit connectable	Total capacity		50 to 150% of outdoor unit capacity *3		
	Model/Quantity		P15-P125/7	P15-P140/10	P15-P140/12
Sound pressure level (measured in anechoic room)		dB <A>	52	53	54
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Flared		
	Gas pipe	mm (in.)	15.88 (5/8) Flared		
Fan	Type x Quantity		Propeller Fan × 1		
	Air flow rate	m^3/min	78.8		
		L/s	1,313		
		cfm	2,782		
*5	Motor output	kW	0.20 x 1		
Compressor	Type x Quantity		Twin rotary hermetic compressor × 1		
	Starting method		Inverter		
	Motor output	kW	2.0	2.5	3.0
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension H x W x D		mm	981 × 1050 × 330 (+25)		
		in.	38-5/8 × 41-3/8 × 13 (+1)		
Protection devices	High pressure protection		High pressure switch		
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat Sink thermistor)		
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector		
	Fan motor		Overheating, Voltage protection		
Refrigerant	Type x original charge		R410A 2.9kg		
Net weight		kg (lbs)	87 (191) *6		
Heat exchanger			Cross Fin and Copper tube		
Defrosting method			—		
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E		

Notes:

*1 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)

*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C DB/19°C WB (84°F DB/66°F WB)	46°C DB / 24°C WB (115°F DB / 75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Up to 150% can be connected. However, up to 130% for simultaneous operation.
*4 Liquid pipe diameter: 12.7mm in case that the farthest piping length is longer than 60m, or piping length from outdoor unit to a branch box is longer than 20m.
*5 External static pressure option is available (30 Pa/3.1 mmH$_2$O).
*6 88 (195), for PUMY-CP100/125/140YKM2-U-BS. 130 (287) for PUMY-CP175/200/225YKM2-U-BS.
*Nominal conditions *1 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-series

PUMY-CP YKM-U (-BS)



Specifications

Model			PUMY-CP175YKM-U (-BS)	PUMY-CP200YKM-U (-BS)	PUMY-CP225YKM-U (-BS)
Power source			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz		
Cooling capacity (T1)	*1	kW	20.0	22.4	25.0
	*1	BTU/h	68,200	76,400	85,300
	Power input	kW	5.48	6.91	9.62
	Current input	A	9.57-9.09-8.76, 9.57	12.35-11.73-11.31, 12.35	15.72-14.93-14.39, 15.72
	EER	kW/kW	3.65	3.24	2.60
		BTU/h /W	12.45	11.06	8.87
Cooling capacity (T3)	*2	kW	15.0	16.8	17.3
	*2	BTU/h	51,182	57,323	59,030
	Power input	kW	5.79	6.52	7.10
	Current input	A	10.11-9.61-9.26, 10.11	11.39-10.82-10.43, 11.39	12.40-11.78-11.35, 12.40
	EER	kW/kW	2.59	2.58	2.44
		BTU/h /W	8.84	8.79	8.32
	CSPF	BTU/h /W	17.33	15.73	14.81
	Power factor	%	87	87	87
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)		
	Outdoor temp.	D.B.	10 to 52.0°C (50 to 126°F)		
Indoor unit connectable	Total capacity		50 to 150% of outdoor unit capacity *3		
	Model/Quantity		P15-P200/12	P15-P250/12	P15-P250/12
Sound pressure level (measured in anechoic room)		dB <A>	57	57	58
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Flared *4		
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		
Fan	Type x Quantity		Propeller Fan × 2		
	Air flow rate	m^3/min	134	134	143.8
		L/s	2,233	2,233	2,397
		cfm	4,732	4,732	5,078
	Motor output	kW	0.20 + 0.20		
Compressor	Type x Quantity		Scroll hermetic compressor × 1		
	Starting method		Inverter		
	Motor output	kW	3.6	4.3	5.6
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension H x W x D		mm	1,338 × 1,050 × 330 (+25)		
		in.	52-11/16 × 41-11/32 × 13 (+1)		
Protection devices	High pressure protection		High pressure switch		
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat Sink thermistor)		
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector		
	Fan motor		Overheating, Voltage protection		
Refrigerant	Type x original charge		R410A 6.3kg		
Net weight		kg (lbs)	129 (285) *5		
Heat exchanger			Cross Fin and Copper tube		
Defrosting method			—		
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E		

Notes:

*1 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)

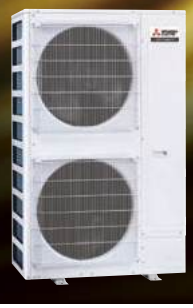
*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C DB/19°C WB (84°F DB/66°F WB)	46°C DB / 24°C WB (115°F DB / 75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Up to 150% can be connected. However, up to 130% for simultaneous operation.
*4 Liquid pipe diameter: 12.7mm in case that the farthest piping length is longer than 60m, or piping length from outdoor unit to a branch box is longer than 20m.
*5 88 (195) for PUMY-CP100/125/140YKM-U-BS. 130 (287) for PUMY-CP175/200/225YKM-U-BS.
*Nominal conditions *1 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-series
PUMY-CP YBM-U (-BS)



Specifications

Model			PUMY-CP250YBM-U (-BS)	PUMY-CP300YBM-U (-BS)
Power source			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz	
Cooling capacity (T1)	*1	kW	28.0	33.5
	*1	BTU/h	95,500	114,300
	Power input	kW	7.18	8.59
	Current input	A	11.73-11.14-10.74, 11.73	14.03-13.33-12.85, 14.03
	EER	kW/kW	3.90	3.90
		BTU/h /W	13.30	13.30
Cooling capacity (T3)	*2	kW	21.0	25.1
	*2	BTU/h	71,600	85,600
	Power input	kW	6.30	7.07
	Current input	A	10.64-10.10-9.47, 10.64	11.94-11.34-10.93, 11.94
	EER	kW/kW	3.33	3.55
		BTU/h /W	11.37	12.11
	CSPF	BTU/h /W	17.98	18.92
	Power factor	%	90	90
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)	
	Outdoor temp.	D.B.	10.0 to 52.0°C (50 to 126°F)	
Indoor unit connectable	Total capacity		50 to 150% of outdoor unit capacity *3	
	Model/Quantity		P15-P250/24	P15-P250/29
Sound pressure level (measured in anechoic room)		dB <A>	59	60
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8) Flared *6	12.7(1/2) Flared
	Gas pipe	mm (in.)	22.2(7/8) Brazed	25.4(1) Brazed
Fan	Type x Quantity		Propeller Fan × 2	
	Air flow rate	m^3/min	178	178
		L/s	2,966	2,966
		cfm	6,285	6,285
*4	Motor output	kW	0.375 + 0.375	
Compressor	Type x Quantity		Scroll hermetic compressor × 1	
	Starting method		Inverter	
	Motor output	kW	6.65	7.23
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	
External dimension H x W x D		mm	1,662 × 1,050 × 460 (+45)	
		in.	65-7/16 × 41-11/32 × 18-7/64 (+1-49/64)	
Protection devices	High pressure protection		High pressure switch	
	Inverter circuit		Overcurrent detection, Overheat detection (Heat Sink thermistor)	
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector	
	Fan motor		Overcurrent, Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A 8.0kg	
Net weight		kg (lbs)	185 (408) *5	
Heat exchanger			Cross Fin and Copper tube	
Defrosting method			—	
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E	

Notes:

*1 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference	External static press.
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)	0 Pa

*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C DB/19°C WB (84°F DB/66°F WB)	46°C DB / 24°C WB (115°F DB / 75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 Up to 150% can be connected. However, up to 130% for simultaneous operation.
*4 External static pressure option is available (30 Pa/3.1 mmH$_2$O).
*5 187 (413) for PUMY-CP250/300YBM-U-BS.
*6 Liquid pipe diameter: 12.7mm, in case of farthest piping length (farthest indoor unit from outdoor unit) is longer than 90m, or connect with PEFY-P200/250.
*Nominal conditions *1 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-series
PUMY-P YKM2-U (-BS)



Specifications

Model			PUMY-P175YKM2-U (-BS)	PUMY-P200YKM2-U (-BS)	PUMY-P225YKM2-U (-BS)
Power source			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz		
Cooling capacity (Nominal)	*1	kW	20.0	22.4	25.0
	*1	BTU/h	68,200	76,400	85,300
	Power input	kW	5.48	6.91	9.62
	Current input	A	9.57-9.09-8.76, 9.57	12.35-11.73-11.31, 12.35	15.72-14.93-14.39, 15.72
	EER	kW/kW	3.65	3.24	2.60
		BTU/h /W	12.45	11.06	8.87
Cooling capacity (T3)	*2	kW	15.0	16.8	17.3
	*2	BTU/h	51,182	57,323	59,030
	Power input	kW	5.79	6.52	7.10
	Current input	A	10.11-9.61-9.26, 10.11	11.39-10.82-10.43, 11.39	12.40-11.78-11.35, 12.40
	EER	kW/kW	2.59	2.58	2.44
		BTU/h /W	8.84	8.79	8.32
	CSPF	BTU/h /W	17.33	15.73	14.81
	Power factor	%	87	87	87
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)		
	Outdoor temp.*4*5	D.B.	-5.0 to 52.0°C (23 to 126°F)		
Heating capacity (Nominal)	*3	kW	22.4	25.0	27.3
	*3	BTU/h	76,400	85,300	93,200
	Power input	kW	5.73	6.96	7.65
	Current input	A	9.36-8.89-8.57, 9.36	11.37-10.80-10.41, 11.37	12.50-11.87-11.44, 12.50
	COP	kW/kW	3.91	3.59	3.57
Temp. range of heating *4	Indoor temp.	D.B.	15.0 to 27.0°C (59 to 81°F)		
	Outdoor temp.	W.B.	-20.0 to 15.0°C (-4 to 59°F)		
Indoor unit connectable	Total capacity		50 to 130% of outdoor unit capacity		
	Model/Quantity		P15-P224/12	P15-P250/12	P15-P250/12
Sound pressure level (measured in anechoic room)	*6	dB <A>	57/61	57/61	58/63
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Flared *7		
	Gas pipe	mm (in.)	22.2 (7/8) Brazed		
Fan	Type x Quantity		Propeller Fan × 2		
	Air flow rate	m^3/min	134	134	143.8
		L/s	2,233	2,233	2,397
		cfm	4,732	4,732	5,078
	Motor output	kW	0.20 + 0.20		
Compressor	Type x Quantity		Scroll hermetic compressor × 1		
	Starting method		Inverter		
	Motor output	kW	3.7	4.3	5.7
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension H x W x D		mm	1,338 × 1,050 × 330 (+25)		
		in.	52-11/16 × 41-11/32 × 13 (+1)		
Protection devices	High pressure protection		High pressure switch		
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat Sink thermistor)		
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector		
	Fan motor		Overheating, Voltage protection		
Refrigerant	Type x original charge		R410A 7.3kg		
Net weight		kg (lbs)	138 (305) *8		
Heat exchanger			Cross Fin and Copper tube		
Defrosting method			Reversed refrigerant circuit		
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E		

Notes:

*1, *3 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB (95°F DB)	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.)

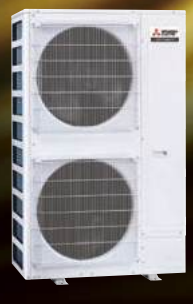
*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29°C DB/19°C WB (84°F DB/66°F WB)	46°C DB / 24°C WB (115°F DB / 75°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*4 10 to 52°C D.B. : When connecting PKFY-P15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VCM, PEFY-P-VMA4, M, S and P series indoor unit.
*5 -15 to 52°C D.B. [5 to 126°F D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*4.
*6 Cooling mode/Heating mode
*7 Liquid pipe diameter: 12.7mm in case that the farthest piping length is longer than 60m, or piping length from outdoor unit to a branch box is longer than 20m.
*8 139 (307) for PUMY-P175/200/225YKM2-U-BS.
*Nominal conditions *1,*2 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-series
PUMY-P YBM-U (-BS)



Specifications

Model			PUMY-P250YBM-U (-BS)	PUMY-P300YBM-U (-BS)
Power source			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz	
Cooling capacity (Nominal)	*1	kW	28.0	33.5
	*1	BTU/h	95,500	114,300
	Power input	kW	6.83	8.17
	Current input	A	11.16-10.60-10.22, 11.16	13.35-12.68-12.22, 13.35
	EER	kW/kW	4.10	4.10
		BTU/h /W	13.98	13.99
Cooling capacity (T3)	*2	kW	21.0	25.1
	*2	BTU/h	71,600	85,600
	Power input	kW	6.40	7.07
	Current input	A	10.80-10.26-9.89, 10.80	11.94-11.34-10.93, 11.94
	EER	kW/kW	3.28	3.55
		BTU/h /W	11.19	12.11
	CSPF	BTU/h /W	18.28	18.34
	Power factor	%	90	90
Temp. range of cooling	Indoor temp.	W.B.	15.0 to 24.0°C (59 to 75°F)	
	Outdoor temp.*4*5	D.B.	-5.0~52.0°C (23 to 126°F)	
Heating capacity (Nominal)	*3	kW	31.5	37.5
	*3	BTU/h	107,500	128,000
	Power input	kW	6.06	7.36
	Current input	A	9.90-9.41-9.07, 9.90	12.02-11.42-11.01, 12.02
	COP	kW/kW	5.20	5.10
Temp. range of heating *4	Indoor temp.	D.B.	15.0 to 27.0°C (59 to 81°F)	
	Outdoor temp.	W.B.	-20.0 to 15.0°C (-4 to 59°F)	
Indoor unit connectable	Total capacity		50 to 130% of outdoor unit capacity	
	Model/Quantity		P15-P250/21	P15-P250/25
Sound pressure level (measured in anechoic room)	*6	dB <A>	59/60	60/62
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52(3/8) Flared *9	12.7(1/2) Flared
	Gas pipe	mm (in.)	22.2(7/8) Brazed	25.4(1) Brazed
Fan	Type x Quantity		Propeller Fan × 2	
	Air flow rate	m^3/min	187/183	187/197
		L/s	3116/3050	3116/3283
		cfm	6603/6462	6603/6956
*7	Motor output	kW	0.375 + 0.375	
Compressor	Type x Quantity		Scroll hermetic compressor × 1	
	Starting method		Inverter	
	Motor output	kW	6.65	7.35
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	
External dimension H x W x D		mm	1,662 × 1,050 × 460 (+45)	
		in.	65-7/16 × 41-11/32 × 18-7/64 (+1-49/64)	
Protection devices	High pressure protection		High pressure switch	
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heat Sink thermistor)	
	Compressor		Compressor thermistor, Overcurrent detection, Compressor protector	
	Fan motor		Overcurrent, Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A 9.3kg	
Net weight		kg (lbs)	192 (424) *8	
Heat exchanger			Cross Fin and Copper tube	
Defrosting method			Reversed refrigerant circuit	
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E	

Notes:

*1, *3 Nominal conditions

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

*2 T3 conditions (subject to UAE.S.ISO 15042)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	29ºC DB/19ºC WB (84ºF DB/66ºF WB)	46ºC DB / 24ºC WB (115ºF DB / 75ºF WB)	7.5m (24-9/16ft.)	0m (0ft.)

*4 10 to 52ºC D.B. : When connecting PKFY-P15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VCM, PEFY-P-VMA4, M, S and P series indoor unit.
*5 -15 to 52ºC D.B. [5 to 126ºF D.B.], when using an optional air protect guide [PAC-SH21AG-E]. However, this condition does not apply to the indoor unit listed in*3.
*6 Cooling mode/Heating mode
*7 External static pressure option is available (30 Pa/3.1 mmH_2O).
*8 194 (428) for PUMY-P250/300YBM-U-BS.
*9 Liquid pipe diameter: 12.7mm, in case of farthest piping length (farthest indoor unit from outdoor unit) is longer than 90m, or connect with PEFY-P200/250.
*Nominal conditions *1,*3 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.

Optional Parts for Outdoor Units

For PUMY-Series

Description	Model	Remarks
Air protect guide	PAC-SH95AG-E	For PUMY-CP100-225V/YKM(2)-U, PUMY-P 175-225YKM2-U* *Two are needed for PUMY-(C)P175/200/225YKM(2)
	PAC-SK21AG-E	Two are needed for PUMY-(C)P250/300YBM-U
Air outlet guide	PAC-SH96SG-E	For PUMY-CP100-225V/YKM(2)-U, PUMY-P 175-225YKM2-U* *Two are needed for PUMY-(C)P175/200/225YKM(2)
	PAC-SK22SG-E	Two are needed for PUMY-(C)P250/300YBM-U
Drain socket	PAC-SG61DS-E	For PUMY-CP100-225V/YKM(2)-U, PUMY-P 175-225YKM2-U
	PAC-SK27DS-E	For PUMY-(C)P250/300YBM-U
Centralized drain pan	PAC-SH97DP-E	For PUMY-CP100-225V/YKM(2)-U, PUMY-P 175-225YKM2-U
	PAC-SJ83DP-E	For PUMY-(C)P250/300YBM-U
Connection kit	PAC-LV11M-J	
Branch pipe	CMY-Y62-G-E	For 2 branches
Header	CMY-Y64-G-E	For 4 branches
	CMY-Y68-G-E	For 8 branches

Indoor unit

A suitable unit can be selected from among a wide lineup of 16 types of units according to a building's needs. The lineup includes the cassette type, ensuring improved comfort and a pleasant appearance, the ceiling concealed type, excelling in quietness and ensuring flexible placement of air outlets, and the ceiling suspended and wall-mounted types.



Various installation patterns for indoor situations

Ceiling Cassette





Ceiling Concealed





Other Types





Wide Selection of Indoor Units

Ceiling Cassette Type

4-way airflow type
PLFY-P VEM-PA



Capacity zone

kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0

››› P91-P94

4-way airflow type
PLFY-P VFM-E1



Capacity zone

kW	1.7	2.2	2.8	3.6	4.5	5.6

››› P95-P98

2-way airflow type
PLFY-P VMMD-E

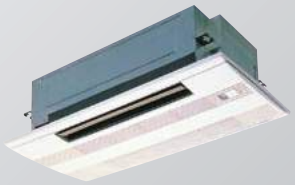


Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0

››› P99-P100

1-way airflow type
PMFY-P VBM-E



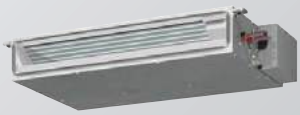
Capacity zone

kW	2.2	2.8	3.6	4.5

››› P101-P102

Ceiling Concealed Type

Low static pressure type
PEFY-P VMS1(L)-E

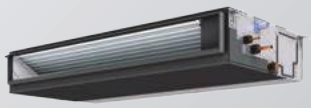


Capacity zone

kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1

››› P105-P106

Medium static pressure type
PEFY-P VMA(L)-E4
PEFY-P VMA3/4-E



Capacity zone

VMA(L) (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
VMA3/4 (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	

››› P107-P111

High static pressure type
PEFY-P VMHS-E



Capacity zone

kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	18.0	20.2	22.4	28.0

››› P112-P114

Fresh air intake type
PEFY-P VMHS-E-F



Capacity zone

kW	14.0	22.4	28.0

››› P115-P116

Low noise type
PEFY-P VMR-E-L/R



Capacity zone

kW	2.2	2.8	3.6

››› P117-P118

Other Type

Ceiling suspended type
PCFY-P VKM-E



Capacity zone

kW	4.5	7.1	11.2	14.0

››› P119-P120

Wall-mounted type
PKFY-P VLM-E
PKFY-P VKM-E



Capacity zone

VLM (kW)	1.2	1.7	2.2	2.8	3.6	4.5	5.6
VKM (kW)	7.1	11.2					

››› P121-P122

Floor standing type
PFFY-P VKM-E2



Capacity zone

kW	2.2	2.8	3.6	4.5

››› P123-P124

Floor standing type (for perimeter zone)
PFFY-P VLEM-E



Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1

››› P125-P126

Floor standing type (for perimeter zone)
PFFY-P VCM-E



Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1

››› P127-P128

Floor standing type
PFFY-P YM-E
PFFY-P YMH-E



Capacity zone

YM (kW)	22.4	28.0	45.0	56.0
YMH (kW)	22.4	28.0		

››› P129-P130

Floor standing type (freshair intake type)
PFFY-P YM-E-F



Capacity zone

kW	33.5	67.0

››› P131-P132

Ceiling Cassette







Ceiling Cassette Type

4-way airflow type
PLFY-P VEM-PA



- Line up expanded up to P140
- The airflow pattern can be selected from 4, 3, or 2 directions
- With the 3D i-see Sensor, “felt temperature* control” is available, contributing to improve comfort/energy efficiency

*i.e., the temperature felt by people in the room

3D i-see Sensor | Decoration Panel | Drain Pump | Air Flow Rate 4 types | Fresh air intake usable

4-way airflow type
PLFY-P VFM-E1



- 625 mm [24 in.] compact design. Fits perfectly with 2-inch by 2-inch ceiling systems
- With 3D i-see Sensor, smart control based on the number of people in the room is available, contributing to improve comfort/energy efficiency

3D i-see Sensor | Decoration Panel | Drain Pump | Air Flow Rate 3 types | Fresh air intake usable

2-way airflow type
PLFY-P VMMD-E



- Stylish design with well blended air inlet
- The unit has a height of 290 mm [11-7/16 in.] and can be used in a corridor or narrow room

Decoration Panel | Drain Pump | Air Flow Rate 3 types | Fresh air intake usable

1-way airflow type
PMFY-P VBM-E



- The 1-way air flow type that is recommended to install on the edges of a room
- Thin design with a height of 230 mm [9-1/16 in.]

Decoration Panel | Drain Pump | Air Flow Rate 4 types | Fresh air intake usable

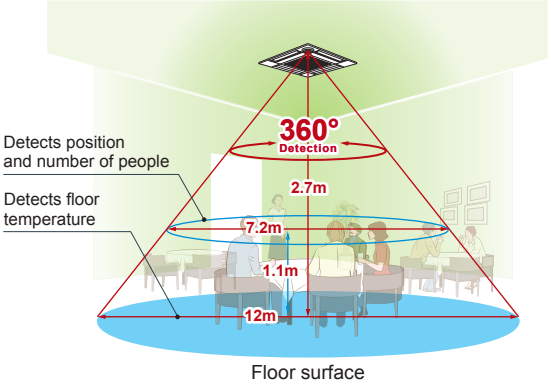
3D i-see Sensor



The “3D i-see Sensor” built into the optional corner panel eliminates uneven temperature distribution and reduces electricity consumption.

Highly accurate motion detection

A total of eight sensors rotate a full 360° in 3-minute intervals. In addition to detecting body temperature, our original algorithm also detects the number of occupants in the room and their positions.



PLFY-P VEM-PA





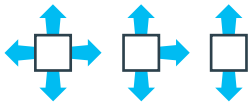
Optimum Airflow

2-, 3-, 4-way Airflow Pattern Selection

Three outlet options to choose from-bidirectional, 3-way, and 4-way-to suit different types of installation. Select, for example, 4-directional for installation in the center of the room and 3-directional for installation in the corner.

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

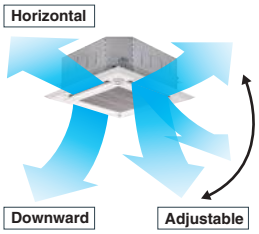
* Optional shuffle placement is required for 2- and 3-way patterns.



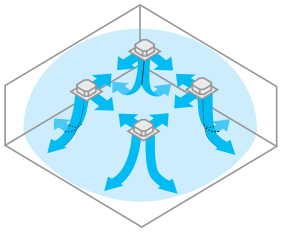
Individual Vane Angle Settings

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

Airflow direction at each vane can be set using the wired remote controller or the wireless remote controller (PAR-SL100A-E).



Multi-directional air-conditioning



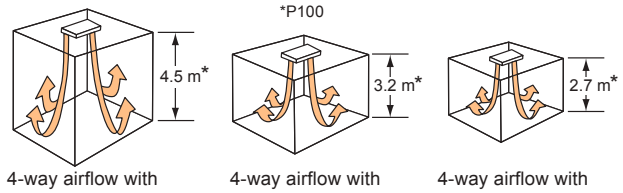
2-, 3-, 4-way Airflow Pattern Selection

Individual Vane Angle Settings

The combination of individual vane setting enables the optimal outlet setting for each room layout to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

Equipped with High- and Low-ceiling Modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match a room's height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.



4-way airflow with high-ceiling setting

4-way airflow with standard setting

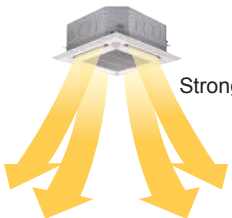
4-way airflow with low-ceiling setting

Airflow Range

Model / Airflow pattern	P32–P80			P100/P125/P140		
	High-ceiling setting	Standard setting	**Low-ceiling setting**	**High-ceiling setting**	Standard setting	**Low-ceiling setting**
4-way	**3.5 m**	2.7 m	**2.5 m**	**4.5 m**	3.2 m	**2.7 m**
3-way	**3.5 m**	3.0 m	**2.7 m**	**4.5 m**	3.6 m	**3.0 m**
2-way	**3.5 m**	3.3 m	**3.0 m**	**4.5 m**	4.0 m	**3.3 m**

Automatic Air-speed Adjustment

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



At the start of the heating / cooling operation, the airflow is set to high-speed to quickly heat / cool the room.



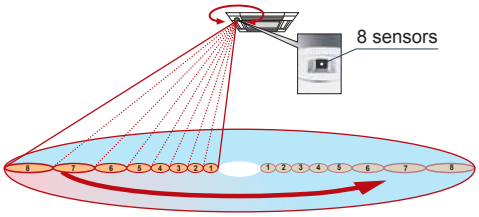
When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.

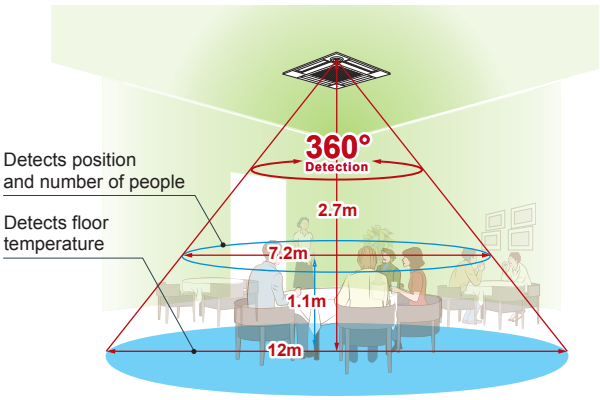
3D i-see Sensor



• Highly accurate people detection

A total of eight sensors rotate a full 360° in 3-minute intervals. In addition to detecting human body temperature, our original algorithm also detects people's positions and the number of people.





Floor surface

*In case of a 2.7m ceiling

• Detects number of people

Room occupancy energy-saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save air-conditioning power. Air-conditioning power equivalent to 1°C is saved during both cooling and heating operation at an occupancy rate of approximately 30%. The temperature is controlled according to the number of people.

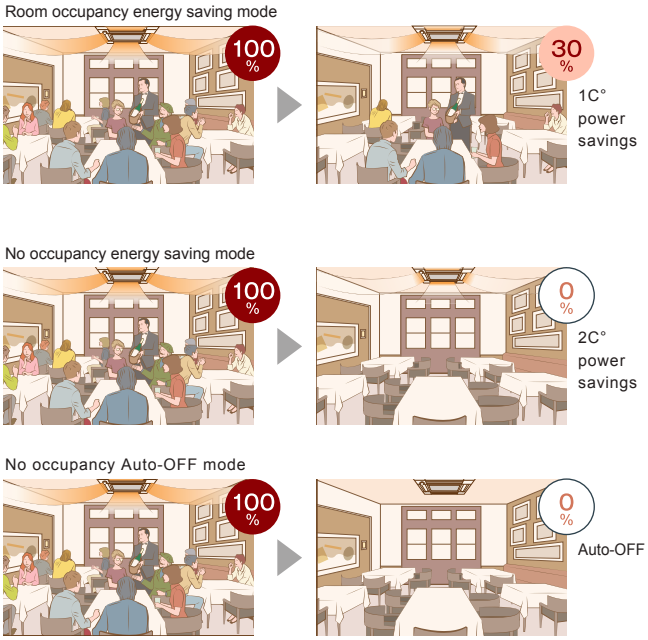
No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is in the room, the system is switched to a preset power-saving mode. If the room remains unoccupied for more than 60min, air-conditioning power equivalent to 2°C is saved during both cooling and heating operation. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

When the room remains unoccupied for a preset period of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10min, ranging from 60 to 180 min.

*No occupancy Auto-OFF mode is not available when multiple indoor units are operated by one MA remote controller.

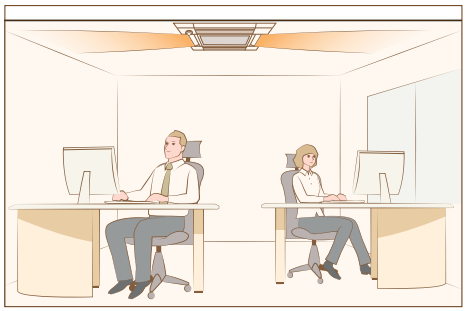


*PAR-40MAA is required for each setting.

• Detects people's position

Direct/Indirect settings*

Some people do not like the feeling of wind, while others want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, it is possible to choose to block or not block to the wind for each vane.

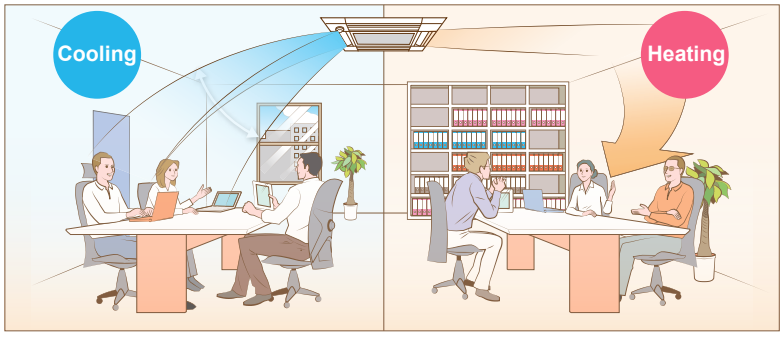


*PAR-40MAA or PAR-SL100A-E is required for each setting.

Seasonal airflow*

<When cooling>
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

<When heating>
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



*PAR-40MAA is required for each setting.

Easy Installation

Temporary hanging hook

The structure of the panel has been redesigned and is now equipped with a temporary hanging hook.
This has improved work efficiency during panel installation.




Electrical box wiring

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

• PLFY-P VBM-E ➡ • PLFY-P VEM-PA




No need to remove screws

Installation is possible without removing the screws for the corner panel and the control box, simply loosen them. This lowers the risk of losing screws.

• Corner panel



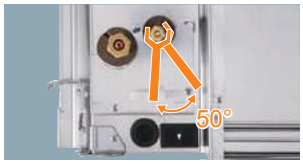
• Control box cover

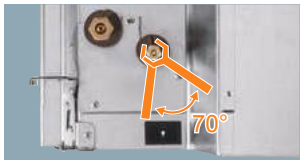


Increased space for plumbing work

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

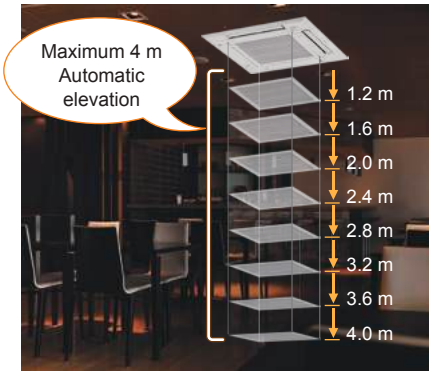
• PLFY-P VBM-E ➡ • PLFY-P VEM-PA





Easy Cleaning

With automatic elevation panel, cleaning the filter is easy, even with high ceilings.



Connectable to Plasma Quad Connect*

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

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



Optional Parts

Description	Model	Applicable capacity
Air outlet shutter plate	PAC-SJ37SP-E	P32, P40, P50, P63, P80, P100, P125, P140
Multi-function casement	PAC-SJ41TM-E	P32, P40, P50, P63, P80, P100, P125, P140
High efficiency filter element	PAC-SH59KF-E	P32, P40, P50, P63, P80, P100, P125, P140
3D i-see Sensor corner panel	PAC-SE1ME-E	P32, P40, P50, P63, P80, P100, P125, P140
Auto elevation and signal receiver panel	PLP-6EAJ	P32, P40, P50, P63, P80, P100, P125, P140
Wireless signal receiver	PAR-SE9FA-E	P32, P40, P50, P63, P80, P100, P125, P140
Space panel	PAC-SJ65AS-E	P32, P40, P50, P63, P80, P100, P125, P140
Duct flange for fresh air intake	PAC-SH65OF-E	P32, P40, P50, P63, P80, P100, P125, P140
Plasma quad connect	PAC-SK51FT-E	P32, P40, P50, P63, P80, P100, P125, P140
Anti-allergy enzyme filter	PAC-SK44KF-E	P32, P40, P50, P63, P80, P100, P125, P140

Specifications

Model				PLFY-P32VEM-PA	PLFY-P40VEM-PA	PLFY-P50VEM-PA	PLFY-P63VEM-PA
Power source				1-phase 220-240V 50Hz/1-phase 220-230V 60Hz			
Cooling capacity		*1	kW	3.6	4.5	5.6	7.1
		*1	BTU/h	12,300	15,400	19,100	24,200
		Power input	kW	0.03	0.03	0.03	0.03
		Current input	A	0.32	0.32	0.32	0.36
Heating capacity		*2	kW	4.0	5.0	6.3	8.0
		*2	BTU/h	13,600	17,100	21,500	27,300
		Power input	kW	0.03	0.03	0.03	0.03
		Current input	A	0.25	0.25	0.25	0.29
External finish (Munsell No.)		Unit		Galvanized steel sheet			
		Panel		MUNSELL (1.0Y 9.2/0.2)			
External dimension H x W x D		Unit	mm	258 x 840 x 840			
		Panel	mm	40 x 950 x 950			
Net weight		Unit	kg	19			21
		Panel	kg	5			
Heat exchanger				Micro slit fin (Aluminumfin and copper tube)			
Fan	Type x Quantity			Turbo fan x 1			
	Airflow rate (Low-Mid2-Mid1-High)		m^3/min	13-14-16-17	13-14-16-18	13-14-16-19	15-16-17-19
			L/s	217-233-267-283	217-233-267-300	217-233-267-317	250-267-283-317
			cfm	459-494-565-600	459-494-565-636	459-494-565-671	530-565-600-671
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.050			
Air filter				PP honeycomb			
Sound pressure level (Low-Mid2-Mid1-High)			dB (A)	26-27-29-31	26-27-29-31	26-27-29-31	28-29-30-32
Refrigerant control device				LEV			
Diameter of refrigerant pipe		Liquid	mm (in.)	ø6.35 (ø1/4) Flare			ø9.52 (ø3/8) Flare
		Gas	mm (in.)	ø12.7 (ø1/2) Flare			ø15.88 (ø5/8) Flare
Field drain pipe size			mm (in.)	O.D 32 (1-1/4)			

Model				PLFY-P80VEM-PA	PLFY-P100VEM-PA	PLFY-P125VEM-PA	PLFY-P140VEM-PA
Power source				1-phase 220-240V 50Hz/1-phase 220-230V 60Hz			
Cooling capacity		*1	kW	9.0	11.2	14.0	16.0
		*1	BTU/h	30,700	38,200	47,800	54,600
		Power input	kW	0.05	0.07	0.11	0.11
		Current input	A	0.50	0.67	1.06	1.06
Heating capacity		*2	kW	10.0	12.5	16.0	18.0
		*2	BTU/h	34,100	42,700	54,600	61,400
		Power input	kW	0.05	0.07	0.11	0.11
		Current input	A	0.43	0.60	0.99	0.99
External finish (Munsell No.)		Unit		Galvanized steel sheet			
		Panel		MUNSELL (1.0Y 9.2/0.2)			
External dimension H x W x D		Unit	mm	258 x 840 x 840	298 x 840 x 840		
		Panel	mm	40 x 950 x 950			
Net weight		Unit	kg	21	24		26
		Panel	kg	5			
Heat exchanger				Micro slit fin (Aluminumfin and copper tube)			
Fan	Type x Quantity			Turbo fan x 1			
	Airflow rate (Low-Mid2-Mid1-High)		m^3/min	15-18-20-23	20-23-26-29	24-26-30-35	22-27-31-35
			L/s	250-300-333-383	333-383-433-483	400-433-500-583	367-450-517-583
			cfm	530-636-706-812	706-812-918-1024	847-918-1060-1236	777-953-1095-1235
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.050	0.120		
Air filter				PP honeycomb			
Sound pressure level (Low-Mid2-Mid1-High)			dB (A)	28-31-34-37	34-37-39-41	35-39-42-45	36-39-42-45
Refrigerant control device				LEV			
Diameter of refrigerant pipe		Liquid	mm (in.)	ø9.52 (ø3/8) Flare			
		Gas	mm (in.)	ø15.88 (ø5/8) Flare			
Field drain pipe size			mm (in.)	O.D 32 (1-1/4)			

Notes:

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

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

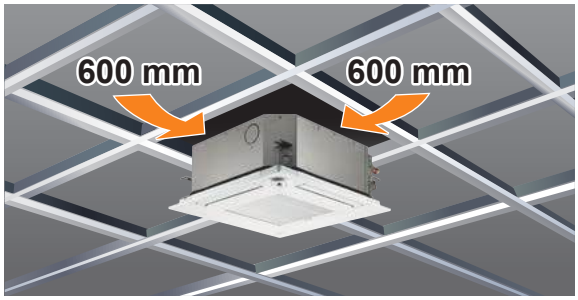
PLFY-P VFM-E1





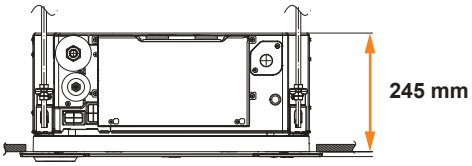
Beautiful square design

The straight square design matches 2 × 2 (600 mm × 600 mm) ceiling construction specifications.
Direct line-based square design enables designs of system ceiling to match the design of direct line type illuminations, thereby creating a beautiful space.



The height above ceiling 245 mm

The height above ceiling of 245 mm is top class in the industry*, and enables fitting into narrow ceiling space.



* As of Aug 2015. Among compact 4-way cassettes for system ceiling. (An incompany investigation.)

Compact & light-weight design

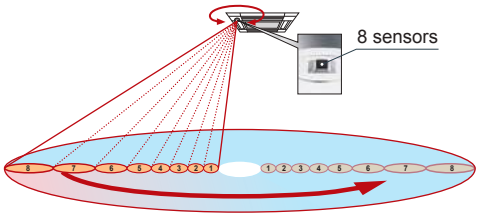
The panel weighs 3 kg, and the unit's body weighs 14 kg (P15, P20 and P25 models) or 15 kg (P32, P40 and P50 models). Their weight is 5 kg lighter than the PLFY-VEM-E model, allowing them to be easily suspended.

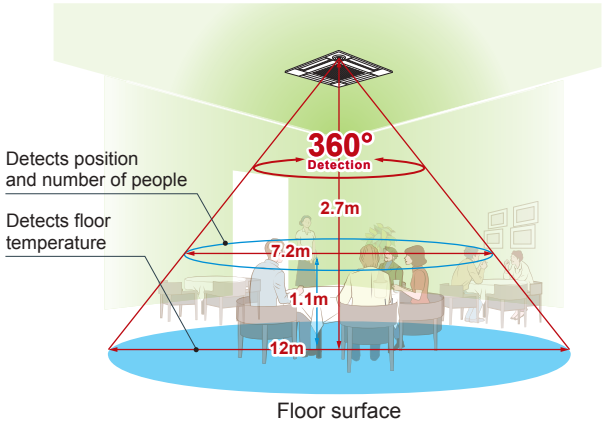
3D i-see Sensor



• Highly accurate people detection

A total of eight sensors rotate a full 360° in 3-minute intervals. In addition to detecting human body temperature, our original algorithm also detects people's positions and the number of people.





*In case of a 2.7m ceiling

• Detects number of people

Room occupancy energy-saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save air-conditioning power. Air-conditioning power equivalent to 1°C is saved during both cooling and heating operation at an occupancy rate of approximately 30%. The temperature is controlled according to the number of people.

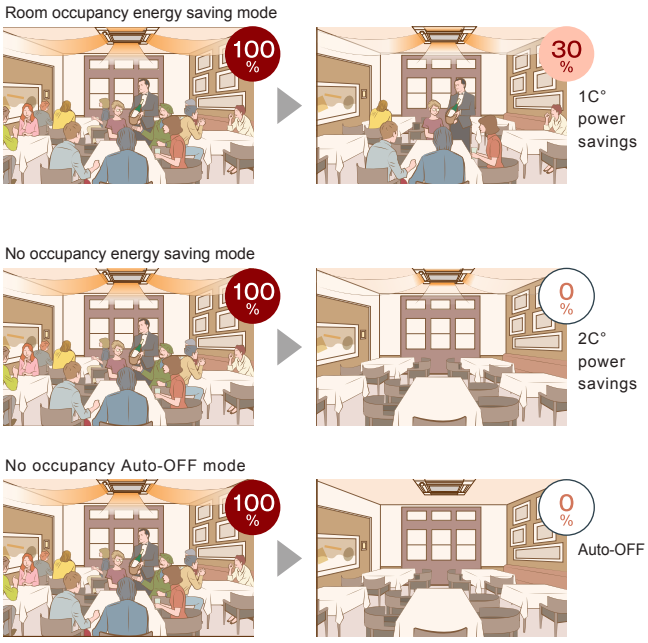
No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is in the room, the system is switched to a preset power-saving mode. If the room remains unoccupied for more than 60min, air-conditioning power equivalent to 2°C is saved during both cooling and heating operation. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

When the room remains unoccupied for a preset period of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10min, ranging from 60 to 180 min.

*No occupancy Auto-OFF mode is not available when multiple indoor units are operated by one MA remote controller.

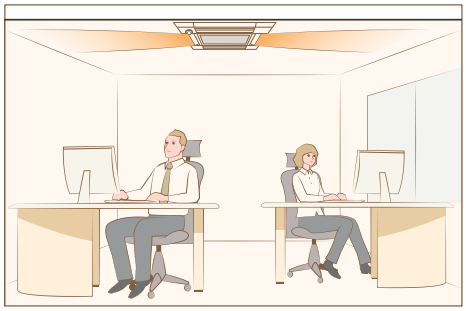


*PAR-40MAA is required for each setting.

• Detects people's position

Direct/Indirect settings*

Some people do not like the feeling of wind, while others want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, it is possible to choose to block or not block to the wind for each vane.



*PAR-40MAA or PAR-SL100A-E is required for each setting.

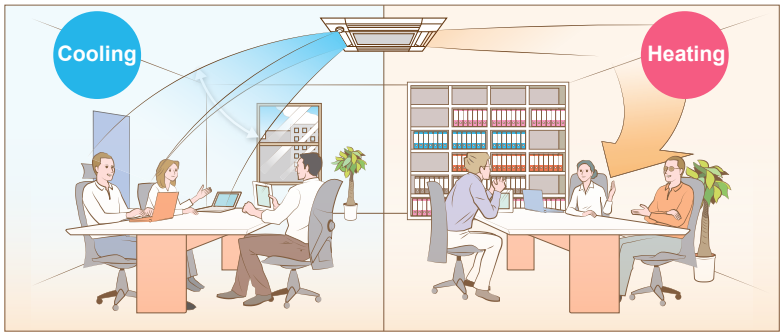
Seasonal airflow*

<When cooling>

Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

<When heating>

The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



*PAR-40MAA is required for each setting.

Optional Parts

Description	Model	Applicable models
i-see Sensor corner panel	PAC-SF1ME-E	P15, P20, P25, P32, P40, P50
Wireless signal receiver	PAR-SF9FA-E	P15, P20, P25, P32, P40, P50

Panel & Corner panel

		With signal Receiver	With 3D i-see Sensor	With New Wireless
Panel	SLP-2FA			
	SLP-2FAL	●		
	SLP-2FAE		●	
	SLP-2FALE	●	●	
	SLP-2FALM	●		●
	SLP-2FALME	●	●	●
Corner panel	PAR-SF9FA-E	●		
	PAC-SF1ME-E		●	

Specifications

Model				PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Power source				1-phase 220-240V 50Hz/220V 60Hz					
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity		*1	kW	1.9	2.5	3.2	4.0	5.0	6.3
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling		kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating		kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling		A	0.19	0.21	0.22	0.23	0.28	0.40
	Heating		A	0.14	0.16	0.17	0.18	0.23	0.35
External finish (Munsell No.)	Unit			Galvanized steel sheet					
	Panel			MUNSELL (1.0Y 9.2/0.2)					
Dimension H x W x D	Unit		mm (in.)	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)					
	Panel		mm (in.)	10 x 625 x 625 (3/8 x 24-5/8 x 24-5/8)					
Net weight	Unit		kg (lbs.)	14 (31)			15 (33)		
	Panel		kg (lbs.)	3 (7)					
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Turbo fan x 1					
	Airflow rate (Lo-Mid-Hi)		m^3/min	6.5-7.5-8.0	6.5-7.5-8.5	6.5-8.0-9.0	7.0-8.0-9.5	7.5-9.0-11.0	9.0-11.0-13.0
			L/s	108-125-133	108-125-142	108-133-150	117-133-158	125-150-183	150-183-217
			cfm	230-265-282	230-265-300	230-282-318	247-282-335	265-318-388	318-388-459
	External static pressure		Pa	0					
Motor	Type			DC motor					
	Output		kW	0.05					
Air filter				PP Honeycomb fabric (long life type)					
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)					
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)					
Field drain pipe diameter			mm (in.)	O.D. 32 (1-1/4) (PVC pipe VP-25 connectable)					
Sound pressure level (Lo-Mid-Hi)		*2	dB (A)	26-28-30	26-29-31	26-30-33	26-30-34	28-33-39	33-39-43

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 It is measured in anechoic room at power source 230V.

PLFY-P VMMD-E NEW





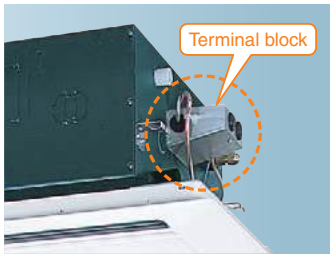
Slimline body

The height of the main unit is merely 290mm (11-7/16 in.) for the P20-P100 models.

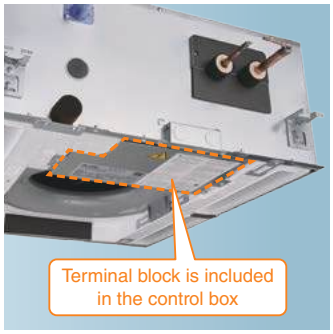
Built-in control box

The terminal block, which was previously mounted on the outside of the unit, is now built into the control box. This structural change has improved connectivity and wiring workability.

Conventional unit



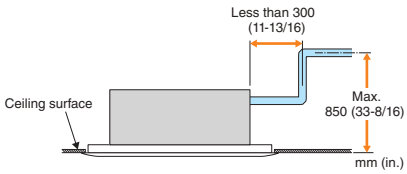
New unit



The control box is accessible from the bottom of the unit.

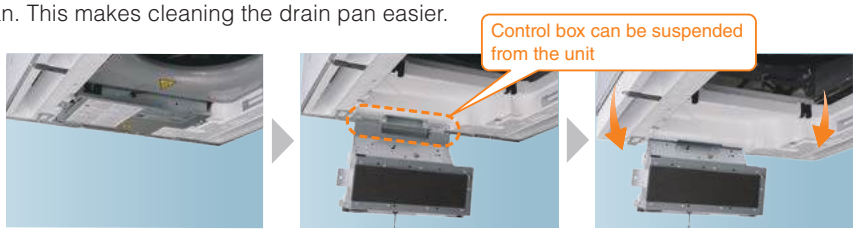
Extended lift of drain pump

The maximum lift of the drain pump has been extended to 850mm (33-8/16 in.) from the ceiling surface, allowing for greater flexibility in piping layout.



Easy detachment of drain pan

New attachments for control box reduce the workload of attaching and detaching the drain pan. This makes cleaning the drain pan easier.



Reduced power consumption and weight

New structures and components improve energy efficiency and installability. The drain pan has been modified to provide smoother airflow, and the fan motor has been changed from AC to DC. These improvements have reduced power consumption of the new model by up to 78% compared to the conventional models (P20). Additionally, the net weight of the new models is lighter than the conventional models, making installation easier.

Versatile airflow settings and vane control deliver comfort throughout the room

Four levels of airflow setting available

The conventional models (P20-P100) had three levels of airflow setting, but the new models offer four levels to accommodate various installation conditions.

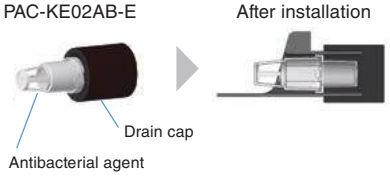
Airflow rate setting

	P20-P100	P125
Conventional models (VLMD)	Low-Mid-High	Low-Mid2-Mid1-High
New models (VMMD)	Low-Mid2-Mid1-High	Low-Mid2-Mid1-High

Silver-Ionized Antibacterial Agent for Drain Pan PAC-KE02AB-E (Optional parts)

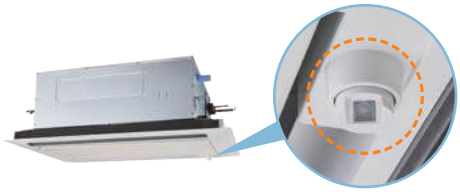
The optional Antibacterial Agent can be installed on drain pan to suppress bacterial growth*, reducing the occurrence of slime. It can reduce the maintenance frequency of drain pan.

* According to tests performed by the Boken Quality Evaluation Institute.
Testing procedure: Antibacterial test of drain water based on the SIAA shake method.
Test number: 11233843-1 Test result: Effective against bacteria (Antibacterial Activity Value 4.3)



New "3D i-see Sensor" panel

The "3D i-see Sensor" built into the optional corner panel reduces uneven temperature distribution and electricity consumption.



Specifications

Model			PLFY-P20VMMD-E	PLFY-P25VMMD-E	PLFY-P32VMMD-E	PLFY-P40VMMD-E
Power source			1-phase 220-230-240 V 50/60 Hz			
Cooling capacity (Nominal)	*1	kW	2.2	2.8	3.6	4.5
	*1	BTU/h	7,500	9,600	12,300	15,400
	Power input	kW	0.016	0.023	0.024	0.031
	Current input	A	0.21-0.20-0.18	0.29-0.27-0.24	0.30-0.28-0.27	0.37-0.35-0.34
Heating capacity (Nominal)	*2	kW	2.5	3.2	4.0	5.0
	*2	BTU/h	8,500	10,900	13,600	17,100
	Power input	kW	0.013	0.020	0.021	0.029
	Current input	A	0.17-0.16-0.15	0.25-0.23-0.20	0.26-0.24-0.23	0.33-0.31-0.30
External finish			Galvanized steel plate			
External dimension HxWxD		mm	290 x 770 x 650	290 x 770 x 650	290 x 770 x 650	290 x 770 x 650
		in.	11-7/16 x 30-3/8 x 25-5/8	11-7/16 x 30-3/8 x 25-5/8	11-7/16 x 30-3/8 x 25-5/8	11-7/16 x 30-3/8 x 25-5/8
Net weight		kg (lbs)	20 (45)	20 (45)	21 (47)	21 (47)
Decoration panel	Model		**CMP-40LWH-E**	**CMP-40LWH-E**	**CMP-40LWH-E**	**CMP-40LWH-E**
	External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)
	Dimension HxWxD	mm	20 x 1,080 x 710	20 x 1,080 x 710	20 x 1,080 x 710	20 x 1,080 x 710
		inch	13/16 x 42-9/16 x 28	13/16 x 42-9/16 x 28	13/16 x 42-9/16 x 28	13/16 x 42-9/16 x 28
	Net weight	kg (lbs)	7 (16)	7 (16)	7 (16)	7 (16)
Heat exchanger			Cross fin (Aluminum fin and copper tube)			
FAN	Type x Quantity		Turbo fan x 1	Turbo fan x 1	Turbo fan x 1	Turbo fan x 1
	External static press.	Pa	0	0	0	0
		mmH_2O	0.0	0.0	0.0	0.0
	Motor Type		DC motor			
	Motor output	kW	0.050	0.050	0.050	0.050
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)
		m^3/min	4.8 - 6.5 - 7.8 - 8.6	4.8 - 6.7 - 8.6 - 10.0	4.9 - 7.4 - 8.3 - 10.0	7.4 - 8.9 - 10.0 - 11.0
		L/s	80 - 108 - 130 - 143	80 - 112 - 143 - 167	82 - 123 - 138 - 167	123 - 148 - 167 - 183
		cfm	169 - 230 - 275 - 304	169 - 237 - 304 - 353	173 - 261 - 293 - 353	261 - 314 - 353 - 388
Sound pressure level (measured in anechoic room)			(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)
		dB <A>	21.5-25.0-28.0-30.0	21.5-25.5-30.0-35.0	23.5-28.5-31.5-36.0	28.5-33.0-36.0-39.5
Air filter			PP honeycomb fabric (long life filter).			
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	6.35 (1/4)Flare	6.35 (1/4)Flare	6.35 (1/4)Flare	6.35 (1/4)Flare
	Gas (R410A)	mm (in.)	12.7 (1/2)Flare	12.7 (1/2)Flare	12.7 (1/2)Flare	12.7 (1/2)Flare
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Model			PLFY-P50VMMD-E	PLFY-P63VMMD-E	PLFY-P80VMMD-E	PLFY-P100VMMD-E	PLFY-P125VMMD-E
Power source			1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)	*1	kW	5.6	7.1	9.0	11.2	14.0
	*1	BTU/h	19,100	24,200	30,700	38,200	47,800
	Power input	kW	0.032	0.056	0.064	0.096	0.196
	Current input	A	0.32-0.31-0.29	0.49-0.48-0.47	0.52-0.50-0.49	0.73-0.70-0.69	1.37-1.33-1.28
Heating capacity (Nominal)	*2	kW	6.3	8.0	10.0	12.5	16.0
	*2	BTU/h	21,500	27,300	34,100	42,700	54,600
	Power input	kW	0.029	0.053	0.061	0.093	0.195
	Current input	A	0.28-0.27-0.26	0.45-0.44-0.43	0.48-0.46-0.45	0.69-0.67-0.65	1.33-1.28-1.24
External finish			Galvanized steel plate				
External dimension HxWxD		mm	290 x 940 x 650	290 x 940 x 650	290 x 1,440 x 650	290 x 1,440 x 650	331 x 1,440 x 650
		in.	11-7/16 x 37-1/16 x 25-5/8	11-7/16 x 37-1/16 x 25-5/8	11-7/16 x 56-3/4 x 25-5/8	11-7/16 x 56-3/4 x 25-5/8	13-1/16 x 56-3/4 x 25-5/8
Net weight		kg (lbs)	24 (53)	26 (58)	39 (86)	42 (93)	47 (104)
Decoration panel	Model		**CMP-63LWH-E**	**CMP-63LWH-E**	**CMP-125LWH-E**	**CMP-125LWH-E**	**CMP-125LWH-E**
	External finish		MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)	MUNSELL (1.0Y 9.2/0.2)
	Dimension HxWxD	mm	20 x 1,250 x 710	20 x 1,250 x 710	20 x 1,750 x 710	20 x 1,750 x 710	20 x 1,750 x 710
		inch	13/16 x 49-1/4 x 28	13/16 x 49-1/4 x 28	13/16 x 68-15/16 x 28	13/16 x 68-15/16 x 28	13/16 x 68-15/16 x 28
	Net weight	kg (lbs)	8(18)	8(18)	11.5(26)	11.5(26)	11.5(26)
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		Turbo fan x 1	Turbo fan x 1	Turbo fan x 2	Turbo fan x 2	Turbo fan x 2
	External static press.	Pa	0	0	0	0	0
		mmH_2O	0.0	0.0	0.0	0.0	0.0
	Motor Type		DC motor				
	Motor output	kW	0.050	0.050	0.050×2	0.050×2	0.120×2
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Air flow rate		(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)
		m^3/min	9.0 - 10.0 - 11.5 - 13.0	9.0 - 11.0 - 13.0 - 15.5	14.7 - 17.5 - 20.4 - 22.2	16.0 - 19.0 - 21.0 - 24.5	22.8 - 25.3 - 28.2 - 31.5
		L/s	150 - 167 - 192 - 217	150 - 183 - 217 - 258	245 - 292 - 340 - 370	267 - 317 - 350 - 408	380 - 422 - 470 - 525
		cfm	318 - 353 - 406 - 459	318 - 388 - 459 - 547	519 - 618 - 720 - 784	565 - 671 - 742 - 865	805 - 893 - 996 - 1,112
Sound pressure level (measured in anechoic room)			(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)	(Low-Mid2-Mid1-High)
		dB <A>	31.0-33.5-37.0-39.5	31.0-35.5-40.0-44.5	32.0-36.5-40.5-43.0	36.0-39.5-43.0-46.5	45.5-48.5-51.5-55.0
Air filter			PP honeycomb fabric (long life filter).				
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	6.35 (1/4)Flare	9.52 (3/8)Flare	9.52 (3/8)Flare	9.52 (3/8)Flare	9.52 (3/8)Flare
	Gas (R410A)	mm (in.)	12.7 (1/2)Flare	15.88 (5/8)Flare	15.88 (5/8)Flare	15.88 (5/8)Flare	15.88 (5/8)Flare
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27 °CD.B./19 °CW.B. (81 °FD.B./66 °FW.B.), Outdoor: 35 °CD.B. (95 °FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2 Nominal heating conditions
Indoor: 20 °CD.B. (68 °FD.B.), Outdoor: 7 °CD.B./6 °CW.B. (45 °FD.B./43 °FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*This unit should be used together with the decoration panel or 3D i-see sensor panel.
*Due to continuing improvement, above specifications may be subject to change without notice.

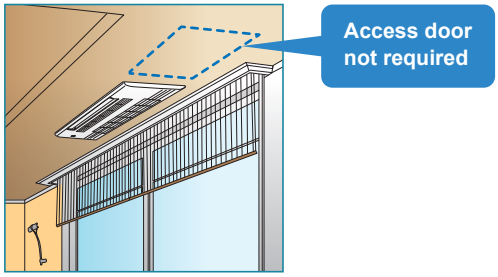
PMFY-P VBM-E





Ceiling Mounted

Installing a the 1-way airflow type unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the center of the room and fixtures such as book shelves are mounted on wall surfaces.

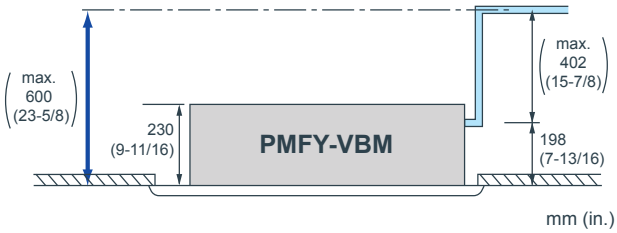


Compact size for smooth installation and maintenance

Unit body size has been standardized for all models at 812 mm for easier installation. Body weight is only 14 kg for the main unit and 3 kg for the panel, making this unit one of the lightest in the industry.

Drain pump

The drain can be positioned anywhere up to 600 mm (23-5/8 in.) from the ceiling's surface.



mm (in.)

Optional Parts

Description	Model	Applicable capacity
Decoration panel	PMP-40BMW	P20, P25, P32, P40

Specifications

Model				PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source				1-phase 220-240V 50Hz/1-phase 220V 60Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.042	0.044		0.054
	Heating		kW	0.042	0.044		0.054
Current	Cooling		A	0.20	0.21		0.26
	Heating		A	0.20	0.21		0.26
External finish (Munsell No.)				White (6.4Y 8.9/0.4)			
Dimension H x W x D	Unit		mm (in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
	Panel		mm (in.)	30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit		kg (lbs.)	14 (31)			
	Panel		kg (lbs.)	3 (7)			
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)			
Fan	Type x Quantity			Line flow fan x 1			
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3		7.7-8.7-9.7-10.7
			L/s	108-120-133-145	122-133-143-155		128-145-162-178
			cfm	230-254-283-307	258-283-304-328		272-307-343-378
	External static pressure		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.028			
Air filter				PP Honeycomb fabric			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm (in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB (A)	27-30-33-35	32-34-36-37		33-35-37-39

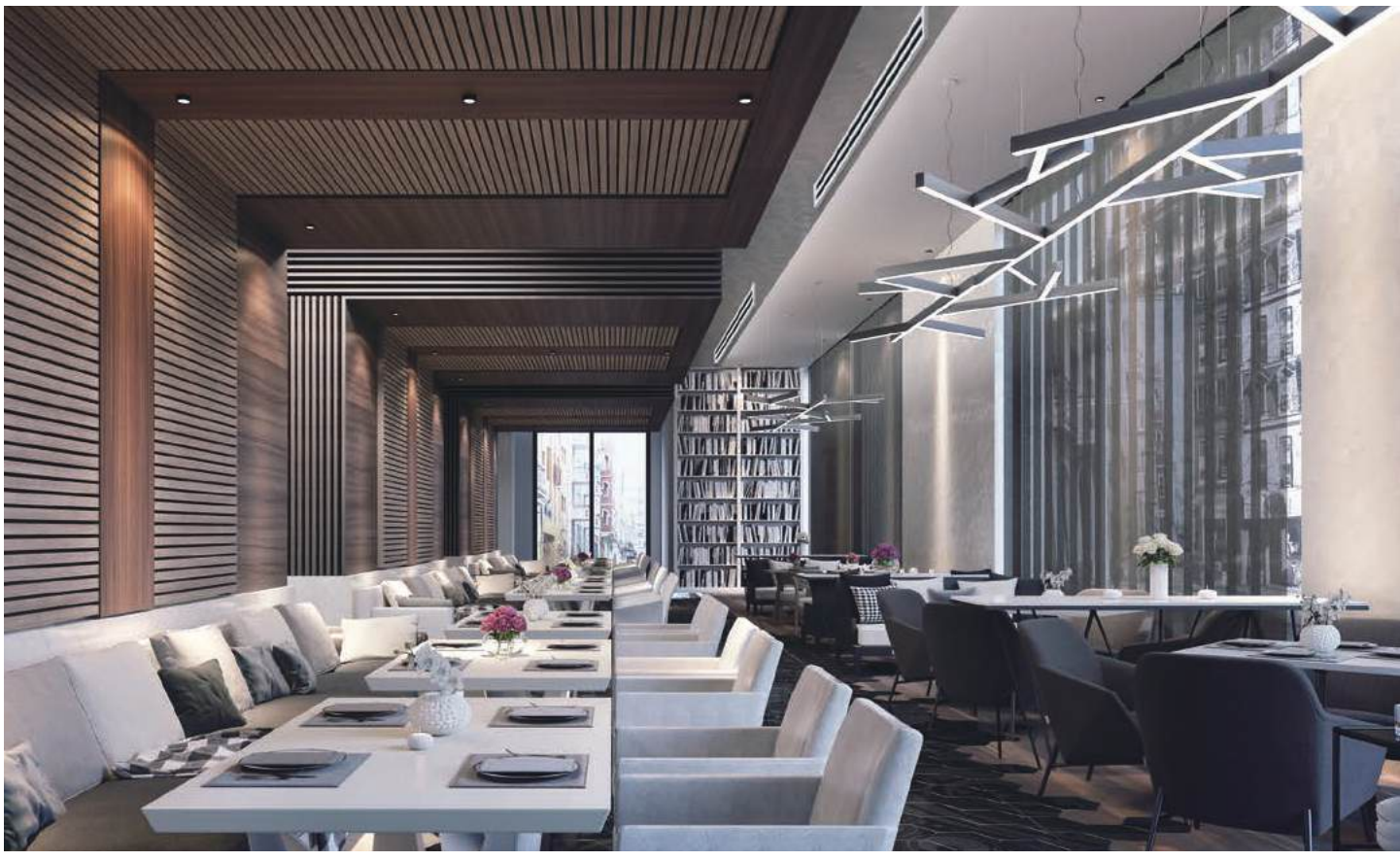
Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).
*3 It is measured in anechoic room.

Ceiling Concealed







Ceiling Concealed Type

Low static pressure type

PEFY-P VMS1(L)-E



- The thin design with a body height of only 200 mm [7-7/8 in.] (all horsepower models) enables installation in a narrow space in the ceiling
- Low-noise operation
- Compact body with an external static pressure of up to 50 Pa

Static pressure up to 50 Pa	Low noise	Height 200 mm	Drain pump (standard) up to 550 mm [21-11/16 in.]	Air flow rate 3 stages

VMS1 model only

Medium static pressure type

PEFY-P VMA(L)-E4
PEFY-P VMA3/4-E



- Thin design of a body height of 250 mm [9-7/8 in.] (all horsepower models)
- The rear or bottom air inlet can be selected
- The drain pump is optionally selectable

Static pressure up to 150 Pa	Height 250 mm	Rear or bottom inlet	Drain pump (standard) up to 700 mm [27-9/16 in.]	Air flow rate 3 stages

* The maximum value varies depending on the model.

VMA model only

High static pressure type

PEFY-P VMHS-E



- External static pressure of up to 250 Pa*1, ensuring flexible duct design
- Applicable to drain pumps (option) from 550 mm [21-11/16 in.] to up to 700 mm [27-9/16 in.]

Static pressure up to 250 Pa	Drain pump option up to 700 mm [27-9/16 in.]	Air flow rate 3 stages

*1 The maximum value varies depending on the model.

Fresh air intake type

PEFY-P VMHS-E-F



- Controllable outlet air temperature
- Fresh air intake type indoor unit
- Usable with external static pressures of up to 250 Pa, and available with three different types of air flow

Controllable outlet air temperature	Static pressure up to 250 Pa	Drain pump option up to 700 mm [27-9/16 in.]	Fresh air intake type	Air flow rate 3 stage

Low noise type

PEFY-P VMR-E-L/R



- Low noise operation. Suitable for spaces where low noise is required such as hotels
- The rear or bottom air inlet can be selected
- The piping connection position can be selected according to the room layout

Static pressure 5 Pa	Low noise	Rear or bottom inlet	Right/Left Piping connection	Air flow rate 3 stages

PEFY-P VMS1(L)-E





Compact design with a height of only 200 mm [7-7/8 in.] (all models) and a width of 790 mm [31-1/8 in.] (P15 to P32), 990 mm [39 in.] (P40 and P50), or 1190 mm [46-7/8 in.] (P63)

Thin body design with a height of only 200 mm [7-7/8 in.] (all models) enables installation in a narrow space in the ceiling.

PEFY-P VMX(L)-E(1)		P15	P20	P25	P32	P40	P50	P63
Height	mm [in.]	200 [7-7/8]						
Width	mm [in.]	790 [31-1/8]				990 [39]		1190 [46-7/8]



Low-noise design

The centrifugal fan and coil are designed to reduce noise, making these models suitable for spaces where quietness is required.

Sound pressure level table at 15 Pa (Standard static pressure) dB(A)

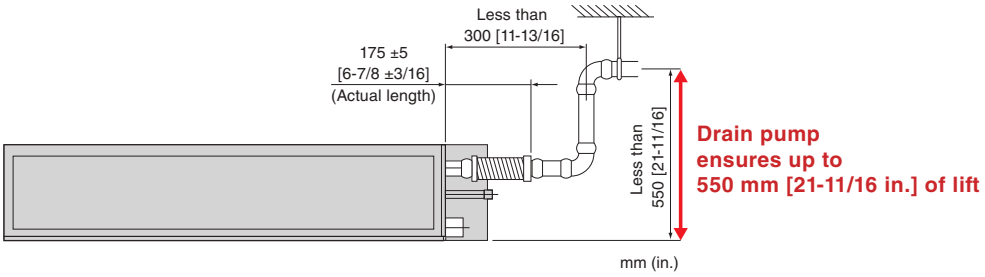
	Capacity		P15	P20	P25	P32	P40	P50	P63
Sound Pressure Level	Fan Speed	High	28	29	30	32	33	35	36
		Mid	24	25	26	27	30	32	33
		Low	22	23	24	24	28	30	30

Selectable external static pressure

The unit may have a compact body, but its external static pressure can be up to 50 Pa.
The external static pressure can be selected from 5, 15, 35 and 50 Pa.
(The factory default is 15 Pa.)

Models with and without drain pump are available

PEFY-P VMS1 is provided with a drain pump as standard and does not require a drain trap. PEFY-P VMS1L which is model without drain pump is recommended for places where low-noise operation is required (i.e. hotels)



Connectable to Plasma Quad Connect

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

Optional Parts

Description	Model	Applicable capacity
Drain pump*1	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63 *1 For PEFY-VMS1L only
Control box replace kit	PAC-KE70HS-E	P15, 20, 25, 32, 40, 50, 63
Plasma quad connect*2	MAC-100FT-E	P15, 20, 25, 32, 40, 50, 63
PQ attachment*2	PAC-HAPAR	P15, 20, 25, 32, 40, 50, 63

*2 Plasma quad connect (MAC-100FT-E) should be used together with PQ attachment.

Specifications

Model				PEFY-P15VMS1(L)-E	PEFY-P20VMS1(L)-E	PEFY-P25VMS1(L)-E	PEFY-P32VMS1(L)-E	PEFY-P40VMS1(L)-E	PEFY-P50VMS1(L)-E	PEFY-P63VMS1(L)-E
Power source				1-phase 220-240V 50Hz/1-phase 220-240V 60Hz						
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	*3	Cooling	kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
		Heating	kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	*3	Cooling	A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
		Heating	A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish				Galvanized						
Dimension H x W x D			mm	200 x 790 x 700				200 x 990 x 700		200 x 1,190 x 700
			in.	7-7/8 x 31-1/8 x 27-9/16				7-7/8 x 39 x 27-9/16		7-7/8 x 46-7/8 x 27-9/16
Net weight	*3		kg (lbs.)	19 (42) [18 (40)]			20 (45) [19 (42)]	24 (53) [23 (51)]		28 (62) [27 (60)]
Heat exchanger				Cross fin (Aluminium fin and copper tube)						
Fan	Type x Quantity			Sirocco fan x 2				Sirocco fan x 3		Sirocco fan x 4
	Airflow rate (Lo-Mid-Hi)		m^3/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
			L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
			cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static pressure		Pa	5-15-35-50						
Motor	Type			DC motor						
	Output		kW	0.096						
Air filter				PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas		mm (in.)	ø12.7 (ø1/2) Brazed						ø15.88 (ø5/8) Brazed
	Liquid		mm (in.)	ø6.35 (ø1/4) Brazed						ø9.52 (ø3/8) Brazed
Field drain pipe diameter			mm (in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (measured in anechoic room)			dB (A)	22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°CD.B./19°CW.B.(81°FD.B./66°FW.B.) Outdoor : 35°CD.B.(95°FD.B.)
Heating : Indoor : 20°CD.B.(68°FD.B.) Outdoor : 7°CD.B./6°CW.B.(45°FD.B./43°FW.B.)
Pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)

*2 The external static pressure is set to 15 Pa at factory shipment.

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

PEFY-P VMA(L)-E4
PEFY-P VMA3/4-E

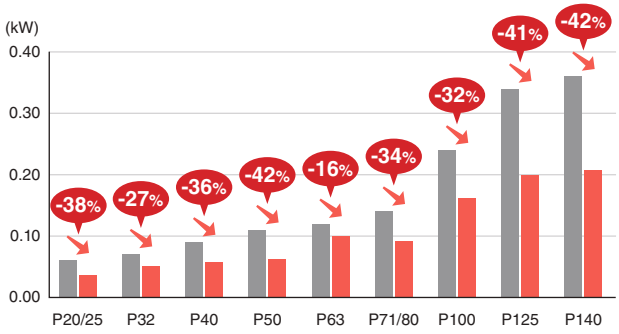




Less power consumption

The shape of fan wing and casing is improved to provide more smooth airflow. Besides, the drain pump motor is changed from AC motor to high-efficient DC motor. Operation efficiency is increased by the air flow and motor, which realizes up to 42% reduction in energy consumption (P50/140).

Comparison of energy consumption in cooling operation



* The values are measured at high fan speed setting and external static pressure of 50 Pa.

External static pressure is settable up to 150 Pa. (PEFY-P VMA-E4)

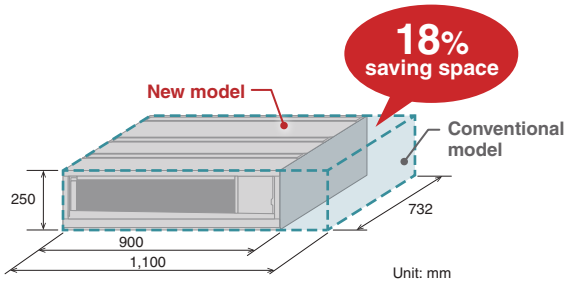
Five-stage external static pressure settings provide flexibility for duct extension, branching, and air outlet configuration and are adjustable to meet different application conditions. Setting ranges to maximum of 150 Pa.

External static pressure settings

Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-P VMA(L)-E4	35/50/70/100/150 Pa						40/50/70/100/150 Pa				

Compact unit requires less installation space (applicable to the PEFY-P63VMA-E4 model only)

The use of new fan with improved air pathway helps to reduce the size of the P63 model unit. The P63 model unit is 200 mm less in width and fits into tighter ceiling space.

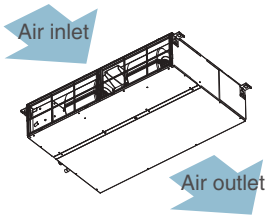


Selectable air inlet pattern

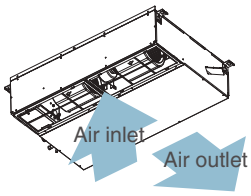
The air inlet position can only be changed between rear and bottom by switching the positions of the closing plate and air filter. (The factory default is rear inlet.)

Two air inlet options can be chosen, rear or bottom:

1. Rear inlet



2. Bottom inlet



* Unit with a bottom inlet make more noise than those with a rear inlet. It is recommended that the rear inlet be selected when installing the units in rooms that should be quiet, such as bedrooms.

Drain pump is optionally selectable

The lineup consists of two types: models with or without a built-in drain pump, thus allowing more freedom in piping layout design.

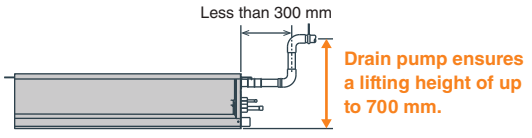


PEFY-P VMA-E4 Built-in drain pump



PEFY-P VMAL-E4 No drain pump

Built-in drain pump	PEFY-P VMA-E4, PEFY-P-VMA3/4-E
No drain pump	PEFY-P VMAL-E

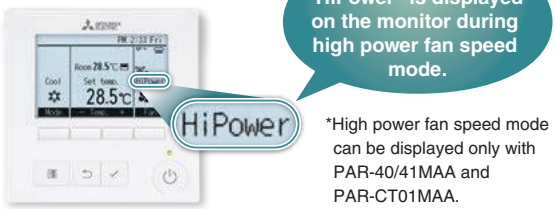


High power fan speed mode (PEFY-P VMA(L)-E4)

This start-up mode is run with the increased fan speed for a maximum of 15 minutes to rapidly cool or heat the space (after the first Thermo-ON operation).

*1. Power consumption and sound pressure level will increase in this mode.
*2. High power fan speed mode is not available when the external static pressure is set to 150 Pa.
*3. PAR-40/41MAA, PAR-U02MEDA, PAR-CT01MAA or PAC-YT52CRA is required for this setting. See the instructions and installation manuals for details.

•PAR-40/41MAA



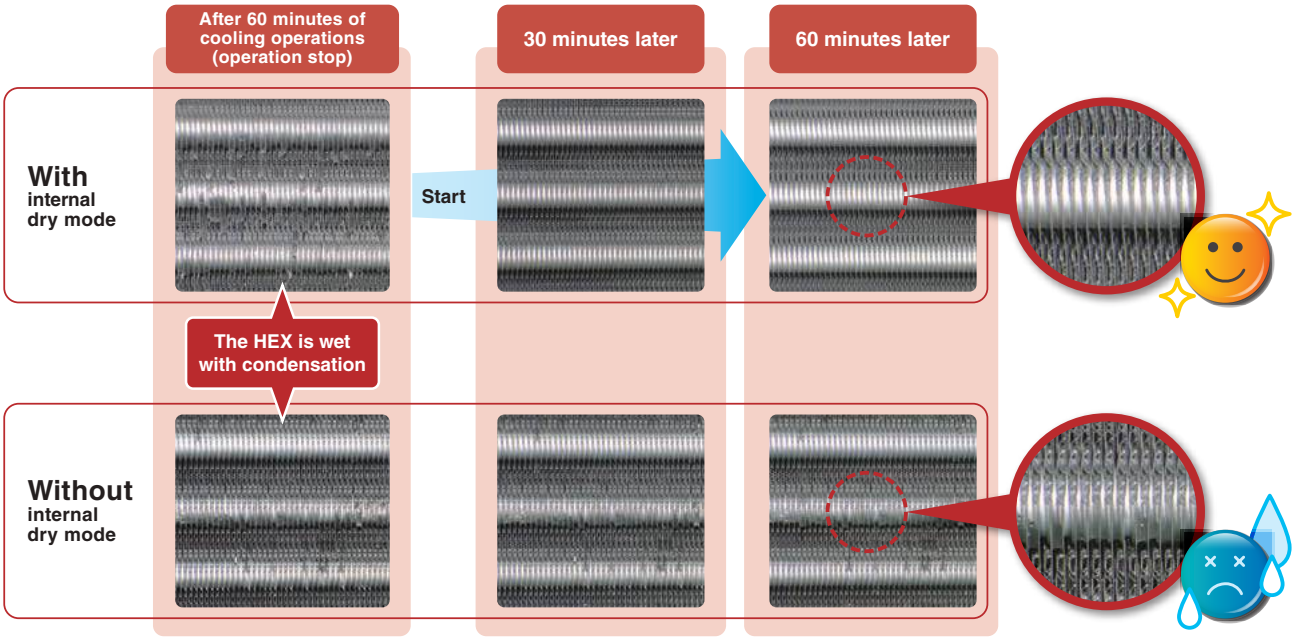
*High power fan speed mode can be displayed only with PAR-40/41MAA and PAR-CT01MAA.

Internal dry mode (PEFY-P VMA(L)-E4)

To dry the heat exchanger (HEX), the unit will operate in the fan mode at high speed after cooling or drying operation has stopped. The drying time is selectable from 30 or 60 minutes.

*1. PAR-40/41MAA, PAR-U02MEDA, PAR-CT01MAA or PAC-YT52CRA is required for this setting. See the instructions and installation manuals for details.
*2. When using AE-C400E-X's apportioned electricity billing function to apportion electricity consumption of indoor units, do not use the internal dry operation function of indoor units.

■Operating Sample



* Under norminal cooling conditions (Indoor) (27˚CD.B./19˚CW.B.)
* Results will vary depending on indoor temperature and humidity conditions.

Connectable to Plasma Quad Connect (PEFY-P VMA(L)-E4)

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

Optional Parts

Description	Model	Applicable capacity	
		VMA (L)	VMA3/4
Filter box	PAC-KE91TB-E	P20, P25, P32	–
	PAC-KE92TB-E	P40, P50, P63	P20
	PAC-KE93TB-E	P71, P80	P25, P32, P40
	PAC-KE94TB-E	P100, P125	–
	PAC-KE95TB-E	P140	P50, P63, P71, P80, P100, P125
Plasma Quad Connect*	MAC-100FT-E	P20, P25, P32, P40, P50, P63, P71, P80, P100, P125, P140	–
PQ attachment (Rear inlet)*	PAC-HA31PAR	P20, P25, P32, P40, P50, P63, P71, P80, P100, P125, P140	–
PQ attachment (Bottom inlet)*	PAC-HA31PAU	P20, P25, P32, P40, P50, P63, P71, P80, P100, P125, P140	–
PQ box*	PAC-KE91PTB-E	P20, P25, P32	–
	PAC-KE92PTB-E	P40, P50, P63	–
	PAC-KE93PTB-E	P71, P80	–
	PAC-KE94PTB-E	P100, P125	–
	PAC-KE95PTB-E	P140	–

*Plasma Quad Connect (MAC-100FT-E) should be used together with PQ attachment or PQ box.

Specifications

* [ ] is in case of PEFY-P VMAL-E4.

Model			PEFY-P20VMA(L)-E4	PEFY-P25VMA(L)-E4	PEFY-P32VMA(L)-E4	PEFY-P40VMA(L)-E4	PEFY-P50VMA(L)-E4	PEFY-P63VMA(L)-E4
Power source			1-phase 220-230-240 V 50/60 Hz					
Cooling capacity *1 (Nominal)		kW	2.2	2.8	3.6	4.5	5.6	7.1
*1		BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
	Power input *2	kW	0.032 [0.030]	0.032 [0.030]	0.044 [0.042]	0.047 [0.045]	0.066 [0.064]	0.087 [0.085]
	Current input *2 (220-230-240 V)	A	0.26 - 0.25 - 0.24	0.26 - 0.25 - 0.24	0.36 - 0.34 - 0.33	0.39 - 0.37 - 0.36	0.53 - 0.51 - 0.49	0.69 - 0.66 - 0.63
Heating capacity *3 (Nominal)		kW	2.5	3.2	4.0	5.0	6.3	8.0
*3		BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
	Power input *2	kW	0.030	0.030	0.042	0.045	0.064	0.085
	Current input *2 (220-230-240 V)	A	0.26 - 0.25 - 0.24	0.26 - 0.25 - 0.24	0.36 - 0.34 - 0.33	0.39 - 0.37 - 0.36	0.53 - 0.51 - 0.49	0.69 - 0.66 - 0.63
External finish			Galvanized steel plate					
External dimension H x W x D		mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732	250 x 900 x 732
		in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8
Net weight		kg (lbs)	21.5 (49) [21 (47)]	21.5 (49) [21 (47)]	21.5 (49) [21 (47)]	26 (58) [25.5 (58)]	26 (58) [25.5 (58)]	27 (60) [26.5 (60)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	External static press. *4	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>
	Motor Type		DC motor					
	Motor output	kW	0.085	0.085	0.085	0.121	0.121	0.121
	Air flow rate (Lo-Mid-Hi)	m^3/min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0	13.5 - 16.0 - 19.0
		L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283	225 - 267 - 317
		cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600	477 - 565 - 671
Sound pressure level (measured in anechoic room) (Lo-Mid-Hi) *2 *5		dB <A>	22.0 - 26.0 - 28.0	22.0 - 26.0 - 28.0	24.0 - 28.0 - 31.0	24.0 - 29.0 - 32.0	25.0 - 32.0 - 35.0	28.0 - 32.0 - 36.0
Air filter			PP honeycomb fabric.					
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	9.52 (3/8) Brazed
	Gas (R410A)	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Model			PEFY-P71VMA(L)-E4	PEFY-P80VMA(L)-E4	PEFY-P100VMA(L)-E4	PEFY-P125VMA(L)-E4	PEFY-P140VMA(L)-E4
Power source			1-phase 220-230-240 V 50/60 Hz				
Cooling capacity *1 (Nominal)		kW	8.0	9.0	11.2	14.0	16.0
*1		BTU/h	27,300	30,700	38,200	47,800	54,600
	Power input *2	kW	0.080 [0.078]	0.080 [0.078]	0.142 [0.140]	0.199 [0.197]	0.208 [0.206]
	Current input *2 (220-230-240 V)	A	0.60 - 0.57 - 0.55	0.60 - 0.57 - 0.55	1.01 - 0.97 - 0.93	1.29 - 1.23 - 1.18	1.40 - 1.34 - 1.28
Heating capacity *3 (Nominal)		kW	9.0	10.0	12.5	16.0	18.0
*3		BTU/h	30,700	34,100	42,700	54,600	61,400
	Power input *2	kW	0.078	0.078	0.140	0.197	0.206
	Current input *2 (220-230-240 V)	A	0.60 - 0.57 - 0.55	0.60 - 0.57 - 0.55	1.01 - 0.97 - 0.93	1.29 - 1.23 - 1.18	1.40 - 1.34 - 1.28
External finish			Galvanized steel plate				
External dimension H x W x D		mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732
		in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight		kg (lbs)	30 (67) [29.5 (67)]	30 (67) [29.5 (67)]	37.5 (84) [37 (82)]	38.5 (86) [38 (84)]	41.5 (93) [41 (91)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
	External static press. *4	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>
	Motor Type		DC motor				
	Motor output	kW	0.121	0.121	0.300	0.300	0.300
	Air flow rate (Lo-Mid-Hi)	m^3/min	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 32.0	28.0 - 34.0 - 37.0	29.5 - 35.5 - 40.0
		L/s	242 - 300 - 350	242 - 300 - 350	383 - 467 - 533	467 - 567 - 617	492 - 592 - 667
		cfm	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,130	989 - 1,201 - 1,306	1,042 - 1,254 - 1,412
Sound pressure level (measured in anechoic room) (Lo-Mid-Hi) *2 *5		dB <A>	26.0 - 32.0 - 35.0	26.0 - 32.0 - 35.0	31.0 - 36.0 - 39.0	35.0 - 39.0 - 41.0	34.0 - 38.0 - 41.0
Air filter			PP honeycomb fabric.				
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas (R410A)	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

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

*3 Nominal heating conditions
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

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

*5 Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.

Specifications

Model				PEFY-P20VMA3-E	PEFY-P25VMA3-E	PEFY-P32VMA3-E	PEFY-P40VMA3-E	PEFY-P50VMA3-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)	*1		kW	2.2	2.8	3.6	4.5	5.6
	*1		BTU/h	7,500	9,600	12,300	15,400	19,100
Heating capacity (Nominal)	*2		kW	2.5	3.2	4	5	6.3
	*2		BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling*3		kW	0.11	0.12	0.12	0.14	0.360
	Heating*3		kW	0.09	0.10	0.10	0.12	0.340
Current	Cooling*3		A	0.90	1.01	1.01	1.15	2.21
	Heating*3		A	0.79	0.90	0.90	1.04	2.10
External finish				Galvanized steel plate				
Dimension H x W x D			mm	250 x 900 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,600 x 732
			in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	27 (60)	32 (71)	32 (71)	32 (71)	46 (102)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 1	Sirocco fan x 2			
	Airflow rate (Lo-Mid-Hi)		m^3/min	12.0-14.5-17.0	13.5-16.0-19.0	13.5-16.0-19.0	14.5-18.0-21.0	29.5 - 35.5 - 42.0
			L/s	200-242-283	225-267-317	225-267-317	242-300-350	492 - 592 - 700
			cfm	424-512-600	477-565-671	477-565-671	512-636-742	1,042 - 1,254 - 1,483
	External static pressure	*4	Pa	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>
Motor	Type			DC motor				
	Output		kW	0.085	0.121	0.121	0.121	0.244
Air filter				PP honeycomb fabric.				
Refrigerant pipe diameter	Liquid (R410A)		mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed
	Gas (R410A)		mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*3 *5	dB (A)	–	–	–	–	–
		*3 *6	dB (A)	26-34-35	25-29-33	25-29-33	26-29-34	33-37-42

Model				PEFY-P63VMA3-E	PEFY-P71VMA3-E	PEFY-P80VMA3-E	PEFY-P100VMA3-E	PEFY-P125VMA3-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)	*1		kW	7.1	8.0	9	11.2	14
	*1		BTU/h	24,200	27,300	30,700	38,200	47,800
Heating capacity (Nominal)	*2		kW	8.0	9.0	0.36	0.36	0.36
	*2		BTU/h	27,300	30,700	2.21	2.21	2.21
Power consumption	Cooling*3		kW	0.360	0.360	10	12.5	16
	Heating*3		kW	0.340	0.340	34,100	42,700	54,600
Current	Cooling*3		A	2.21	2.21	0.34	0.34	0.34
	Heating*3		A	2.10	2.10	2.1	2.1	2.1
External finish				Galvanized steel plate				
Dimension H x W x D			mm	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732
			in.	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	46 (102)	46 (102)	46 (102)	46 (102)	46 (102)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 2				
	Airflow rate (Lo-Mid-Hi)		m^3/min	29.5 - 35.5 - 42.0	29.5 - 35.5 - 42.0	29.5-35.5-42.0	29.5-35.5-42.0	29.5-35.5-42.0
			L/s	492 - 592 - 700	492 - 592 - 700	492-592-700	492-592-700	492-592-700
			cfm	1,042 - 1,254 - 1,483	1,042 - 1,254 - 1,483	1,042-1,254-1,483	1,042-1,254-1,483	1,042-1,254-1,483
	External static pressure	*4	Pa	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>
Motor	Type			DC motor				
	Output		kW	0.244	0.244	0.244	0.244	0.244
Air filter				PP honeycomb fabric.				
Refrigerant pipe diameter	Liquid (R410A)		mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas (R410A)		mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*3 *5	dB (A)	–	–	–	–	–
		*3 *6	dB (A)	33-37-42	33-37-42	33-37-42	33-37-42	33-37-42

Notes:

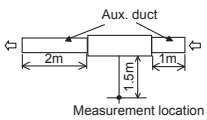
*1 Nominal cooling conditions
Indoor: 27°C(81°F)DB/19°C(66°F)WB, Outdoor: 35°C(95°F)DB
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

*2 Nominal heating conditions
Indoor: 20°C(68°F)DB, Outdoor: 7°C(45°F)DB/6°C(43°F)WB
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

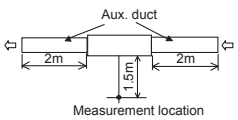
*3 The values are measured at the rated external static pressure.

*4 The rated external static pressure is shown without < >. The factory setting is the rated value.

*5 Measured in anechoic room with a 1m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



*6 Measured in anechoic room with a 2m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



Specifications

Model				PEFY-P20VMA4-E	PEFY-P25VMA4-E	PEFY-P32VMA4-E	PEFY-P40VMA4-E	PEFY-P50VMA4-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)		*1	kW	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100
	Power input	*2	kW	0.087	0.080	0.080	0.080	0.208
	Current input	*2	A	0.69-0.66-0.63	0.60-0.57-0.55	0.60-0.57-0.55	0.60-0.57-0.55	1.40-1.34-1.28
Heating capacity (Nominal)		*3	kW	2.5	3.2	4.0	5.0	6.3
		*3	BTU/h	8,500	10,900	13,600	17,100	21,500
	Power input	*2	kW	0.085	0.078	0.078	0.078	0.206
	Current input	*2	A	0.69-0.66-0.63	0.60-0.57-0.55	0.60-0.57-0.55	0.60-0.57-0.55	1.40-1.34-1.28
External finish				Galvanized steel plate				
External dimension H x W x D			mm	250 x 900 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,600 x 732
			in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	27 (60)	30 (67)	30 (67)	30 (67)	41.5 (93)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 2				Sirocco fan x 3
	External static press.		Pa	35-<50>-<70>-<100>-<150>	40-<50>-<70>-<100>-<150>	40-<50>-<70>-<100>-<150>	40-<50>-<70>-<100>-<150>	<40>-50-<70>-<100>-<150>
			mmH_2O	3.6-<5.1>-<7.1>-<10.2>-<15.3>	4.1-<5.1>-<7.1>-<10.2>-<15.3>	4.1-<5.1>-<7.1>-<10.2>-<15.3>	4.1-<5.1>-<7.1>-<10.2>-<15.3>	<4.1>-5.1-<7.1>-<10.2>-<15.3>
	Motor Type			DC motor				
	Motor output		kW	0.121	0.121	0.121	0.121	0.300
	Driving mechanism			Direct-driven by motor				
	Airflow rate (Lo-Mid-Hi)		m^3/min	13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	29.5 - 35.5 - 40.0
			L/s	225 - 267 - 317	242 - 300 - 350	242 - 300 - 350	242 - 300 - 350	492 - 592 - 667
		*4	cfm	477 - 565 - 671	512 - 636 - 742	512 - 636 - 742	512 - 636 - 742	1,042 - 1,254 - 1,412
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*2 *5	dB (A)	28.0-32.0-36.0	26.0-32.0-35.0	26.0-32.0-35.0	26.0-32.0-35.0	34.0-38.0-41.0
Insulation material				EPS, Polystyrene foam, Urethane foam				
Air filter				PP honeycomb fabric.				
Refrigerant piping diameter	Liquid (R410A)		mm (in.)	6.35 (1/4)Brazed	6.35 (1/4)Brazed	6.35 (1/4)Brazed	6.35 (1/4)Brazed	6.35 (1/4)Brazed
	Gas (R410A)		mm (in.)	12.7 (1/2)Brazed	12.7 (1/2)Brazed	12.7 (1/2)Brazed	12.7 (1/2)Brazed	12.7 (1/2)Brazed
Field drain pipe size			mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")

Model				PEFY-P63VMA4-E	PEFY-P71VMA4-E	PEFY-P80VMA4-E	PEFY-P100VMA4-E	PEFY-P125VMA4-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)		*1	kW	7.1	8.0	9.0	11.2	14.0
		*1	BTU/h	24,200	27,300	30,700	38,200	47,800
	Power input	*2	kW	0.208	0.208	0.208	0.208	0.208
	Current input	*2	A	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28
Heating capacity (Nominal)		*3	kW	8.0	9.0	10.0	12.5	16.0
		*3	BTU/h	27,300	30,700	34,100	42,700	54,600
	Power input	*2	kW	0.206	0.206	0.206	0.206	0.206
	Current input	*2	A	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28	1.40-1.34-1.28
External finish				Galvanized steel plate				
External dimension H x W x D			mm	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732
			in.	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	41.5 (93)	41.5 (93)	41.5 (93)	41.5 (93)	41.5 (93)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 3				
	External static press.		Pa	<40>-50-<70>-<100>-<150>	<40>-50-<70>-<100>-<150>	<40>-50-<70>-<100>-<150>	<40>-50-<70>-<100>-<150>	<40>-50-<70>-<100>-<150>
			mmH_2O	<4.1>-5.1-<7.1>-<10.2>-<15.3>	<4.1>-5.1-<7.1>-<10.2>-<15.3>	<4.1>-5.1-<7.1>-<10.2>-<15.3>	<4.1>-5.1-<7.1>-<10.2>-<15.3>	<4.1>-5.1-<7.1>-<10.2>-<15.3>
	Motor Type			DC motor				
	Motor output		kW	0.300	0.300	0.300	0.300	0.300
	Driving mechanism			Direct-driven by motor				
	Airflow rate (Lo-Mid-Hi)		m^3/min	29.5 - 35.5 - 40.0	29.5 - 35.5 - 40.0	29.5 - 35.5 - 40.0	29.5 - 35.5 - 40.0	29.5 - 35.5 - 40.0
			L/s	492 - 592 - 667	492 - 592 - 667	492 - 592 - 667	492 - 592 - 667	492 - 592 - 667
		*4	cfm	1,042 - 1,254 - 1,412	1,042 - 1,254 - 1,412	1,042 - 1,254 - 1,412	1,042 - 1,254 - 1,412	1,042 - 1,254 - 1,412
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*2 *5	dB (A)	34.0-38.0-41.0	34.0-38.0-41.0	34.0-38.0-41.0	34.0-38.0-41.0	34.0-38.0-41.0
Insulation material				EPS, Polystyrene foam, Urethane foam				
Air filter				PP honeycomb fabric.				
Refrigerant piping diameter	Liquid (R410A)		mm (in.)	9.52 (3/8)Brazed	9.52 (3/8)Brazed	9.52 (3/8)Brazed	9.52 (3/8)Brazed	9.52 (3/8)Brazed
	Gas (R410A)		mm (in.)	15.88 (5/8)Brazed	15.88 (5/8)Brazed	15.88 (5/8)Brazed	15.88 (5/8)Brazed	15.88 (5/8)Brazed
Field drain pipe size			mm (in.)	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")

Notes:

*1 Nominal cooling conditions
Indoor:27°CDB/19°CWB (81°FDB/66°FWB), Outdoor:35°CDB (95°FDB)
Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)
*2. The values are measured at the factory setting of external static pressure.
*3. Nominal heating conditions
Indoor:20°CDB (68°FDB), Outdoor:7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)
*4. The factory setting of airflow mode and external static pressure mode is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*5. Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.
* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
* Due to continuing improvement, above specifications may be subject to change without notice.



High static pressure type

PEFY-P VMHS-E



PEFY-P VMHS-E (P40-P140)



PEFY-P VMHS-E (P160-P250)

Sufficient external static pressure ensuring flexible duct design

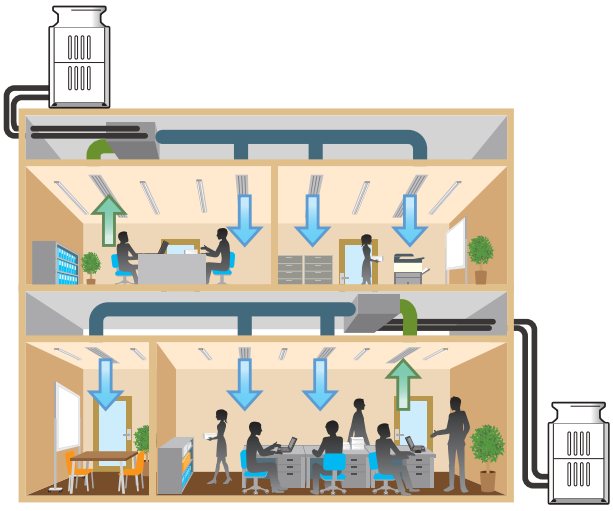
Sufficient external static pressure enables designs with long ducts and greatly expands design possibilities. Ducted air-conditioning that maches an interior design can be realized.

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

PEFY-P VMHS-E	P160	P180
External static pressure (Pa)	<100> – 150 – <200> – <250>	

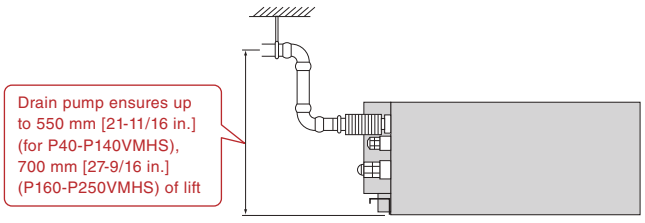
PEFY-P VMHS-E	P200	P250
External static pressure (Pa)	<50> – <100> – 150 – <200> – <250>*	

* The rated external static pressure is shown without < >.
The factory setting is the rated value.



Drain pump (option) ensures up to 550 mm [21-11/16 in.] for P40-P140VMHS model / 700 mm [27-9/16 in.] for P160-P250VMHS models

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm [21-11/16 in.] for P40-P140VMHS, models/700 mm [27-9/16 in.] for P160-P250VMHS models, allowing more freedom in piping layout design and reducing horizontal piping requirements.



Optional Parts

Description	Model	Applicable capacity VMHS-E	Remarks
Drain pump	PAC-KE05DM-F	P160-P250	
	PAC-DRP10DP-E2	P40-P140	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P160-P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Required when long life filter is used
	PAC-KE99TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P160-P250	

Specifications

Model				PEFY-P40VMHS-E	PEFY-P50VMHS-E	PEFY-P63VMHS-E	PEFY-P71VMHS-E
Power source				1-phase 220-230-240 V 50/60 Hz			
Cooling capacity		*1	kW	4.5	5.6	7.1	8.0
		*1	BTU/h	15,400	19,100	24,200	27,300
	*2	Power input	kW	0.055		0.090	0.075
	*2	Current input (220-230-240 V)	A	0.41-0.39-0.38		0.64-0.62-0.59	0.54-0.52-0.50
Heating capacity		*3	kW	5.0	6.3	8.0	9.0
		*3	BTU/h	17,100	21,500	27,300	30,700
	*2	Power input	kW	0.055		0.090	0.075
	*2	Current input (220-230-240 V)	A	0.41-0.39-0.38		0.64-0.62-0.59	0.54-0.52-0.50
External finish				Galvanized steel plate			
External dimension H x W x D			mm	380 x 745 x 900			380 x 1,030 x 900
			in.	15 x 29-3/8 x 35-7/16			15 x 40-9/16 x 35-7/16
Net weight			kg (lbs.)	35 (78)			45 (100)
Heat exchanger				Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 1			Sirocco fan x 2
	*4 External static press.		Pa	50-<100>-<150>-<200>			
			mmH_2O	5.1-<10.2>-<15.3>-<20.4>			
	Motor Type			DC motor			
	Motor output		kW	0.121			0.244
	Air flow rate			(Low-Mid-High)			
			m^3/min	10.0-12.0-14.0		13.5-16.0-19.0	15.5-18.0-22.0
			L/s	167-200-233		225-267-317	258-300-367
			cfm	353-424-494		477-565-671	547-636-777
Sound pressure level (measured in anechoic room)				(Low-Mid-High)			
		*2	dB <A>	20-23-27		24-27-32	24-26-30
Air filter				Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.			
Refrigerant piping diameter	Gas (R410A)		mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed	
	Liquid (R410A)		mm (in.)	6.35 (1/4) Brazed		9.52 (3/8) Brazed	
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)			

Model				PEFY-P80VMHS-E	PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E
Power source				1-phase 220-230-240 V 50/60 Hz			
Cooling capacity		*1	kW	9.0	11.2	14.0	16.0
		*1	BTU/h	30,700	38,200	47,800	54,600
	*2	Power input	kW	0.090	0.160		0.190
	*2	Current input (220-230-240 V)	A	0.63-0.61-0.58	1.05-1.01-0.96		1.24-1.19-1.14
Heating capacity		*3	kW	10.0	12.5	16.0	18.0
		*3	BTU/h	34,100	42,700	54,600	61,400
	*2	Power input	kW	0.090	0.160		0.190
	*2	Current input (220-230-240 V)	A	0.63-0.61-0.58	1.05-1.01-0.96		1.24-1.19-1.14
External finish				Galvanized steel plate			
External dimension H x W x D			mm	380 x 1,030 x 900	380 x 1,195 x 900		
			in.	15 x 40-9/16 x 35-7/16	15 x 47-1/16 x 35-7/16		
Net weight			kg (lbs.)	45 (100)	51 (113)		53 (117)
Heat exchanger				Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 2			
	*4 External static press.		Pa	50-<100>-<150>-<200>			
			mmH_2O	5.1-<10.2>-<15.3>-<20.4>			
	Motor Type			DC motor			
	Motor output		kW	0.244	0.375		
	Air flow rate			(Low-Mid-High)			
			m^3/min	18.0-21.5-25.0	26.5-32.0-38.0		28.0-34.0-40.0
			L/s	300-358-417	442-533-633		467-567-667
			cfm	636-759-883	936-1,130-1,342		989-1,201-1,412
Sound pressure level (measured in anechoic room)				(Low-Mid-High)			
		*2	dB <A>	25-27-30	27-31-34		27-32-36
Air filter				Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.			
Refrigerant piping diameter	Gas (R410A)		mm (in.)	15.88 (5/8) Brazed			
	Liquid (R410A)		mm (in.)	9.52 (3/8) Brazed			
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)			

Notes:

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

Specifications

Model				PEFY-P160VMHS-E1	PEFY-P180VMHS-E1	PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power source				1-phase 220-230-240V 50/60Hz			
Cooling capacity		*1	kW	18.0	20.2	22.4	28.0
		*1	BTU/h	61,400	68,900	76,400	95,500
	*2 Power input		kW	0.470	0.630	0.63	0.82
	*2 Current input (220-230-240 V)		A	2.71-2.59-2.49	3.48-3.33-3.19	3.47-3.32-3.18	4.72-4.43-4.14
Heating capacity		*3	kW	20.0	22.5	25.0	31.5
		*3	BTU/h	68,200	76,800	85,300	107,500
	*2 Power input		kW	0.470	0.630	0.63	0.82
	*2 Current input (220-230-240 V)		A	2.71-2.59-2.49	3.48-3.33-3.19	3.47-3.32-3.18	4.72-4.43-4.14
External finish				Galvanized steel plate			
External dimension H x W x D			mm	470 x 1,250 x 1,120			
			in.	18-9/16 x 49-1/4 x 44-1/8		18-1/2 x 49-1/4 x 44-1/8	
Net weight			kg (lbs.)	84.0 (186)		97 (214)	100 (221)
Heat exchanger				Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 2			
	*4 External static press.		Pa	<100>-150-<200>-<250>		<50>-<100>-150-<200>-<250>	
			mmH_2O	<10.2>-15.3-<20.4>-<25.5>		<5.1>-<10.2>-15.3-<20.4>-<25.5>	
	Motor Type			DC motor			
	Motor output		kW	0.733		0.870	
	Driving mechanism			Direct-driven by motor		Inverter-control	
	Air flow rate			(Low-Mid-High)			
			m^3/min	36.0-42.0-60.0	50.0-61.0-72.0		58.0-71.0-84.0
			L/s	600-700-1,000	833-1,017-1,200		967-1,183-1,400
			cfm	1,271-1,483-2,119	1,766-2,154-2,542		2,048-2,507-2,966
Sound pressure level (measured in anechoic room)				(Low-Mid-High)			
		*2	dB <A>	34.5-38.5-47.5	40.5-45.0-49.0	36-39-43	39-42-46
Air filter				Option: Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.			
Refrigerant piping diameter	Gas (R410A)		mm (in.)	19.05 (3/4") Brazed			22.22 (7/8") Brazed
	Liquid (R410A)		mm (in.)	9.52 (3/8") Brazed			
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4")			

Notes:

*1 Nominal cooling conditions (subject to JIS B8615-2)
Indoor: 27°CDB/19°CWB (81°FDB/66°FWB), Outdoor: 35°CDB (95°FDB)
Pipe length: 7.5m (24-9/16"ft.), Level difference: 0m (0ft.)
*2 The values are measured at the factory setting of external static pressure.
*3 Nominal heating conditions (subject to JIS B8615-2)
Indoor: 20°CDB (68°FDB), Outdoor: 7°CDB/6°CWB (45°FDB/43°FWB)
Pipe length: 7.5m (24-9/16"ft.) Level, difference: 0m (0ft.)
*4 The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

PEFY-P VMHS-E-F



PEFY-P VMHS-E-F (P125)



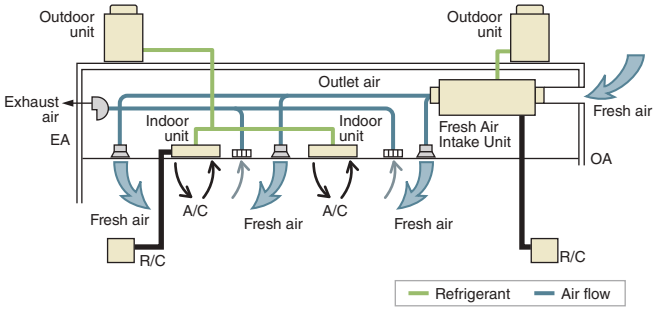
PEFY-P VMHS-E-F (P200/P250)



Enables Intake of Outside Air

Fresh air can be taken in with temperature control. Fresh air intake is available for each air-conditioning zone.

* Fresh air intake type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.



Flexible Air-Flow Setting

Four levels of external static pressure levels to choose from compared to the three levels on the existing models

Model	P125	P200	P250
External static pressure (Pa)	<100> – <150> – 200 – <250>		

*The factory setting of external static pressure is shown without chevrons "< >".

Two types of air-flow modes are available, each of which has three air-flow rates to choose from.

Mode	Normal-airflow rate	High-airflow rate
Air-flow rate	Low-Medium-High	Low-Medium-High

*Air-flow rates are accessible from the remote controller.

Controllable Outlet Air Temperature

Pre-treating the intake air before being supplied to the room contributes to the stability of room temperature, ensuring optimized comfort of the occupants.

* Outlet air temperature may fluctuate, depending on the outside air temperature and the operating status of indoor and outdoor units.

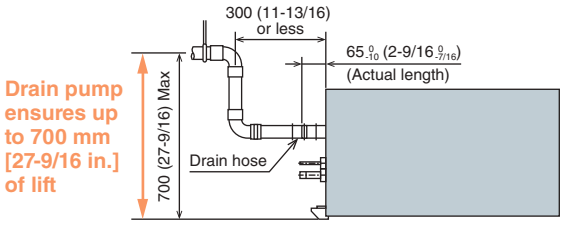
Equipped with New Fan Motor

Fan motor has been changed to higher efficiency DC motor. Power source has been changed from three-phase power supply to single-phase power supply, which allows for easier installation.

* Comparison with PEFY-P140, 200, 250VMH-E-F

Drain Pump (Optional)

Greater design flexibility made possible by the increased head height (Max. 700 mm)*



* Comparison with PEFY-P140, 200, 250VMH-E-F

Optional Parts

Description	Model	Applicable capacity
Drain pump kit	PAC-DRP10DP-E2	P125
	PAC-KE06DM-F	P200, 250
Long life filter	PAC-KE89LAF	P125
	PAC-KE85LAF	P200, 250
Filter box	PAC-KE140TB-F	P125
	PAC-KE250TB-F	P200, 250

Specifications

Model			PEFY-P125VMHS-E-F	PEFY-P200VMHS-E-F	PEFY-P250VMHS-E-F *6
Power source			1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz	1-phase 220-230-240 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	14.0	22.4	28.0
	*1	BTU/h	47,800	76,400	95,500
	*2 Power input	kW	0.220	0.260	0.350
	*2 Current input (220 V)	A	1.43	1.66	2.16
Temp. range of cooling			17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.	17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.	17°CD.B./15.5°CW.B. ~ 43°CD.B./35°CW.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 17°CD.B.
Heating capacity (Nominal)	*3	kW	8.9	13.9	17.4
	*3	BTU/h	30,400	47,400	59,400
	*2 Power input	kW	0.230	0.270	0.360
	*2 Current input (220 V)	A	1.52	1.85	2.38
Temp. range of heating			-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.	-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.	-10°CD.B. ~ 20°CD.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°CD.B.
External finish			Galvanized	Galvanized	Galvanized
External dimension HxWxD		mm	380 x 1,195 x 900	470 x 1,250 x 1,120	470 x 1,250 x 1,120
		in.	15 x 47-1/16 x 35-7/16	18-9/16 x 49-1/4 x 44-1/8	18-9/16 x 49-1/4 x 44-1/8
Net weight		kg (lbs.)	49 (109)	78 (172)	81 (179)
Heat exchanger			Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)
FAN	Type x Quantity		Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2
*4, 5	External static press.	Pa	<100> - <150> - 200 - <250>	<100> - <150> - 200 - <250>	<100> - <150> - 200 - <250>
		mmH_2O	<10.2> - <15.3> - 20.4 - <25.5>	<10.2> - <15.3> - 20.4 - <25.5>	<10.2> - <15.3> - 20.4 - <25.5>
	Motor Type		DC motor	DC motor	DC motor
	Motor output	kW	0.244	0.375	0.375
	Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
*4, 5	Air flow rate		Normal-airflow rate mode / <High-airflow rate mode>	Normal-airflow rate mode / <High-airflow rate mode>	Normal-airflow rate mode / <High-airflow rate mode>
	(Low-Mid-High)	m^3/min	14.0 - 15.5 - 18.0 / 15.5 - 18.0 - 20.0	22.5 - 25.0 - 28.0 / 25.0 - 28.0 - 32.0	28.0 - 31.0 - 35.0 / 31.0 - 35.0 - 40.0
		L/s	233 - 258 - 300 / 258 - 300 - 333	375 - 417 - 467 / 417 - 467 - 533	467 - 517 - 583 / 517 - 583 - 667
		cfm	494 - 547 - 636 / 547 - 636 - 706	794 - 883 - 989 / 883 - 989 - 1,130	989 - 1,095 - 1,236 / 1,095 - 1,236 - 1,412
Sound pressure level (measured in anechoic room)			Normal-airflow rate mode / <High-airflow rate mode>	Normal-airflow rate mode / <High-airflow rate mode>	Normal-airflow rate mode / <High-airflow rate mode>
(Low-Mid-High)	*2	dB <A>	34-37-41 / 36-40-42	35-38-41 / 36-39-42	38-40-44 / 38-41-45
Air filter			Option: Synthetic fiber unwoven cloth filter (long life filter).	Option: Synthetic fiber unwoven cloth filter (long life filter).	Option: Synthetic fiber unwoven cloth filter (long life filter).
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas (R410A)	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	22.22 (7/8) Brazed
Field drain pipe size		mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Optional parts	Drain pump kit		PAC-DRP10DP-E2	PAC-KE06DM-F	PAC-KE06DM-F
	Long life filter		PAC-KE89LAF	PAC-KE85LAF	PAC-KE85LAF
	Filter box		PAC-KE140TB-F	PAC-KE250TB-F	PAC-KE250TB-F

Notes:

*1 Cooling capacity indicates the maximum value at operation under the following condition. Cooling: Indoor 33°CDB/28°CWB, Outdoor 33°CDB. The set temperature of the remote controller is 18°C.
*2 The value are measured at the factory setting of airflow mode and external static pressure.
*3 Heating capacity indicates the maximum value at operation under the following condition. Heating: Indoor 0°CDB/-2.9°CWB, Outdoor 0°CDB/-2.9°CWB. The set temperature of the remote controller is 25°C.
*4 The factory setting of airflow mode and external static pressure mode is shown without < >. Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*5 If the airflow rate is over the usable range, dew drop can be caused from the air outlet and the air flow rate is changed automatically because of the output down by the fan motor control. If the air flow rate is less than the usable range, condensation from the unit surface can be caused.
*6 Regarding P250VMHS-E-F, the middle notch air flow rate is different from the spec value when the external static pressure setting is set to 100Pa. See "Fan characterics curves" in DATA BOOK for the details.

- The combination of fresh air intake type indoor units with other types of indoor units to handle internal thermal load which may cause the conflict of operation mode. It is not recommended when fresh air intake type indoor unit is connected to the Y or WY series.
- Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the desired preset temperature may not always be achieved and the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- Fresh air intake type indoor units cannot be connected to PUMY, except for PUMY-SP112/125/140 VKM/YKM(-BS) and PUMY-P112/125/140 VKM5/YKM4(-BS). Fresh air intake type cannot be connected to an outdoor unit together with PWFY series.
- The maximum connectable indoor units to 1 outdoor unit are 110% (100% in case of heating below -5°C).
- When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity.
- The AUTO mode on the local remote controller is available only when fresh air intake type indoor unit is connected to the R2 or WR2 series of outdoor unit.
- The system changeover function is available only when all the connected indoor units are fresh air intake type indoor units.
- The fan temporary stops during defrost.
- The cooling and heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5 m and a level difference of 0 m.
- The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information in DATA BOOK for the details.
- Thermo off (Fan) operation automatically starts either when temperature is lower than 17°CDB in cooling mode or when the temperature exceeds 20°CDB in heating mode.
- Dry mode is not available.
- When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
- Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation. Please be careful when positioning indoor unit air outlet grilles, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
- Air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible in case of usage of field supply filters.

PEFY-P VMR-E-L/R



* The picture represents -L type. For -R type, the control box comes to the right side when looked at from the front.



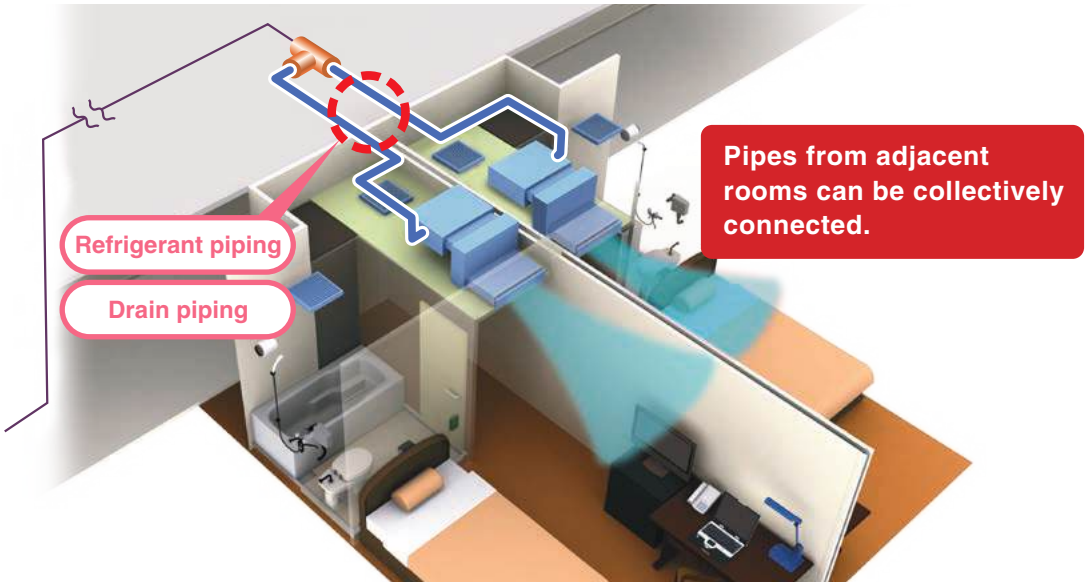
Low-noise operation for a quiet indoor environment

Low noise design: Minimum of 20 dB when air flow rate is low and maximum of 35 dB when air flow rate is high.

* Noise values measured on a rear-inlet model in an anechoic room. (The noise value is higher in cases where the bottom inlet is used.)

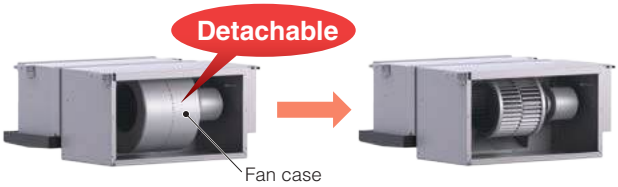
Flexibly application in symmetrically arranged rooms

Models are available with refrigerant/drain piping and control box on either the right or left sides. They can be flexibly applied to symmetrically arranged hotel rooms.



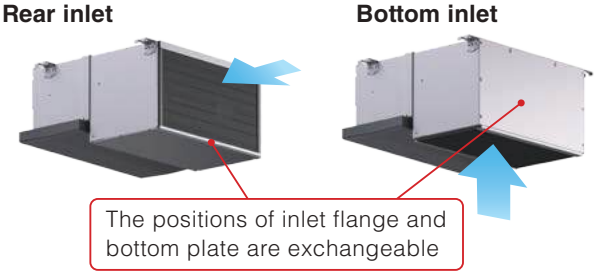
Easy Maintenance

The fan case has no screws and can be easily removed, meaning the fan is easy to maintain. The air filter can be removed from the side or rear of the body.



Air inlet direction can easily be changed

The rear or bottom air inlet can be selected according to the room's layout.



By exchanging the closing board and air filter, rear inlet and bottom inlet can be changed. (At factory shipment: Rear inlet)

* The units with bottom inlet make more noise than those with rear inlet. It is recommended to choose the type of "with rear inlet" for the rooms that should be quiet such as bedrooms.

Specifications

Model				PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L
Power source				1-phase 220-230-240V 50Hz/1-phase 220-230V 60Hz		
Cooling capacity		*1	kW	2.2	2.8	3.6
		*1	BTU/h	7,500	9,600	12,300
Heating capacity		*1	kW	2.5	3.2	4.0
		*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling		kW	0.06/0.06	0.06/0.06	0.07/0.08
	Heating		kW	0.06/0.06	0.06/0.06	0.07/0.08
Current	Cooling		A	0.29/0.29	0.29/0.29	0.34/0.38
	Heating		A	0.29/0.29	0.29/0.29	0.34/0.38
External finish				Galvanized		
Dimension H x W x D	Rear inlet		mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet		mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight			kg (lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity			Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.8-5.8-7.9		4.8-5.8-9.3
			L/s	80-97-132		80-97-155
			cfm	170-205-279		170-205-328
	External static pressure	*2	Pa	5		
Motor	Type			1-phase induction motor		
	Output		kW	0.018		0.023
Air filter				PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas		mm (in.)	ø12.7 (ø1/2) Brazed		
	Liquid		mm (in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter			mm (in.)	O.D. 26 (1)		
Sound pressure level (Lo-Mid-Hi)	220V	*3	dB (A)	20-25-30		20-25-33
	230V		dB (A)	21-26-32		21-26-35
	240V		dB (A)	22-27-30		22-27-33

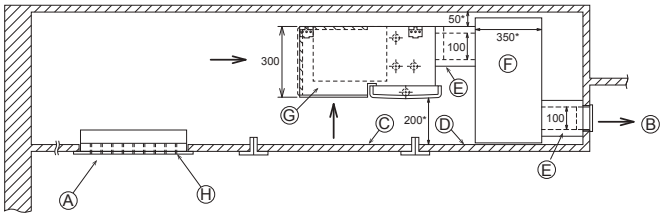
Model				PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R
Power source				1-phase 220-230-240V 50Hz/1-phase 220-230V 60Hz		
Cooling capacity		*1	kW	2.2	2.8	3.6
		*1	BTU/h	7,500	9,600	12,300
Heating capacity		*1	kW	2.5	3.2	4.0
		*1	BTU/h	8,500	10,900	13,600
Power consumption	Cooling		kW	0.06/0.06	0.06/0.06	0.07/0.08
	Heating		kW	0.06/0.06	0.06/0.06	0.07/0.08
Current	Cooling		A	0.29/0.29	0.29/0.29	0.34/0.38
	Heating		A	0.29/0.29	0.29/0.29	0.34/0.38
External finish				Galvanized		
Dimension H x W x D	Rear inlet		mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet		mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight			kg (lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity			Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.8-5.8-7.9		4.8-5.8-9.3
			L/s	80-97-132		80-97-155
			cfm	170-205-279		170-205-328
	External static pressure	*2	Pa	5		
Motor	Type			1-phase induction motor		
	Output		kW	0.018		0.023
Air filter				PP Honeycomb fabric (washable)		
Refrigerant pipe diameter	Gas		mm (in.)	ø12.7 (ø1/2) Brazed		
	Liquid		mm (in.)	ø6.35 (ø1/4) Brazed		
Field drain pipe diameter			mm (in.)	O.D. 26 (1)		
Sound pressure level (Lo-Mid-Hi)	220V	*3	dB (A)	20-25-30		20-25-33
	230V		dB (A)	21-26-32		21-26-35
	240V		dB (A)	22-27-30		22-27-33

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 The external static pressure is set to 5Pa (at 220V, 230V, 240V).
*3 Measured in anechoic room. Sound pressure levels of the unit with a rear air inlet. (Sound pressure levels are higher than the unit with a bottom air inlet.)

* If quietness is required, installation of a crank-shaped duct is recommended. Please refer to the installation pattern below for the duct system design.

(Unit: mm)



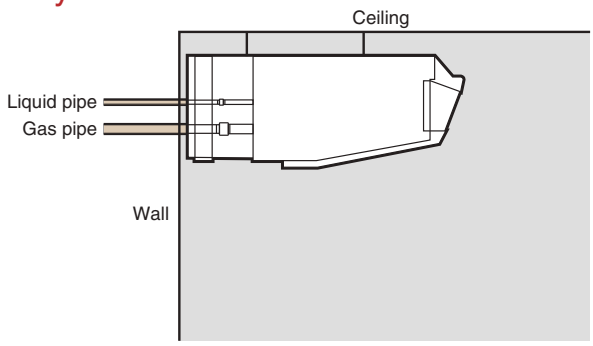
Ⓐ Air inlet
Ⓑ Air outlet
Ⓒ Access door
Ⓓ Ceiling surface
Ⓔ Duct
Ⓕ Duct box
Ⓖ Air filter
Ⓗ Inlet grille
* Reference data

PCFY-P VKM-E



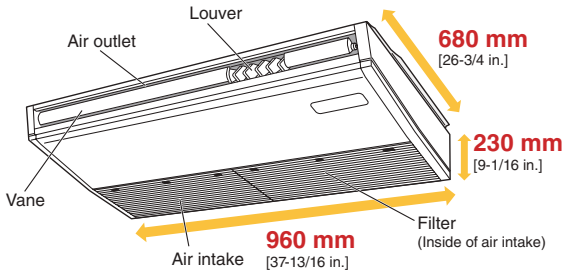


Easy installation



The ceiling suspended cassette can easily be installed without requiring duct work, even if the ceiling does not have sufficient space.

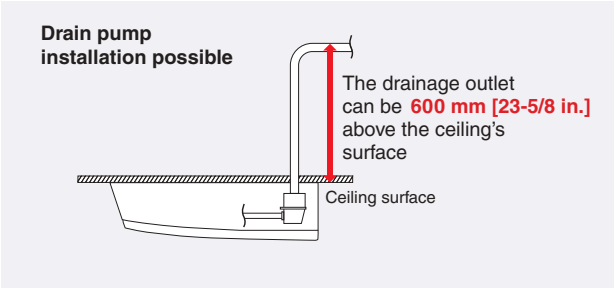
230 mm [9-1/16 in.] high unit is designed in consideration of interior design coordination



Sleek and slim with stylishly curved lines, the PCFY-Series is designed to blend into interior.

Drain pump is available for all models

The optional drain pump allows the drain connection to be raised as high as 600mm [23-5/8 in.], expanding flexibility in choosing the unit's location.



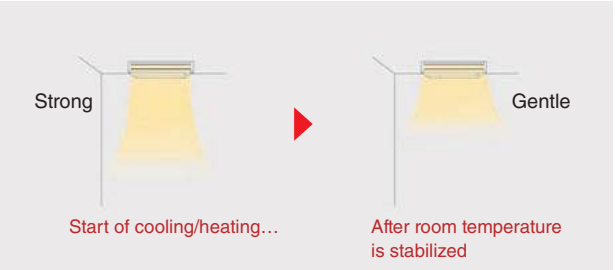
Auto Vane Control

Outlet vanes can be moved up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



Equipped with automatic air-speed adjustment

In addition to the conventional 4-speed settings, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



Optional Parts

Description	Model	Applicable capacity
Drain pump kit	PAC-SH83DM-E	P40
	PAC-SH84DM-E	P63, 100, 125
High efficiency filter	PAC-SH88KF-E	P40
	PAC-SH89KF-E	P63
	PAC-SH90KF-E	P100, 125
Wireless remote controller kit	PAR-SL94B-E	P40, 63, 100, 125

Specifications

Model				PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E
Power source				1-phase 220-240V 50Hz/1-phase 220V 60Hz			
Cooling capacity		*1	kW	4.5	7.1	11.2	14.0
		*1	BTU/h	15,400	24,200	38,200	47,800
Heating capacity		*1	kW	5.0	8.0	12.5	16.0
		*1	BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling		kW	0.04	0.05	0.09	0.11
	Heating		kW	0.04	0.05	0.09	0.11
Current	Cooling		A	0.28	0.33	0.65	0.76
	Heating		A	0.28	0.33	0.65	0.76
External finish (Munsell No.)				6.4Y 8.9/ 0.4			
Dimension H x W x D			mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680	
			in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4	
Net weight			kg (lbs.)	24 (53)	32 (71)	36 (79)	38 (84)
Heat exchanger				Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4	
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
			L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
			cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.090	0.095	0.160	
Air filter				PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8)/ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter			mm (in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB (A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
*2 Airflw rate/Sound pressure level are shown in (low-middle 2-middle 1-high).
*3 It is measured in anechoic room.

PKFY-P VLM-E
PKFY-P VKM-E


PKFY-P VLM (P10~P32)


PKFY-P VLM (P40/P50)


PKFY-P VKM



A design thet matches the room's interior (VLM model)

A sharp and simple form combines beauty and function. The simple square design harmonizes beautifully with the straight lines of the walls, floor and ceiling. The white body color has been adopted to enhance the beauty and comfort of a room without disturbing its atmosphere.

Conventional model


PKFY-P VBM <P15~P25>


PKFY-P VHM <P32~P50>

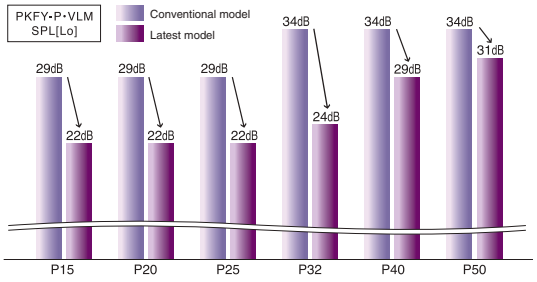
Latest model


PKFY-P VLM <P10~P32>


PKFY-P VLM <P40~P50>

Low noise

The noise level has been reduced compared to the conventional model (PKFY-P VBM/VHM) by improving the unit structure such as the line flow fan.



* Measurement condition (Fan speed: Low)
* It is measured in anehoic room.

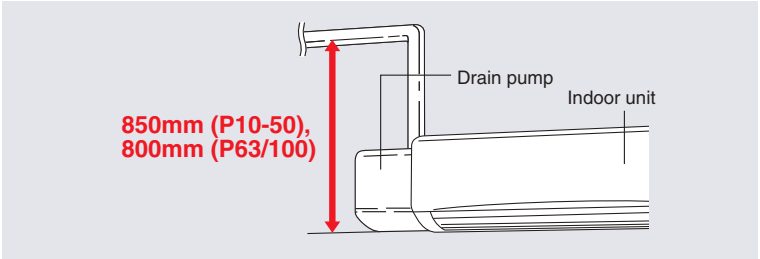
Fan speed & vane control

The VLM model provides 4 fan speeds and an auto mode. Additionally, the vane angle can be set to five steps. This enables air conditioning as desired.

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

Drain pump option

The optional drain pump allows the drain connection to be raised as high as 850mm (P10-50), 800mm (P63/100), allowing more flexible in piping layout design.



Optional Parts

Description	Model	Applicable capacity
External LEV Box	PAC-SK17LE-E	P10
	PAC-SG95LE-E	P15, 20, 25, 32, 40, 50, 63
Drain pump kit	PAC-SK01DM-E	P10, 15, 20, 25, 32, 40, 50
	PAC-SH94DM-E	P63,100

Specifications

Model				PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E
Power source				1-phase 220-240 V 50 Hz, 1-phase 220-230 V 60Hz						
Cooling capacity (Nominal)		*1	kW	1.2	1.7	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	4,100	5,800	7,500	9,600	12,300	15,400	19,100
	Power input		kW	0.02	0.02	0.02	0.03	0.04	0.04	0.05
	Current input		A	0.20	0.20	0.20	0.25	0.35	0.35	0.45
Heating capacity (Nominal)		*2	kW	1.4	1.9	2.5	3.2	4.0	5.0	6.3
		*2	BTU/h	4,800	6,500	8,500	10,900	13,600	17,100	21,500
	Power input		kW	0.01	0.01	0.01	0.02	0.03	0.03	0.04
	Current input		A	0.15	0.15	0.15	0.20	0.30	0.30	0.40
External finish (Munsell No.)				Plastic (0.7PB 9.2/0.4)						
External dimension H x W x D			mm	299 x 773 x 237					299 x 898 x 237	
			in.	11-25/32 x 30-7/16 x 9-11/32					11-25/32 x 35-3/8 x 9-11/32	
Net weight			kg (lbs.)	11 (25)					13 (29)	
Heat exchanger				Cross fin (Aluminum fin and copper tube)						
Fan	Type x Quantity			Line flow fan x 1						
	External static press		Pa (mmH_2O)	0 (0)						
	Motor type			DC motor						
	Motor output		kW	0.03						
	Driving mechanism			Direct driven						
	Airflow rate (Lo-Mid2-Mid1-Hi)		m^3/min	3.3-3.5-3.8-4.2	4.0-4.2-4.4-4.7	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4
			L/s	55-58-63-70	67-70-73-78	67-73-82-90	67-77-90-112	72-90-115-140	105-123-143-167	113-138-170-207
			cfm	117-124-134-148	141-148-155-166	141-155-173-191	141-162-191-237	152-191-244-297	222-261-304-353	240-293-360-438
Noise level (measured in anechoic room)			dB (A)	22-24-26-28	22-24-26-28	22-26-29-31	22-27-31-35	24-31-37-41	29-34-37-40	31-36-41-46
Insulation material				Polyethylene sheet						
Air filter				PP honeycomb						
Protection device				Fuse						
Refrigerant control device				LEV						
Refrigerant piping diameter	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)						
	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)						
Field drain pipe diameter			mm (in.)	I.D.16 (5/8)						
Optional parts	DRAIN PUMP KIT			PAC-SK01DM-E						
	EXTERNAL LEV BOX			PAC-SK17LE-E	PAC-SG95LE-E					

Notes:

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

Model				PKFY-P63VKM-E	PKFY-P100VKM-E
Power source				1-phase 220-240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity (Nominal)		*1	kW	7.1	11.2
		*1	BTU/h	24,200	38,200
(220V)	Power input		kW	0.05	0.08
	Current input		A	0.37	0.58
Heating capacity (Nominal)		*2	kW	8.0	12.5
		*2	BTU/h	27,300	42,600
(220V)	Power input		kW	0.04	0.07
	Current input		A	0.30	0.51
External finish (Munsell No.)				Plastic, MUNSELL (1.0Y 9.2/0.2)	
External dimension H x W x D			mm	365x1170x295	
			in.	14-3/8 x 46-1/16 x 11-5/8	
Net weight			kg (lbs.)	21(46)	
Heat exchanger				Cross fin (Aluminum fin and copper tube)	
Fan	Type x Quantity			Line flow fan x 1	
	External static press		Pa (mmH_2O)	0 (0)	
	Motor type			DC motor	
	Motor output		kW	0.056	
	Driving mechanism			Direct-drive	
	Airflow rate (Low-High)		m^3/min	16-20	20-26
			L/s	267-333	333-433
			cfm	565-706	706-918
Sound pressure level (measured in anechoic room)			dB (A)	39-45	41-49
Insulation material				Polyethylene sheet	
Air filter				PP honeycomb	
Protection device				Fuse	
Refrigerant control device				LEV	
Refrigerant piping diameter	Liquid (Flare)		mm (in.)	ø9.52 (ø3/8)	
	Gas (Flare)		mm (in.)	ø15.88 (ø5/8)	
Field drain pipe diameter			mm (in.)	I.D.16 (5/8)	
Optional parts	DRAIN PUMP KIT			PAC-SH94DM-E	
	EXTERNAL LEV BOX			PAC-SG95LE-E	-

Notes:

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

PFFY-P VKM-E2



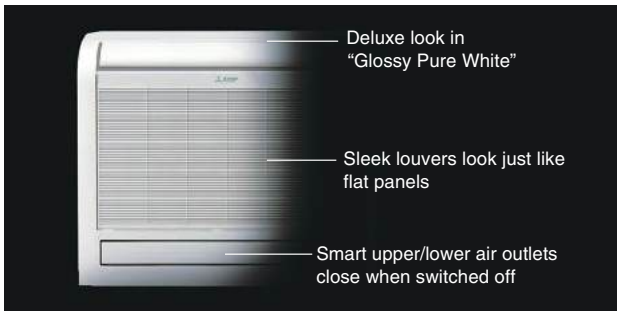


Sophisticated Design

An innovative floor-standing air-conditioner from Mitsubishi Electric. A pleasing mix of streamlined form and diversified function. Engineered to keep room walls free, provide comfortable cooling in summer, and toasty heating in the winter.

The “Glossy Pure White” color ensures a deluxe look, a perfect match for any room. Both upper and lower air outlets remain closed when switched off, a smart and striking image.

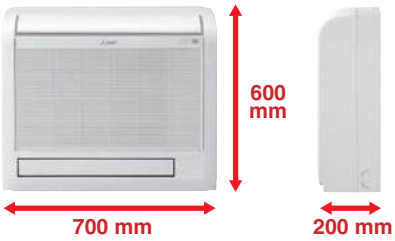
A superb new air-conditioner from Mitsubishi Electric, providing a handsome fit for your own distinctive interior.



Slim yet Mighty

The unit’s body is slim and trim, highlighting its compact essence. An ideal size for living rooms, bedrooms, and more.

The removable and washable front panel makes cleaning a snap. Easy, regular cleaning helps your air-conditioner stay beautiful while maintaining its energy-efficient operation.

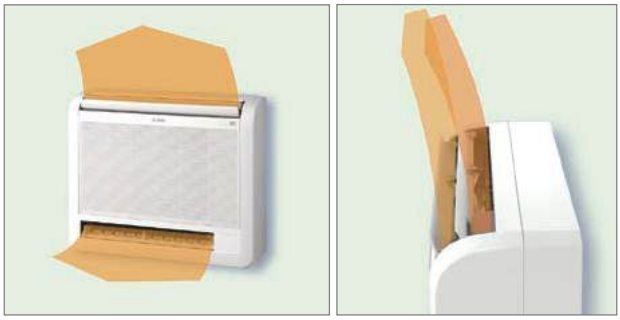


Optimum Air Distribution

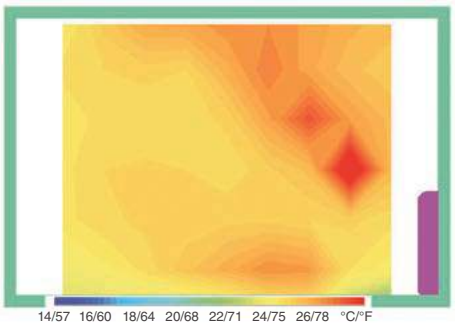
Comfy room temperatures are accomplished through optimum, powerful and efficient air distribution through the upper and lower air outlets.

The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode).

By setting the vane angle almost vertical, bothersome direct wind can be avoided for increased comfort.



The air from both the upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Say goodbye to chilly feet!



Specifications

Model				PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source				1-phase 220-240V 50Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.025	0.025	0.025	0.028
	Heating		kW	0.025	0.025	0.025	0.028
Current	Cooling		A	0.20	0.20	0.20	0.24
	Heating		A	0.20	0.20	0.20	0.24
External finish				Plastic (Pure white)			
Dimension H x W x D			mm	600 x 700 x 200			
			in.	23-5/8 x 27-9/16 x 7-7/8			
Net weight			kg (lbs.)	15 (34)			
Heat exchanger				Cross fin (Alminium plate fin and copper tube)			
Fan	Type x Quantity			Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi)	*2	m^3/min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.03 x 2			
Air filter				PP honeycomb fabric (Catechin Filter)			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm (in.)	I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi)		*2	dB (A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle-high-shigh).
*3 It is measured in anechoic room.

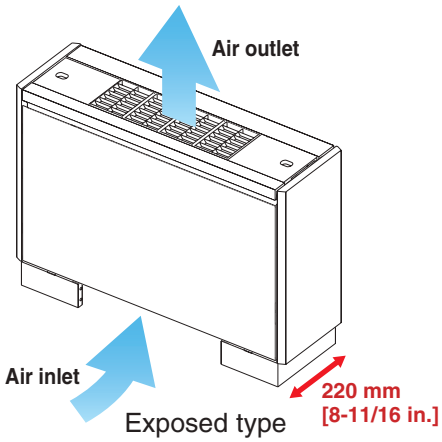
PFFY-P VLEM-E





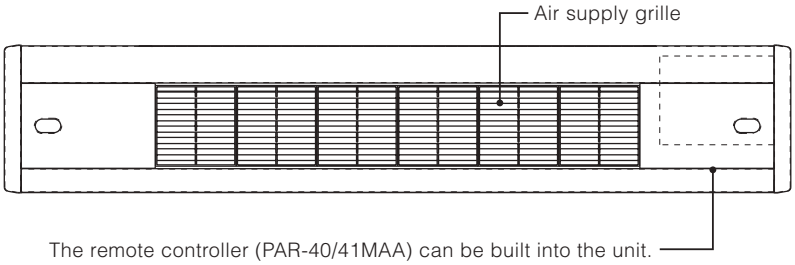
Compact unit for easy perimeter air-conditioning

The compact body depth of 220 mm [8-11/16 in.] can be easily installed in a perimeter zone for effective air-conditioning.



Remote controller can be installed on the main unit

The remote controller can be embedded in the main unit, allowing temperature and air volume to be easily set.





PAR-40/41MAA

Specifications

Model				PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power source				1-phase 220-240V 50Hz/1-phase 208-230V 60Hz					
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
	Heating		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
Current	Cooling		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
	Heating		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
External finish (Munsell No.)				Acrylic paint (5Y 8/1)					
Dimension H x W x D			mm	630 x 1,050 x 220		630 x 1,170 x 220		630 x 1,410 x 220	
			in.	24-13/16 x 41-3/8 x 8-11/16		24-13/16 x 46-1/8 x 8-11/16		24-13/16 x 55-9/16 x 8-11/16	
Net weight			kg (lbs.)	28 (62)		30 (67)	32 (71)	36 (80)	37 (82)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Hi)	*2	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
			L/s	92-108		117-150	150-183	200-233	200-258
			cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure		Pa	0					
Motor	Type			1-phase induction motor					
	Output		kW	0.015		0.018	0.030	0.035	0.050
Air filter				PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter			mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi)		*2 *3 *4	dB (A)	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Air flow rate/Sound pressure level are in (Low-High)
*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point
*4 It is measured in anechoic room.

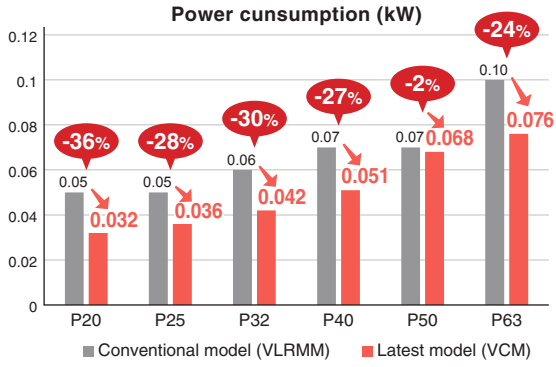
PFFY-P VCM-E



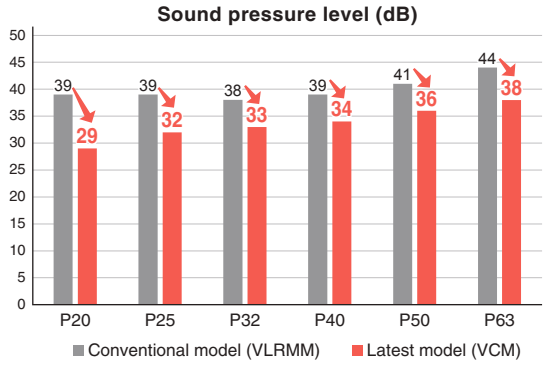


Reduced power consumption and noise

The structure realizes smooth airflow to reduce pressure loss in the air pathway. Additionally, the inner pipes of its heat exchanger have been downsized from ø9.52 to ø7.0 to contain a larger number of pipings.
The combination of the structure and components contributes to reducing power consumption and operation noise.



* Measurement condition (External static pressure: 40Pa Fan speed: High)
* The unit consumes the same power in both cooling and heating modes.

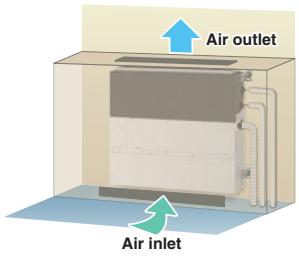


* Measurement condition (External static pressure: 40Pa Fan speed: High)
* The sound pressure level in operation is measured at 1.5 m apart from the front side and bottom side of the unit in anechoic room.

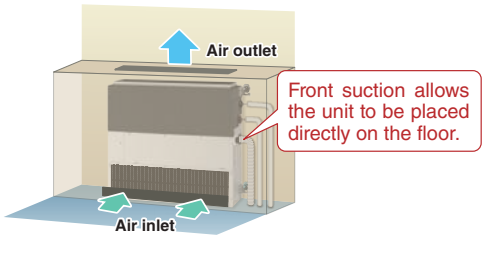
Flexible installation pattern ideal for perimeter zone air conditioning

Air inlet can be selected from two patterns, bottom suction or front suction, by changing the panel, fan guard and filter.

• **Bottom suction*1**

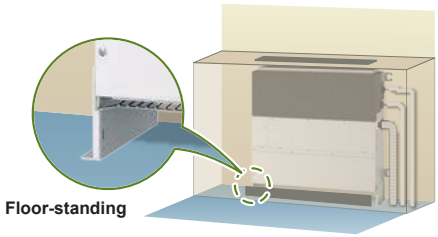


• **Front suction*2**



• **Floor standing with legs**

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



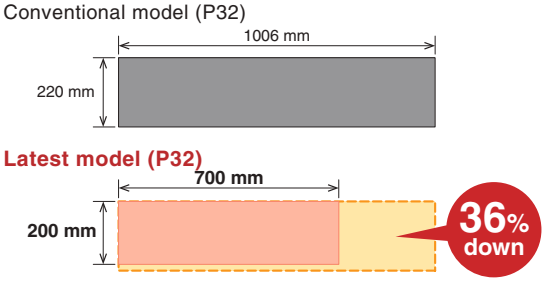
* Height of unit (with legs) is 690 mm.

*1 Select a site where the flow of supply air is not blocked. The unit cannot be placed directly on the floor in the case of bottom suction.

*2 Front suction makes more noise than bottom suction. Bottom suction is recommended when installing the unit in rooms that need to be quiet, such as bedrooms.

Smaller footprint

The latest model (P32) has a 36% smaller footprint compared to the PFFY-VLRMM, owing to a redesigning of the positions of the inner components.



Flexible airflow and external static pressure setting

Airflow rate and external static pressure can be selected to suit various installation conditions.

	Conventional	
Air flow rate	PFFY-P VLRM	Low-High
	PFFY-P VLRMM	Low-Mid-High
	Latest	
	PFFY-P VCM	**Low-Mid-High**

	Conventional	
External static pressure (Pa)	PFFY-P VLRM	0
	PFFY-P VLRMM	20-40-60
	Latest	
	PFFY-P VCM	**0-10-40-60**

Specifications

Model				PFFY-P20VCM-E	PFFY-P25VCM-E	PFFY-P32VCM-E
Power source				1-phase 220-230-240 V 50/60 Hz		
Cooling capacity (Nominal)	*1		kW	2.2	2.8	3.6
	*1		BTU/h	7,500	9,600	12,300
	*2	Power input	kW	0.022	0.026	0.031
	*2	Current input	A	0.25	0.30	0.34
Heating capacity (Nominal)	*3		kW	2.5	3.2	4.0
	*3		BTU/h	8,500	10,900	13,600
	*2	Power input	kW	0.022	0.026	0.031
	*2	Current input	A	0.25	0.30	0.34
External finish				Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension H x W x D	*4		mm	615 (690) x 700 x 200	615 (690) x 700 x 200	615 (690) x 700 x 200
			in.	24-1/4 (27-3/16) x 27-9/16 x 7-7/8	24-1/4 (27-3/16) x 27-9/16 x 7-7/8	24-1/4 (27-3/16) x 27-9/16 x 7-7/8
Net weight			kg (lbs)	18 (40)	18 (40)	18.5 (42)
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
FAN		Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	*5	External static press.	Pa	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>
			mmH_2O	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>
		Motor Type		DC motor	DC motor	DC motor
		Motor output	kW	0.096	0.096	0.096
		Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
		Air flow rate		(Low-Mid-High)		
			m^3/min	5.0 - 6.0 - 7.0	5.5 - 6.5 - 8.0	5.5 - 7.0 - 8.5
			L/s	83 - 100 - 117	92 - 108 - 133	92 - 117 - 142
			cfm	177 - 212 - 247	194 - 230 - 282	194 - 247 - 300
Sound pressure level (measured in anechoic room)	*2		dB<A>	(Low-Mid-High) 21-23-26	22-25-29	23-26-30
Air filter				PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Refrigerant piping diameter		Liquid (410A)	mm (in.)	6.35 (1/4)Brazed	6.35 (1/4)Brazed	6.35 (1/4)Brazed
		Gas (410A)	mm (in.)	12.7 (1/2)Brazed	12.7 (1/2)Brazed	12.7 (1/2)Brazed
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1. Nominal cooling conditions
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2. The values are measured at the factory setting of external static pressure.
*3. Nominal heating conditions
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*4. The values in ( ) show the height of unit with leg.
*5. The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
*Due to continuing improvement, above specifications may be subject to change without notice.

Model				PFFY-P40VCM-E	PFFY-P50VCM-E	PFFY-P63VCM-E
Power source				1-phase 220-230-240 V 50/60 Hz		
Cooling capacity (Nominal)	*1		kW	4.5	5.6	7.1
	*1		BTU/h	15,400	19,100	24,200
	*2	Power input	kW	0.038	0.052	0.058
	*2	Current input	A	0.38	0.50	0.49
Heating capacity (Nominal)	*3		kW	5.0	6.3	8.0
	*3		BTU/h	17,100	21,500	27,300
	*2	Power input	kW	0.038	0.052	0.058
	*2	Current input	A	0.38	0.50	0.49
External finish				Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
External dimension H x W x D	*4		mm	615 (690) x 900 x 200	615 (690) x 900 x 200	615 (690) x 1,100 x 200
			in.	24-1/4 (27-3/16) x 35-7/16 x 7-7/8	24-1/4 (27-3/16) x 35-7/16 x 7-7/8	24-1/4 (27-3/16) x 43-5/16 x 7-7/8
Net weight			kg (lbs)	22.5 (51)	22.5 (51)	25.5 (58)
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
FAN		Type x Quantity		Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 4
	*5	External static press.	Pa	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>	<0> - 10 - <40> - <60>
			mmH_2O	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>	<0.0> - 1.0 - <4.1> - <6.1>
		Motor Type		DC motor	DC motor	DC motor
		Motor output	kW	0.096	0.096	0.096
		Driving mechanism		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
		Air flow rate		(Low-Mid-High)		
			m^3/min	8.0 - 9.5 - 11.0	10.0 - 11.5 - 13.5	12.0 - 14.0 - 16.5
			L/s	133 - 158 - 183	167 - 192 - 225	200 - 233 - 275
			cfm	282 - 335 - 388	353 - 406 - 477	424 - 494 - 583
Sound pressure level (measured in anechoic room)	*2		dB<A>	(Low-Mid-High) 25-27-30	28-31-34	28-32-35
Air filter				PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.
Refrigerant piping diameter		Liquid (410A)	mm (in.)	6.35 (1/4)Brazed	6.35 (1/4)Brazed	9.52 (3/8)Brazed
		Gas (410A)	mm (in.)	12.7 (1/2)Brazed	12.7 (1/2)Brazed	15.88 (5/8)Brazed
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)

Notes:

*1. Nominal cooling conditions
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2. The values are measured at the factory setting of external static pressure.
*3. Nominal heating conditions
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*4. The values in ( ) show the height of unit with leg.
*5. The factory setting of external static pressure is shown without < >.
Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.
*Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
*Due to continuing improvement, above specifications may be subject to change without notice.

Floor standing exposed type

PFFY-P YM-E
PFFY-P YMH-E





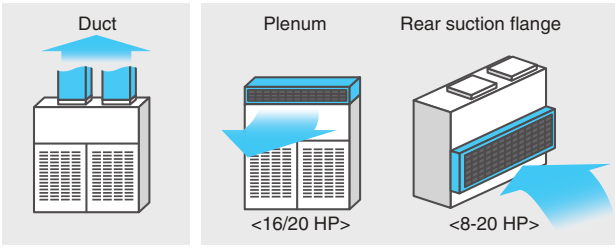


Reduces installation and maintenance time

This series is a floor-standing, large capacity, indoor unit, which reduces the piping and installation burdens, and makes maintenance easy.

Increased adaptation to local needs

In addition to the standard duct blowing, both plenum blowing and rear suction are optionally selectable.



Wide ranges of airflow rate and static pressure options are available to suit a greater variety of needs

		Air flow rate (m³/min [ft.³/min])	Static pressure (Pa)
		High, 50/60 Hz	380 V, 50/60 Hz
PFFY-P200YM-E	8 HP	65.0/69.0 [2300/2430]	0
PFFY-P250YM-E	10 HP	77.0/72.0 [2720/2540]	0
PFFY-P200YMH-E*	8 HP	65.0 [2300]	180/200
PFFY-P250YMH-E*	10 HP	72.0 [2540]	180/210
PFFY-P400YM-E	16 HP	150.0 [5300]	210/390
PFFY-P500YM-E	20 HP	200.0 [7060]	290/510

*High static pressure model

Pulley belt option

This option supports the use of wider ranges of airflow rates and static pressures to suit a greater variety of needs.

Both large-scale and individual air conditioning can be performed

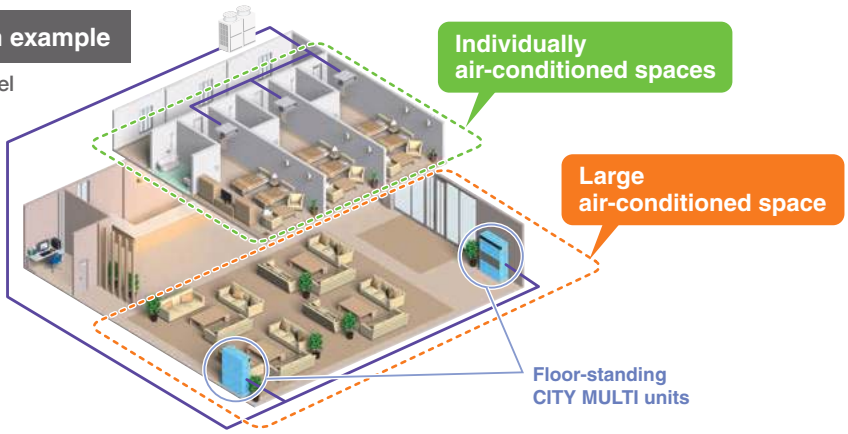
When this model is used in a large space and CITY MULTI indoor units are used in individual rooms, one outdoor unit can control the air conditioners in these rooms of various sizes.

Multiple units can be connected to one outdoor unit

Multiple units of this model can be connected to one outdoor unit. Air can be spread throughout a large room.

Installation example

Example: Hotel



Optional Parts

Description	Model	Applicable capacity
OA duct flange	PAC-ODF10DF-E	P200, 250
	PAC-ODF20DF-E	P400, 500
Plenum	PAC-PLE20PL-E1	P400, 500

Specifications

Model				PFFY-P200YM-E	PFFY-P250YM-E	PFFY-P200YMH-E	PFFY-P250YMH-E	PFFY-P400YM-E	PFFY-P500YM-E
Power source				3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling capacity (Nominal)		*1	kW	22.4	28.0	22.4	28.0	45.0	56.0
		*1	BTU/h	76,400	95,500	76,400	95,500	153,500	191,100
	*2 Power input		kW	0.490/0.680	1.05/1.26	1.00/1.41	1.31/1.41	2.86/3.79	3.94/5.30
	*2 Current input (380-400-415 V)		A	0.97-0.98-0.99/ 1.24-1.23-1.22	1.74-1.83-1.88/ 2.06-2.05-2.04	1.82-1.85-1.87/ 2.37-2.37-2.37	2.14-2.18-2.20/ 2.18-2.18-2.18	5.23-5.25-5.33/ 6.16-6.18-6.26	7.66-7.68-7.76/ 8.49-8.51-8.58
Heating capacity (Nominal)		*3	kW	25.0	31.5	25.0	31.5	50.0	63.0
		*3	BTU/h	85,300	107,500	85,300	107,500	170,600	215,000
	*2 Power input		kW	0.490/0.680	1.05/1.26	1.00/1.41	1.31/1.41	2.86/3.79	3.94/5.30
	*2 Current input (380-400-415 V)		A	0.97-0.98-0.99/ 1.24-1.23-1.22	1.74-1.83-1.88/ 2.06-2.05-2.04	1.82-1.85-1.87/ 2.37-2.37-2.37	2.14-2.18-2.20/ 2.18-2.18-2.18	5.23-5.25-5.33/ 6.16-6.18-6.26	7.66-7.68-7.76/ 8.49-8.51-8.58
External finish				Galvanized steel plate (with polyester coating) <MUNSELL 3.0Y 7.8/1.1 or similar>					
External dimension H x W x D			mm	1,665 x 1,200 x 500	1,665 x 1,200 x 500	1,465 x 1,200 x 500	1,465 x 1,200 x 500	1,800 x 1,860 x 650	1,800 x 1,860 x 650
			in.	65-9/16 x 47-1/4 x 19-11/16	65-9/16 x 47-1/4 x 19-11/16	57-11/16 x 47-1/4 x 19-11/16	57-11/16 x 47-1/4 x 19-11/16	70-7/8 x 73-1/4 x 25-5/8	70-7/8 x 73-1/4 x 25-5/8
Net weight			kg (lbs)	157 (347)	158 (349)	138 (305)	139 (307)	310 (684)	362 (799)
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	External static press. (380 V)		Pa	<0>	<0>	<180>/<200>	<180>/<210>	<210>/<390>	<290>/<510>
			mmH_2O	<0.0>	<0.0>	<18.4>/<20.4>	<18.4>/<21.4>	<21.4>/<39.8>	<29.6>/<52.0>
	Motor Type			3-phase induction motor					
	Motor output		kW	0.400	0.500	0.770	0.770	3.700	5.500
	Driving mechanism			Direct-driven by motor				Belt driving	
	Air flow rate			(High-Low)		(High)			
			m^3/min	65.0-59.0/69.0-60.0	77.0-56.0/72.0-50.0	65.0	72.0	150.0	200.0
			L/s	1,083-983/1,150-1,000	1,283-933/1,200-833	1,083	1,200	2,500	3,333
			cfm	2,295-2,083/2,436-2,119	2,719-1,977/2,542-1,766	2,295	2,542	5,297	7,062
Sound pressure level (measured in anechoic room) (380 V)		*2	dB (A)	(High-Low)		(High)			
				58-56/60-56	63-60/62-60	58/60	60/61	68/69	69/69
Air filter				PP honeycomb fabric.					
Refrigerant piping diameter	Liquid (R410A)		mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas (R410A)		mm (in.)	22.22 (7/8) Brazed	22.22 (7/8) Brazed	22.22 (7/8) Brazed	22.22 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Field drain pipe size			in.	Rc 1	Rc 1	Rc 1	Rc 1	Rc 1-1/4	Rc 1-1/4

Notes:

*1 Nominal cooling conditions
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2 The values are measured at the factory setting of external static pressure.
*3 Nominal heating conditions
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*4 Long period operation in a high temperature and humidity atmosphere (dew point of 23°C or more) may cause condensation to form in the indoor unit.
*5 In case of this type of unit is connected, the maximum connected indoor unit capacity to one outdoor unit have to be less than or equal to 100%.
*6 This unit cannot be connected to R2 or WR2-Series. (PFFY-P400, P500YM-E only)
*7 This unit cannot be connected to PUMY-Series.

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

Floor standing exposed type

PFFY-P YM-E-F

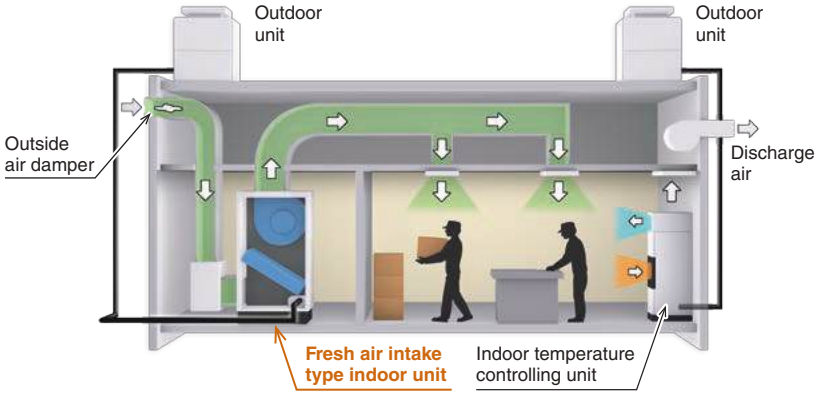




Enable intake of outside air

This model can take in the outside air, it delivers fresh air to indoors and improves comfort even in places where much ventilation is required, such as factories.

*This product is for use in occupant spaces and not suitable for use in spaces requiring stringent thermostatic control.
*Fresh air intake type is designed to supply conditioned outside air into the room. Do not use to handle internal thermal load.



*Please prepare dampers, ducts, and grilles locally in the field.

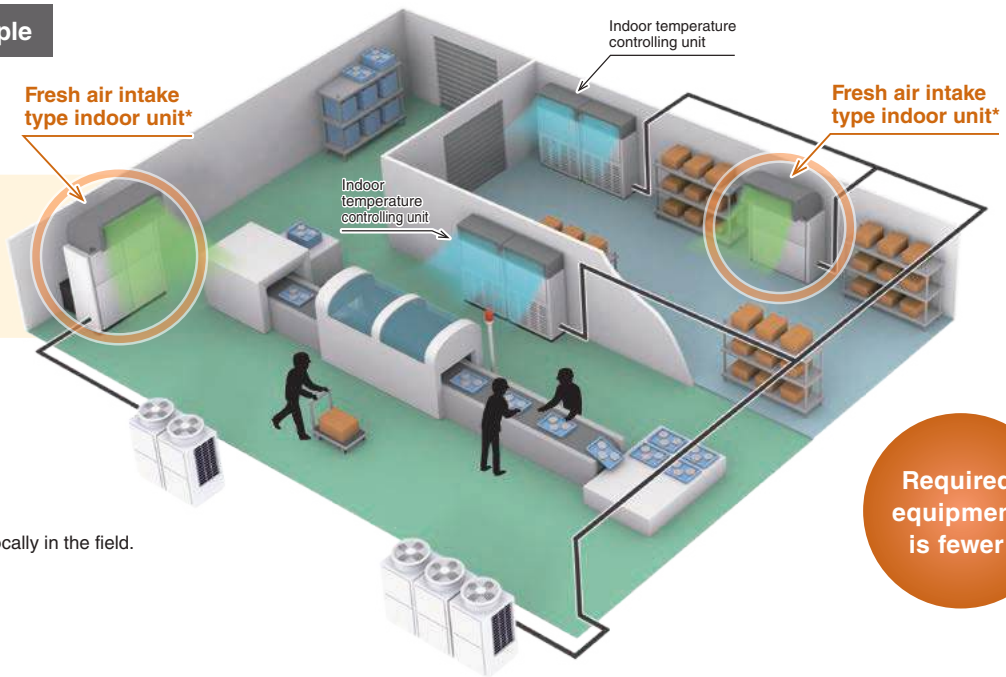
Usable in combination with CITY MULTI indoor units

P300 is usable in combination with the CITY MULTI indoor units in a single refrigerant system*.
By installing an outdoor unit and indoor units that match the size of each room, it is possible to achieve individual air conditioning and intaking fresh air.

*When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity. Please refer to NOTEs of specification regarding the details.

Installation example

Example: Factory



Suitable for use to require outside air intake

Example: Factory, Airport, Hall, Restaurant

*Please prepare plenums locally in the field.

Required equipment is fewer!

Air flow rate, external static pressure setting

The airflow rate of this product at High speed is 45 m³/min for the P300 model and 90 m³/min for the P600 model. Two patterns of static pressure setting are selectable, depending on the size and the use of the building.

	Air flow rate (m³/min)	External static pressure
	High	
PFFY-P300YM-E-F	45.0	80 Pa, 140 Pa
PFFY-P600YM-E-F	90.0	120 Pa, 200 Pa

Specifications

Model				PFFY-P300YM-E-F	PFFY-P600YM-E-F
Power source				3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)		*1	kW	33.5	67.0
		*1	BTU/h	114,300	228,600
	*2	Power input	kW	0.350-0.360-0.370/0.450-0.450-0.470	0.790-0.810-0.860/0.960-0.960-0.980
	*2	Current input	A	0.86-0.88-0.91/0.92-0.93-0.91	2.76-3.03-3.46/2.38-2.39-2.52
Temp. range of cooling				21°C D.B./15.5°C W.B. ~ 43°C D.B./35°C W.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is lower than 21°C D.B.	
Heating capacity (Nominal)		*3	kW	28.0	56.0
		*3	BTU/h	95,500	191,100
	*2	Power input	kW	0.350-0.360-0.370/0.450-0.450-0.470	0.790-0.810-0.860/0.960-0.960-0.980
	*2	Current input	A	0.86-0.88-0.91/0.92-0.93-0.91	2.76-3.03-3.46/2.38-2.39-2.52
Temp. range of heating				0°C D.B. ~ 20°C D.B. * Thermo-off (FAN-mode) automatically starts if the outdoor temperature is higher than 20°C D.B.	
External finish				Galvanized steel plate (with polyester coating) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D			mm	1,465 x 1,200 x 500	1,805 x 1,860 x 710
			in.	57-11/16 x 47-1/4 x 19-11/16	71-1/8 x 73-1/4 x 28
Net weight			kg (lbs)	146 (322)	357 (788)
Heat exchanger				Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 2
	External static press.		Pa	80/140	120/200
			mmH_2O	8.2/14.3	12.2/20.4
	Motor Type			3-phase induction motor	3-phase induction motor
	Motor output		kW	0.400	2.200
	Driving mechanism			Direct-driven by motor	Belt driving
	Air flow rate			(High)	(High)
			m^3/min	45.0	90.0
			L/s	750	1,500
			cfm	1,589	3,178
Sound pressure level (measured in anechoic room)				(High)	(High)
			*2 dB (A)	48.5/48.5	54.0/56.0
Air filter				PP honeycomb fabric 1012 × 720 Dust collection efficiency (Weight Method) 17%	PP honeycomb fabric 894 x 612 x 2 Dust collection efficiency (Weight Method) 17%
Refrigerant piping diameter	Liquid (R410A)		mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed
	Gas (R410A)		mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Field drain pipe size			in.	Rc 1	Rc 1-1/4

Notes:

*1 Nominal cooling conditions
Indoor: 33°C D.B./28°C W.B., Outdoor: 33°C D.B.
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2 The values are measured in fan mode and at the factory setting of external static pressure.
*3 Nominal heating conditions
Indoor: 7°C D.B., Outdoor: 7°C D.B./3°C W.B.
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

- Long period operation in a high temperature and humidity atmosphere (dew point of 23°C or more) may cause condensation to form in the indoor unit.
- This unit cannot be connected to PUMY, R2 and WR2 series.
- Fresh air intake type indoor units cannot be connected to an outdoor unit together with PWFY series.
- When this fresh air intake type indoor unit is included in the system, the upper limit of connectable indoor unit capacity range is 100% of the connected outdoor unit capacity.
- When fresh air intake type indoor units connect to an outdoor unit together with other types of indoor unit, the total capacity of fresh air intake type indoor units needs to be 30% or less of the connected outdoor unit capacity.
- The actual capacity characteristics vary with the combination of indoor and outdoor units.
  See the technical information in DATA BOOK for the details.
- Thermo off (Fan) operation automatically starts either when temperature is lower than 21°C D.B. in cooling mode or when the temperature exceeds 20°C D.B. in heating mode.
- Dry mode is not available.
- When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
- Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation, which may occur dew condensation on the grills and ducts. Please insulate the grills, ducts, and rooms to prevent dew condensation properly.
- Air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible in case of usage of field supply filters.
- Fresh air intake type indoor unit is designed to supply pretreated outside air into the room.
  Do not use to handle internal thermal load.
- Depending on the air conditioning load, outside temperature, and due to the activation of protection functions, the desired preset temperature may not always be achieved and the outlet air temperature may swing.
  Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- The fan temporary stops during defrost.

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



Remote Controller



Remote controller list

Building Management Zone

Centralized control



AE-C400E-X with BACnet Interface

For BACnet®

BMS and CITY MULTI can be connected. This enables control of the entire building and air-conditioning control on the BMS side.

Floor Management Zone

System controller



AE-C400E-X

This model, featuring a color LCD screen, can control up to 50 indoors unit when used independently, and up to 400 indoor units when connected to AE-C400E-X/EW-C50E-X.



EW-C50E-X

This model can control up to 50 indoor units when connected to the AE-C400E-X as an expansion unit.



PAC-YT40ANRA

The power can be turned on and off easily for 50 indoor units in up to 16 groups with this single unit.



AT-50B

This model is suitable for control on each floor. You can control up to 50 indoor units on the color LCD screen.

The air conditioners in each group can be turned on and off, and their modes can be changed. The weekly timer allows them to be turned on automatically before work starts, and off after closing time.

Local remote controller



PAR-40/41MAA
(MA remote controller)

The temperature can be set in steps of 0.5°C [1°F] increments, and the air flow direction and error icons are displayed on the screen.



PAR-21MAA
(MA remote controller)

The temperature can be set in steps of 1°C/1°F increments. The button panel can be accessed and closed when the buttons are not used.



PAR-U02MEDA
(ME remote controller)

All elements appear on the LCD screen, which features an occupancy sensor. All conditions including grouping can be set on this one controller.



PAC-YT52CRA
(MA remote controller)

A compact remote controller dedicated to setting the temperature and fan speed



PAR-CT01MAA
(MA remote controller)

All elements appear on the LCD screen. The background and character colors can be selected.



PAR-SL101A-E
(MA Wireless remote controller)

* Connected only to PLFY-P VEM-PA / PLFY-P VFM-E1/PKFY-P VLM-E
* Requires wireless signal receiving unit



PAR-FL32MA
(MA Wireless remote controller)

* Requires wireless signal receiving unit

A suitable remote controller can be selected to control the air conditioners in each room according to each use situation.



Building management system

System controller



AE-C400E-X



EW-C50E-X



AT-50B



PAC-YT40ANRA

PAC-SC51KUA

Power supply unit for transmission line

PAC-SF46EPA

Transmission booster

Expansion interface

PI Controller



DIDO Controller



AI Controller



Extension of air conditioner functions

BACnet®

EW-C50E-X
AE-C400E-X

M-NET

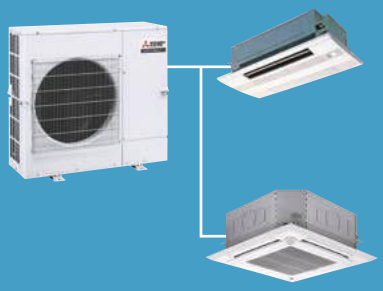
M-NET

Using our MELANS products enhances air-conditioning EFFICIENCY and QUALITY, contributing to ENERGY SAVINGS and reducing running cost. We offer a wide variety of MELANS products to meet requirements - from the smallest and simplest, to the largest and most complex. We have individual remote controllers, various centralized controllers, BMS interface, etc.

Local remote controller

M-NET

CITY MULTI



M-NET



A control



PAR-40/41MAA
Full-dot LCD display

A control



PAR-21MAA

M-NET



PAR-U02MEDA
Sensor function
Full-dot LCD touch panel

A control



PAR-CT01MAA
Color LCD touch panel

A control



PAC-YT52CRA

A control



Receiver

PAR-FL32MA



Wireless Remote Controller

Serial Communication



Receiver

PAR-SL101A-E
(PLFY-P VEM-PA, PLFY-P VFM-E1, PKFY-P VLM-E only)



Wireless Remote Controller

MELANS

Integrated Communications Control with Mitsubishi Electric Unique Transmission Network (M-NET)

Model	Local remote controller *7							System controller *7							
	PAR-40/41MAA	PAR-21MAA	PAR-U02MEDA	PAR-CT01MAA	PAC-YT52CRA	PAR-FL32MA	PAR-SL101A-E	PAC-YT40ANRA	AT-50B	AE-C400E-X		AE-C400E-X + EW-C50E-X		EW-C50E-X	
Controllable Groups / Indoors (Group / Indoor) *6	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 1	16 / 50	50 / 50	50 / 50		400 / 400		50 / 50	
										AE-C400E-X	Browser	AE-C400E-X	Browser	EW-C50E-X	Browser
■Operation															
ON / OFF	○	○	○	○	○	○	○	◎	◎	◎ ■	◎ ■	◎ ■	◎ ■	▲	◎ ■
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Temperature setting	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Dual set point *8	○	N	○	○	○	N	○ *9	○ *10	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Local Permit / Prohibit	N	N	N	N	N	N	N	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Fan speed	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Air flow direction	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
■Status monitoring															
ON / OFF	○	○	○	○	○	○	○	◎	◎	◎	○	◎	○	▲	○
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Temperature setting	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Local Permit / Prohibit	○	○	○	○	○	○	N	○	○	○	○	○	○	N	○
Fan speed	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Air flow direction	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Indoor temperature	○	○	○	○	○	N	N	N	○	○	○	○	○	N	○
Filter sign	○	○	○	○	N	N	N	N	◎	○	○	○	○	N	○
Error flashing	○	○	○	○	○	○	N	○	◎	○	○	○	○	▲	○
Error code	○	○	○	○	○	N	N	○	○	○	○	○	○	N	○
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
■Scheduling															
One day	○	○	○	○	N	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
ON / OFF times per day	1	8	1	1	N	1	1	N	16	24	24	24	24	N	24
Weekly	○	○	○	○	N	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
ON / OFF times per week	8 x 7	8 x 7	8 x 7	8 x 7	N	N	N	N	16 x 7	24 x 7	24 x 7	24 x 7	24 x 7	N	24 x 7
Annual	N	N	N	N	N	N	N	N	N	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Optimized start-up	N	N	N	N	N	N	N	N	N	○	○	○	○	N	○
Auto-off timer	○	○	○	○	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	5	1	5	5	N	10	10	N	5	1	1	1	1	N	1
■Recording															
Error log	○	N	N	○	N	N	N	N	○	○	○	○	○	N	○
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	●	N	N	N
Energy management data	N	N	N	N	N	N	N	N	N	●	●	●	●	N	●

Model	Local remote controller *7							System controller *7							
	PAR-40/41MAA	PAR-21MAA	PAR-U02MEDA	PAR-CT01MAA	PAC-YT52CRA	PAR-FL32MA	PAR-SL101A-E	PAC-YT40ANRA	AT-50B	AE-C400E-X		AE-C400E-X + EW-C50E-X		EW-C50E-X	
Controllable Groups / Indoors (Group / Indoor) *6	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 1	16 / 50	50 / 50	50 / 50		400 / 400		50 / 50	
										AE-C400E-X	Browser	AE-C400E-X	Browser	EW-C50E-X	Browser

■Other

Temp-set limitation by Local R / C	○	○	○	○	○	N	N	N	N	N	N	N	N	N	N
Temp-set limitation by System controller	○*4	○*4	○	○*4	○*4	N	N	N	○*4	N	○*2 *4	N	○*2 *4	N	○*2 *4
Operation lock	○	○	○	○	○	N	N	N	◎	N	N	N	N	N	N
Night setback	○	N	○	○	N	N	N	N	◎	○	○*2	○	○*2	N	○*2
Sliding temperature control	N	N	N	N	N	N	N	N	N	○	○*2	○	○*2	N	○*2
BACnet® connection	N	N	N	N	N	N	N	N	N	●	●	●	●	●	●

■Management (Group / Interlocked)

Group setting	○*1	○*1	○	○*1	○*1	N	N	○	○	○	○*2	○	○*2	N	○*2
Block setting	N	N	N	N	N	N	N	N	N	○	○*2	○	○*2	N	○*2

■Operating on LOSSNAY interlocked (Group / Interlocked)

ON / OFF	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○*5	N / ○*5	◎ / ◎*3	◎ / ◎	◎ / ◎	◎ / ◎	◎ / ◎	◎ / ◎	▲ / ▲	◎ / ◎
Fan speed	N / ○	N / ○	N / ○	N / ○	N	N	N	N	◎ / ◎	◎ / ◎	◎ / ◎	◎ / ◎	◎ / ◎	N	◎ / ◎
Ventilation mode	N	N	N	N	N	N	N	N	◎ / N	◎ / N	◎ / N	◎ / N	◎ / N	N	◎ / N

■Status monitoring on LOSSNAY interlocked (Group / Interlocked)

ON / OFF	N / ○	N / ○	N / ○	N / ○	N / ○	N	N	N	○ / ○	◎ / ◎	◎ / ◎	◎ / ◎	◎ / ◎	▲ / ▲	◎ / ◎
Fan speed	N / ○	N / ○	N / ○	N / ○	N	N	N	N	○ / ○	○ / ○	○ / ○	○ / ○	○ / ○	N	○ / ○
Ventilation mode	N	N	N	N	N	N	N	N	○ / N	○ / N	○ / N	○ / N	○ / N	N	○ / N

◎: Each group / Batched ; ○: Each group ; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM) ; ●: AE-C400E-X / EW-C50E-X license registration possible.
(●): License registration for the optional functions required N: Not Available (Not Used.) △: Batched only ; ▲: Batched handling (for maintenance) ■: Block

*1. Group setting via wiring between Indoor units with cross-over cable;
*2. Setting via the integrated web browser is possible for Ver. 7.7 or later.
*3. Interlock is set at Local remote controller.
*4. This function can only be set on the ME remote controller.
This function cannot be used with the MA/Simple MA remote controller.
(However, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and it is possible to use this function with them.)
*5. Interlock is set from system controllers (Except PAC-YT40ANRA) or local remote controllers.
*6. The maximum number of controllable units decreases depending on the indoor unit model.
*7. For indoor use only.
*8. This function is supported only when all of the indoor units, remote controllers, and system controllers that are connected to a given group features said function.
*9. Function setting of this remote controller is necessary.
*10. Please contact your local distributor regarding the availability of this function.

Optional Parts For Control and M-NET Control

Model	Description
PAC-SE42TS-E	Remote Sensor for A/J/K/M-Net Control
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit
PAC-SA89TA-EP	Timer adapter for remote controller
PAC-SC37SA-E	Output signal connector
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA-G	Transmission booster
PAC-SC51KUA	Power supply unit
PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-YG10HA-E	External input/output adapter for AE-C400E-X
PAC-YK92TB-J	Mounting attachment for AE-C400E-X wall-mount installations
PAC-YK94UTB-J	Electrical box for AE-C400E-X wall-embed installations
PAC-YK96TK-J	Mounting kit for AE-C400E-X wall-mount installations
PAC-AH125M-J	Air handling unit controller
PAC-AH140M-J	
PAC-AH250M-J	
PAC-AH500M-J	

Centralized controller

AE-C400E-X



Dimensions	306 (W)× 211(H) × 71.8(D) mm 12-1/16 (W)× 8-5/16 (H)× 2-27/32(D) in.

Promotes energy savings through the comprehensive display of the air-conditioning equipment's energy consumption.

- The energy consumption of the air-conditioning equipment can be displayed by individual area in graph form for easy viewing.
- Operating status can be easily confirmed by comparing power consumption with the previous year and with the electrical power target.
- Floor layout is displayed on the 12.1-inch LCD touch panel for easy management of air-conditioning equipment.

An optimal system can be easily and flexibly established according to the size of the facility.

- Up to 400 units can be controlled by connecting additional AE-C400E-X or EW-C50E-X.
- Air conditioners can be operated and monitored using the air conditioner icons on the floor plan image displayed on the AE-C400E-X or the Web browser. On the floor plan image, each floor is divided into six sections, and up to 20 floors can be registered.

Features for operating and monitoring the hot water heat pump are also available on PWFY, CAHV, QAHV, and EAHV/EACV.

- Centralized batch control on PWFY, CAHV, QAHV, and EAHV/EACV is possible in addition to that on each air-conditioning unit.

• Control screen for power consumption

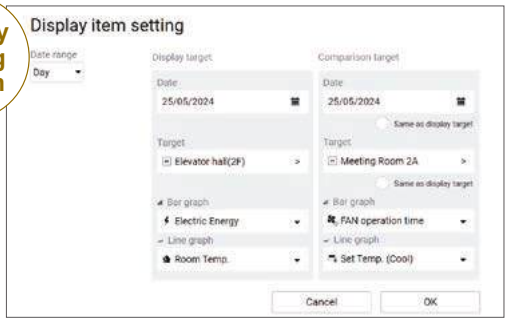
AE-C400E-X is provided with an energy management function as standard. With this function, you can understand the current status of usage of air conditioners and verify the effect of energy saving measures.

- The data of an area in different terms can be compared.
- The data of two areas in the same term can be compared.
- The effect of energy saving measures can be verified.
- The energy management data for the past 24 months (daily or monthly data) or the past 5 years (annual data) from the present can be retained.
- The energy management data (for the past 5 years) can be output to a USB flash drive or a personal computer.

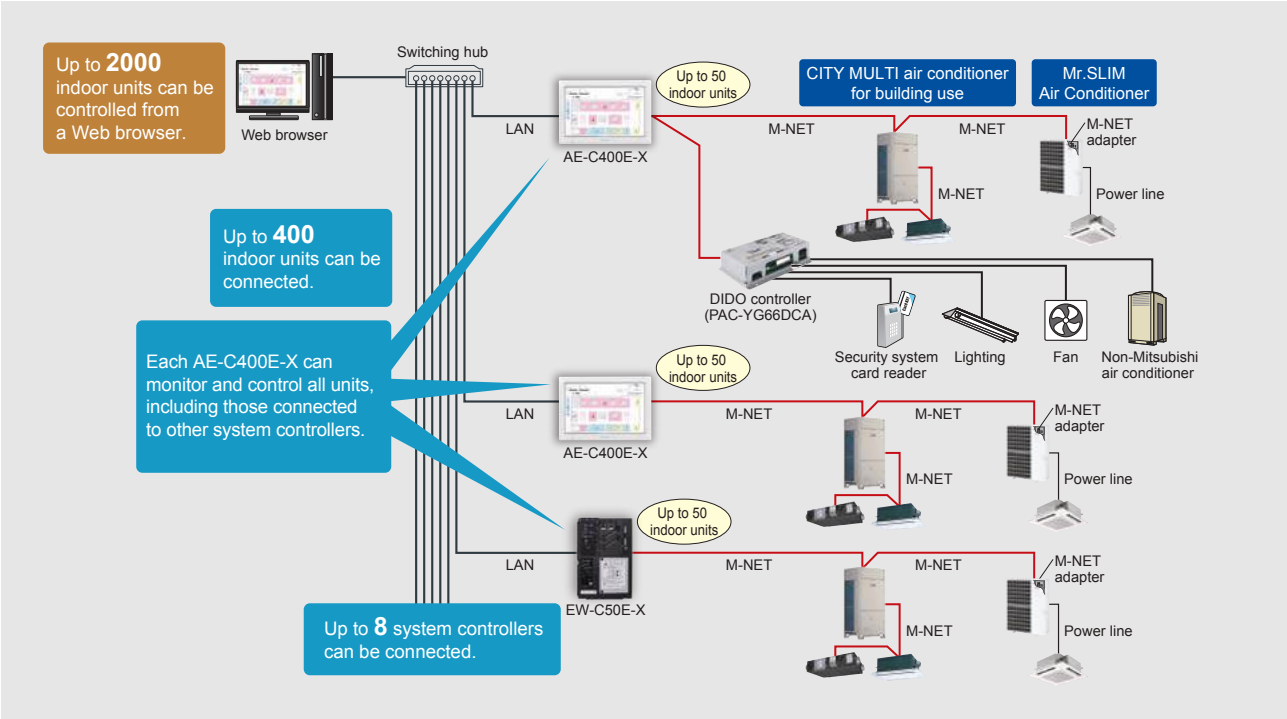
Graph display screen



Display setting screen



System configuration image



Functions

* The functions and specications are subject to change. □: Each unit ○: Each group ●: Each block △: Each floor ◎: Collective ×: Not available

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-VMHS-E-F is excluded.	○◎△●	○
Fan speed setting	Models with 4 air fl ow speed settings : Hi/Mid-2/Mid-1/Low Models with 3 air fl ow speed settings : Hi/Mid/Low Models with 2 air fl ow speed settings : Hi/Low Fan speed setting (including Auto) varies depending on the model.	○◎△●	○
Air flow direction setting	Air fl ow 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 occuring on an air conditioning unit, the afflicated 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.	×	□○●

Centralized controller

EW-C50E-X



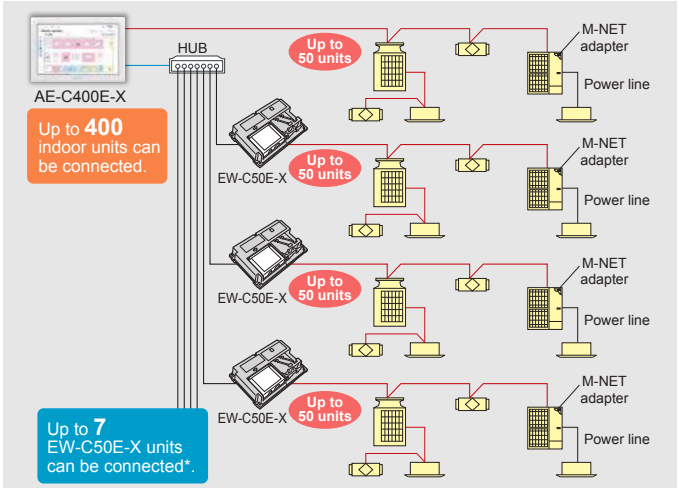
Dual Set Point

Dimensions 185(W) x 278(H) x 60.3(D) mm
7-5/16(W) x 10-31/32(H) x 2-3/8(D) in.
(185 x 278 x 81.5 mm (7-5/16 x 10-31/32 x 3-7/32 in.) when installed on the installation frame)

Major features

Usable as expansion controller for AE-C400E-X

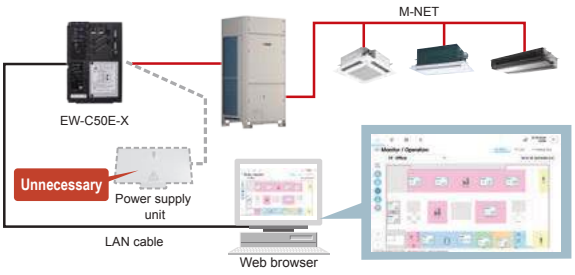
When 7 sets of EW-C50E-X are connected to AE-C400E-X, up to 400 indoor units can be operated and monitored by AE-C400E-X.



* When the M-NET of AE-C400E-X is not used, up to 8 sets of EW-C50E-X can be connected.

- Air conditioners can be operated and monitored only with EW-C50E-X by using a personal computer, tablet or smartphone.

Without AE-C400E-X, air conditioners can be monitored and operated only with this controller by using the browser software*1 of a personal computer. They can be monitored and operated remotely by using the Internet, and the air conditioners in some buildings can be operated simultaneously.*2

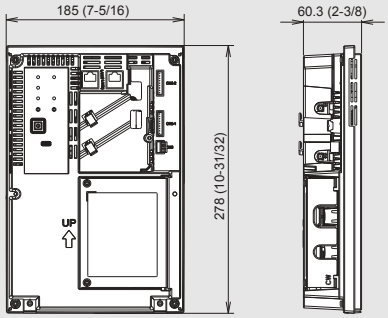


*1. In the case of Windows, Microsoft® Edge or Google Chrome is required.
In the case of Macintosh, Safari 7 is required.
Windows and Microsoft® Edge are registered trademarks of Microsoft Corporation in the United States and other countries.
iPad and Safari are registered trademarks of Apple Inc. in the United States and other countries.
Google Chrome is a registered trademark of Google Inc.

*2. The company names and product names in the text may be trademarks or registered trademarks of their respective companies.
When connecting EW-C50E-X via the Internet, avoid connecting it directly to the Internet. Connect it through a router or the like provided with the VPN function to ensure the security.

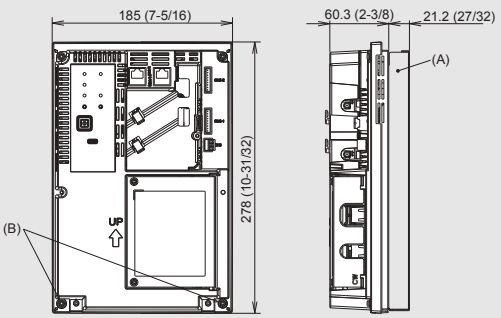
Outline drawing

[1] Controller



[2] Installation on a panel inside a metal control box

Unit: mm (in)



(A) Installation frame (supplied part D-12)
(B) controller mounting hole

Advanced Touch controller

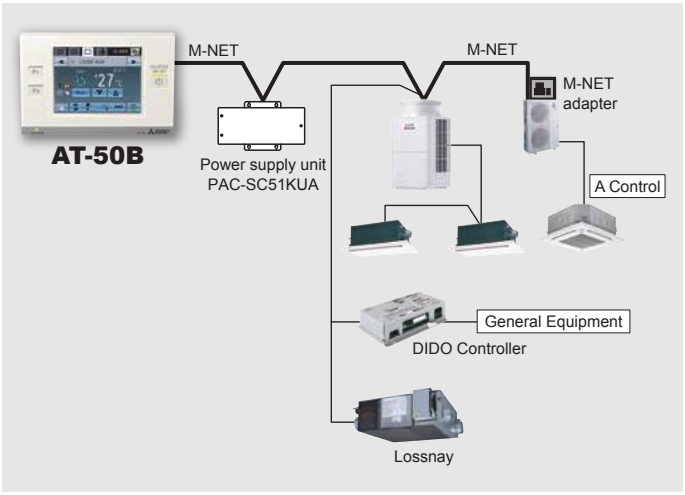
AT-50B



Dimensions	180(W) x 120(H) x 30(D) mm 7-2/16(W) x 4-3/4(H) x 1-3/16(D) in.

The color touch panel is easy to see and operate. The operation screen can be selected according to the intended use.

System structure



Design

Backlit LCD Touch Panel

The 5-inch color LCD (Liquid Crystal Display) touch panel enables easy and simple operations.
When the backlight is off, touching the panel turns on the backlight. The backlight will remain on for a preset length of time.
The touch panel displays operation status of the units in GRID, LIST, or in GROUP form.



GRID (zoom out) screen

Displays operation status of all groups.



GRID (zoom in) screen

Displays the operation status details of each group by group name.



LIST screen

Displays the operation status details of each group.



GROUP screen

Displays the operation status details of each group. Sets group operations.

Functions

Controls 50 indoor units in all

One screen shows the operation conditions of 50 connected indoor units.

Weekly and daily schedule

Five one-day schedule patterns and 12 weekly schedule patterns (max. 16 settings per pattern)
Two weekly schedules can be set.

System changeover

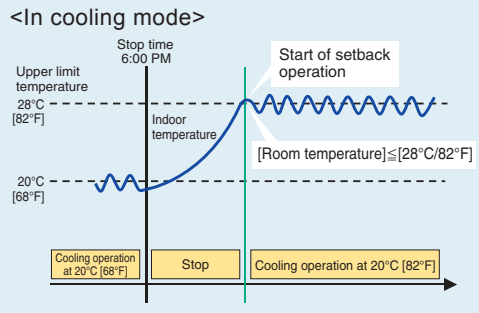
The operation mode can be changed according to the indoor temperature settings, target temperature of each group, or a representative indoor unit.

Main system controller/Sub-system controller

The AT-50B can be used as any of the main and sub system controllers. When it is connected to a system controller, such as the AE-C400E-X, it is used as a sub controller. When some units of the AT-50B are connected, the main and sub controllers can be determined.

Night setback function

When the room temperature goes outside of a certain range during the predetermined period, this function automatically starts heating or cooling operation to prevent dew condensation or an excessive temperature increase in the room.



Simple button arrangement

The F1 and F2 buttons beside the main screen can be customized for frequently used functions.
(Schedule/Operation Mode/Temperature Correction/Remote Controller Restriction)

Functions [Basic Functions]

- ON/OFF
- Temperature setting
- Airflow direction setting
- Operation mode switching
- Fan speed setting
- Louver setting

Advanced Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group. *The settable items vary depending on the models.	◎	◎
Operation lock	The operation lock can be set to the input operation of the AT-50B. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	◎	◎
Error display	When an error is occurring on an air conditioner unit, the affected unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen shows on abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□◎
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	◎	◎
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of the indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	◎	◎
Temperature set limitation	Batch-setting to temperature range limit in cooling, heating, and auto modes. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	◎	◎
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited: When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	◎	◎
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT51HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
Checking the Gas Amount	Use this function to check for a refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded.) Series only.	□	□
Schedule operation	Weekly schedule setting of up to 12 patterns is available. In one pattern, up to 16 settings for "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction", and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedules (Summer/Winter) can be set. Today's schedule allows setting of up to 5 patterns.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.

ON/OFF remote controller

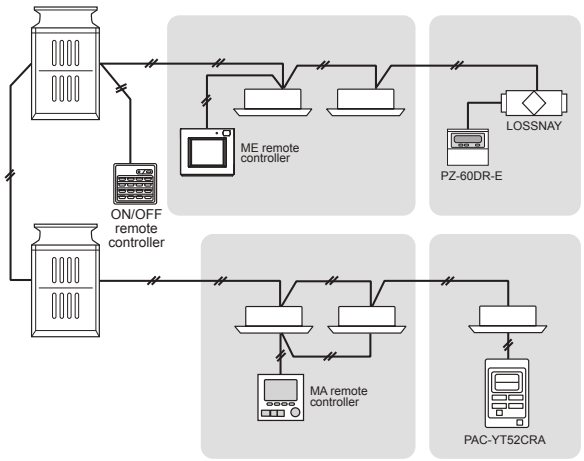
PAC-YT40ANRA

Just press a switch to start. All of the units can be switched ON/OFF by pressing the main switch, and each unit in the group can be switched ON/OFF with individual switches. The PAC-YT40ANRA also has a hardwired connection available (ON/OFF input, fire alarm input, run output, fault output).



Dimensions	130(W) x 120(H) x 19(D) mm 5-1/8(W) x 4-3/4(H) x 3/4(D) in.

System example



- **Control of up to 16 groups/50 indoor units is possible**
  - Up to 16 groups/50 units can be operated with one ON/OFF remote controller.
  - A general-purpose interface is available for control, allowing general devices to also be turned ON and OFF.
- **Just press a switch to start**
  - All of the units can be started and stopped by pressing the main switch, and each unit in the group can be started and stopped with individual switches.
- **LED flashing during failure**
  - If any error should occur in the air conditioner, its details can be confirmed easily with the flashing LED. The LED also indicates whether each group is running or stopped.
- **Interlock operation with external system is possible**
  - It can be flexibly interlocked with a card reader, fire alarm system, or building management system, etc., using the incorporated external input/output function.
- **Flexible group setting**
  - Groups can be easily configured, allowing the group pattern to be freely set according to the layout.
  - The ON/OFF remote controller can be connected at the indoor/outdoor transmission line without the power supply unit.

NOTE
The dual set point function is available depending on the controller version.
Please contact your local distributor regarding the availability of this function.

○: Each group □: Batch only ×: Not available

Function	Description	PAC-YT40ANRA	
UNITS	Max No.Units	50 units/16 groups	
		Operations	Display
ON/OFF	ON and OFF operation	○	○
Error indication	LED flashes during failure. (The error code can be confirmed by removing the cover.)	×	○
Ventilation operation (Independent)	Group operation of only LOSSNAY units possible. *Only ON/OFF of group.	○	○
Ventilation operation (Interlocked)	The LOSSNAY will run in interlock with the operation of the indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	○	○
External input	On and Off operation / Fire Alarm*	□	×
External output	On and Off operation / Faults*	×	□

* Applicable to collective only
Not applicable to groups

Wired MA remote controller

PAR-40MAA / PAR-41MAA



Dimensions 120(W) x 120(H) x 14.5(D) mm
4-23/32(W) x 4-23/32(H) x 37/64(D) in.

Highlight display

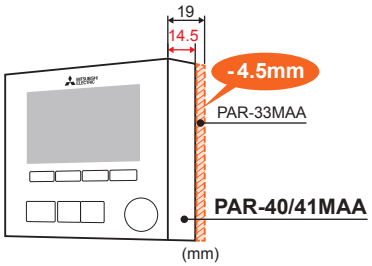
The screen background can be set to black to suit the ambience of the room.



*Factory setting : White

More slim

Compared to the previous version (PAR-33MAA), This remote controller is slimmer by 4.5 mm (depth), allowing for more flexible installation.



- **Backlit LCD (Liquid Crystal Display)**
  Large, easy-to-see display
  Full-dot LCD display with large characters for easy viewing
  Contrast also adjustable
- **Night Setback**
  When the room temperature goes outside of a certain range during the predetermined period, this function automatically starts heating or cooling operation to prevent dew condensation or an excessive temperature increase in the room.
- **3D i-see sensor***
  Settings for 3D i-see sensor can be performed.
- **Draft reduction***
  “Close” has been added to the manual vane angle selection. The air outlet can be closed to reduce drafts from the air conditioner.
- **Auto descending panel***
  Panels can be lowered/raised using the remote controller. The descending distance of the panel can also be selected.

*The availability of the function depends on the indoor unit model. For details, please contact your local distributor.

Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Auto / Heat.	○	○
Room temp. setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI LOSSNAY units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The above information needs to be entered in advance.) * An error code may not appear depending on the error.	–	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode, temperature, filter sign reset, air direction, fan speed and timer. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	×	○
Operation lock	The following operations can be prohibited: “Location,” “ON/OFF,” “Mode,” “Set temp.,” “Menu,” “Fan,” “Louver,” or “Vane.”	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Daylight saving time	The start / end time for daylight saving time can be set. The daylight saving time function will be activated based on the setting contents.	○	○

Wired MA remote controller

PAR-21MAA



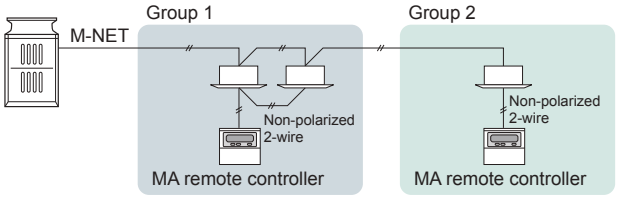


Dimensions 130(W) x 120(H) x 19(D) mm
5-1/8(W) x 4-3/4(H) x 3/4(D) in.

- **Dot Liquid Crystal Display (LCD)**
- **Multi-language Display**

- **Set temperature in 1°C/°F increment**
- **Weekly timer**
  Up to 8 ON/OFF/temperature settings per day in one-minute increments. Setting kept in nonvolatile memory. No need to worry about resetting after a power failure.
- **Self-diagnosis function immediately reports an error code in case of malfunction**

Example of system configuration



Multi-language Display Example [Dot display table]

Language		English	German	Spanish	Russian	Italian	Chinese	French	Japanese
Waiting for start-up		PLEASE WAIT	←	←	←	←	←	←	←
Operation mode	Cool	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Dry	DRY	Trocknen	DESHUMI-DIFICACION	Сушка	DRY	除湿	DESHU	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Auto	AUTO	AUTO	AUTO-MÁTICO	Авто	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Fan	FAN	Lüfter	VENTI-LACIÓN	Вент	VENTILAZIONE	送风	VENTILATION	送風
	Ventilation	VENTILATION	Gebläse Lüftung	VENTI-LACIÓN	Вентиляция	ARIA ESTERNA	换气	VENTILATION	換気
	Stand by (Hot adjust)	STAND BY	STAND BY	CALENTANDO	ОБОГРЕВ: ПАУЗА	STAND BY	准备中	PRE CHAUFFAGE	準備中
	Defrost	DEFROST	Abtauen	DESCONGE-LACIÓN	ОТТАИВАНИЕ	SBRINA MENTO	除霜中	DEGIVRAGE	霜取中
Button not used		NOT AVAILABLE	nicht Verfügbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBLE	無効ボタン
Check (Error)		CHECK	Prüfen	COMPROBAR	Проверка	CHECK	检查	CONTROLE	点検
Test run		TEST RUN	Testbetrieb	TEST FUNCIO NAMIENTO	Тестовый запуск	TEST RUN	试运转	TEST	試ウンテン
Self check		SELF CHECK	selbst-diagnose	AUTO REVISIÓN	САМОДИАГ-НОСТИКА	SELF CHECK	自我诊断	AUTO CONTROLE	自己ジンダン
Unit function selection		FUNCTION SELECTION	Funktion sauswahl	SELECCIÓN DE FUNCIÓN	Выбор функции	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	キノウ選択
Setting of ventilation		SETTING OF VENTILATION	Lüfterstufen Wahlen	CONFIG. VENTILACIÓN	Настройка вентустан.	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定

Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Operation mode switching	Switches between Cool / Dry / Auto* / Fan / Heat. Operation modes vary depending on the air conditioner unit. * Auto only supported for the CITY MULTI R2 and WR2 Series.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Models with 4 air flow speed settings: High/Mid-1/Mid-2/Low Models with 3 air flow speed settings: High/Mid/Low Models with 2 air flow speed settings: High/Low Fan speed setting (including Auto) varies depending on the model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, or 5-angle Swing) Auto Louver ON/OFF Air flow direction settings vary depending on the model.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *1: When the local remote controller inactivation command is received from the main system controller, " ▨ " is displayed.	×	○*1
Prohibition/permission of specified mode (Cooling prohibited/heating prohibited /cooling-heating prohibited)	Operation for the following modes is prohibited through System Controller settings: At cooling prohibited: Cool, Dry, Auto, At heating prohibited: Heat, Auto, At cooling-heating prohibited: Cool, Heat, Dry, Auto	×	○
Error	When an error is occurring on an air conditioner unit, the affected unit and the error code are displayed.	×	□
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. LOSSNAY items that can be set are "Hi" "Low" "Stop". Ventilation mode switching is not available.	○	○
Set temperature range limit	Set temperature range limit to cooling, heating, or auto mode.	○	○
Auto lock function	Setting/releasing of simplified locking for remote control switch can be performed. · Locking of all switches · Locking of all switches except ON/OFF switch	○	○

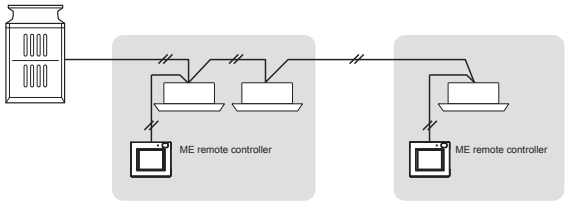
ME remote controller

PAR-U02MEDA



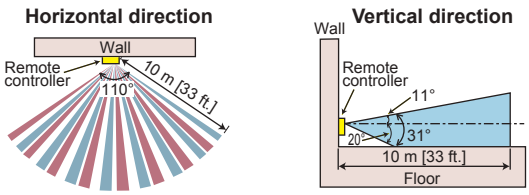
Dimensions	140(W) x 120(H) x 25(D) mm 5-9/16(W) x 4-3/4(H) x 1(D) in.

Example of system configuration



- **Occupancy Sensor**
  The occupancy sensor detects when the room is empty and provides energy-saving control.
- **Touch Panel & Backlit LCD**
  The operation settings screen is a touch panel.
  When the backlight is off, touching the panel turns on the backlight.
  The backlight will remain on for a preset length of time.
- **LED Indicator**
  The color of the LED indicator indicates operation status.
  The LED indicator is lit during normal operations, and is not lit when units are stopped. In case of error, the indicator blinks.
- **Brightness Sensor**
  The brightness sensor detects brightness in the room and provides energy-saving control.
- **Temperature & Humidity Sensor**
  The sensor detects room temperature and relative humidity.
- **Device control via AHC (Advanced HVAC Controller)**
  Products from other manufacturers can be connected via AHC.

Occupancy Sensor detection zone



Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up.	×	○
Error information	When an error occurs, an error code and the unit address appear. A contact number can be set to appear when an error occurs. (The information above needs to be entered in the Service menu.)	—	○
Schedule (Weekly timer)	Weekly ON/OFF times, operation mode, and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 in 10-minute increments.	○	○
Energy-save control during vacancy	When vacancy is detected by the occupancy sensor, the energy-save control assist function is activated. Four control types are available for selection: ON/OFF/Set temperature/Fan speed/Thermo-off. The brightness sensor can be used in conjunction with the occupancy sensor to detect the occupancy/vacancy status more accurately.	○	○



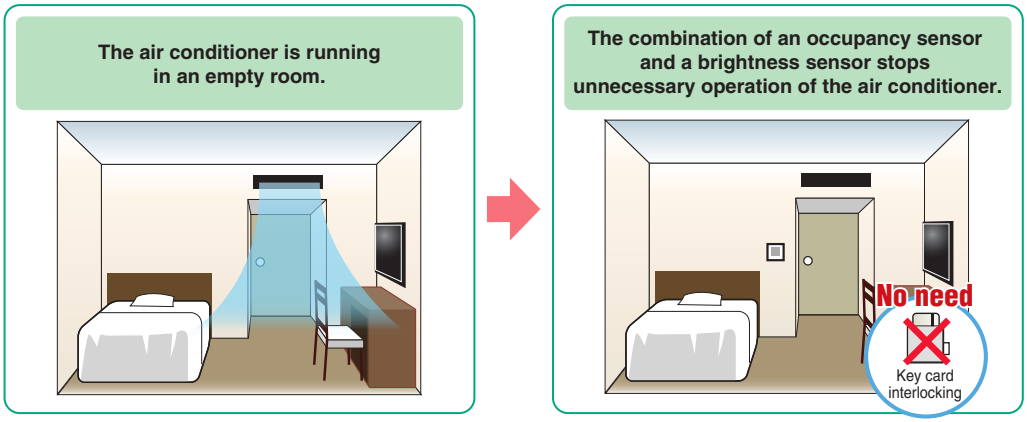
Example of use of PAR-U02MEDA

Automatic turning off air conditioners

For Hotels

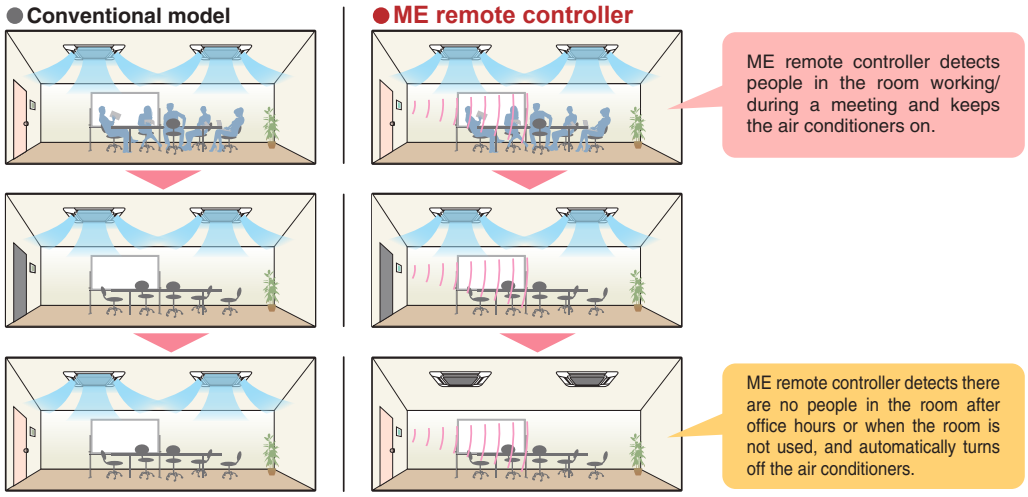
Mitsubishi Electric remote controller has an occupancy sensor to automatically turn off the air conditioner when the room is empty.

With ME Remote Controller



The occupancy sensor of the ME remote controller detects the conditions in the room, and the ME remote controller will automatically turn the air conditioners on or off.

For Offices

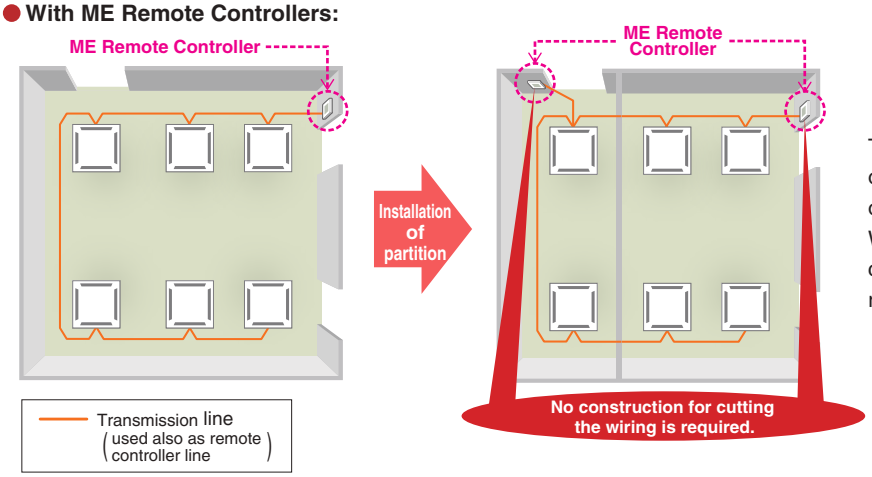


Partitioning can be installed later when a ME Remote Controller is used.

For Offices

For Commercial Facilities

With ME Remote Controllers:



The ME remote controller can be operated when it is connected with any of the indoor units.
When changing the room layout, you can set the groups easily with the remote controller.

MA remote controller

PAR-CT01MAA



Dimensions	65(W) x 120(H) x 14.1(D) mm 2-9/16(W) x4-3/4(H) x 9/16(D) in.

- **User-friendly**
  Large icons are easily visible on the full color touch panel display.
- **Flexibility**
  Customized display, color of parameter and background, editable parameter on the initial display.

User-friendly

Full color touch panel display



Touch Panel

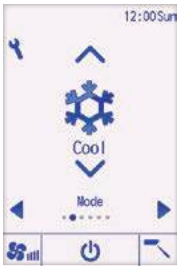


3.5 inch/HVGA
Full Color LCD

Operation panels



Temperature setting



Operation mode



Fan speed



Vane control



Ventilation



Louver control

Flexibility

Multiple color patterns

180 color patterns can be selected for the display's control parameters or background.

Control parameter customization

Users can customize the panel to display the selected parameters only.









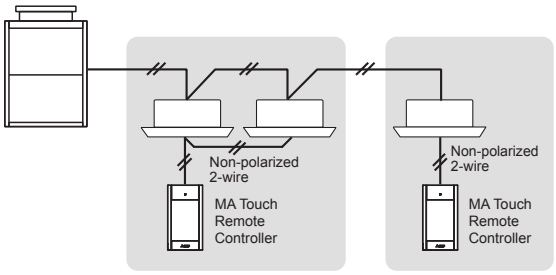


Available in a wide variety of colors to suit the decor of any room.





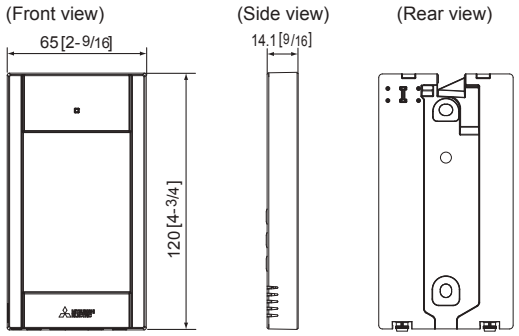
System example



*When a PAR-CT01MAA is connected to a group, no other MA remote controllers can be connected to the same group.

External dimension

Unit: mm[in.]



Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Auto / Heat.	○	○
Temperature setting *1	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI Lossnay units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the settings.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	—	○
Touch panel	The touch panel can be cleaned and calibrated.	—	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	×	○
Operation lock	The following operations can be prohibited: "Location." "ON/OFF," "mode." "Set temp." "Menu." "Fan." "Louver." or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Design	The color of the screen can be changed.	○	○

*1 Temperature will be displayed either in Celsius in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.

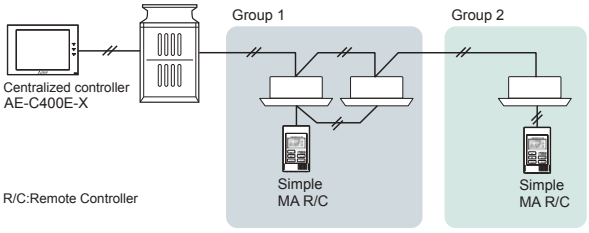
Simple remote controller

PAC-YT52CRA (MA)



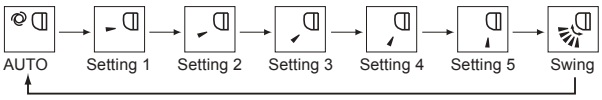
Dimensions 70(W) x 120(H) x 14.5(D) mm
2-3/4(W) x 4-3/4(H) x 19/32(D) in.

Example of system configuration



- **Backlit LCD**
  Backlight for operation in dark areas
- **Flat back**
  Slim and flat type. Hole-free installation on walls
  Less than 14.5 mm [19/32 in.] thick.
- **Vane button (standard)**
  A vane adjustment button has been added to allow the user to change the direction of the air flow (ceiling-cassette and wall-mounted types).

  Pressing the button will switch the vane directions.



* Air flow direction settings will vary depending on the connected indoor unit model.
* For models without a vane adjustment function, air flow direction cannot be set. In such cases, the vane icon blinks when the button is pressed.

- **Only cross-over wiring based on two-wire signal lines is required.**
- **Room temperature sensor is built-in.**
- **Can be used to operate all types of indoor units.**
  *As this controller has limited functions, please use it in conjunction with the standard controller or a central controller.
- **LCD temperature settings and display are in 1°C /2°F increments.**

Functions

□: Each unit ○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model.	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Permit / Prohibit local operation	By setting a centralized controller, the following local operations can be prohibited: ON/OFF, operation mode, preset temperature. * The CENTRAL icon appears while local operations are prohibited.	×	○
Error	Displays the current error status with the address. * The address may hot be displayed depending on the error status.	×	□
Ventilation equipment	When the CITY MULTI indoor unit is connected, interlocked setting of the CITY MULTI LOSSNAY unit is possible. When the Mr. SLIM indoor unit (A-control) is connected, interlocked operation LOSSNAY unit (LGH-R(V) X Type) is possible.	○	○
Set temperature range limit	The preset temperature range can be restricted for each operation mode (COOL/HEAT/AUTO).	○	○

Wireless remote controller



PAR-FL32MA

Dimensions

58(W) x 159(H) x 19(D) mm
[2-5/16(W) x 6-5/16(H) x 3/4(D) in.]



PAR-SL101A-E

(PLFY-P VEM-PA, PLFY-P VFM-E1, PKFY-P VLM-E only)

Dimensions

66(W) x 188(H) x 22(D) mm
[2-5/8(W) x 7-13/32(H) x 7/8(D) in.]



PAR-FA32MA

Dimensions

70(W) x 120(H) x 22.5(D) mm
[2-3/4(W) x 4-3/4(H) x 7/8(D) in.]



PAR-SE9FA-E

(PLFY-P VEM-PA signal receiver)

Dimensions

273(H) x 29(D) mm

PAR-SF9FA-E

(PLFY-VFM-E1 signal receiver)

Dimensions

214(H) x 25.5(D) mm



PAR-SL94B-E

(Wireless remote controller kit for ceiling-suspended type)

Dimensions

182(W) x 57(H) x 31(D) mm/
58(W) x 159(H) x 19(D) mm
[7-3/16(W) x 2-1/4(H) x 1-1/4(D) in.]/
[2-5/16(W) x 6-5/16(H) x 3/4(D) in.]

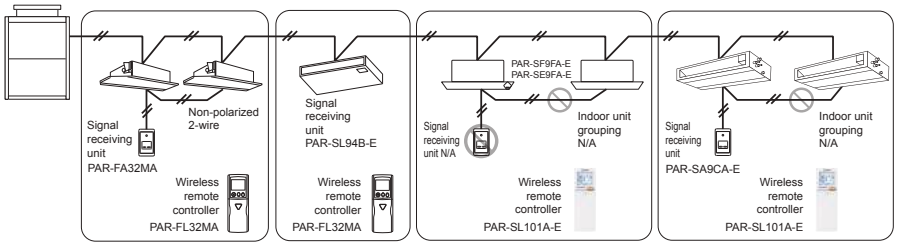
Compatibility table

Indoor unit model	Receiver	Transmitter
PMFY-P VBM-E PLFY-P VMMD-E PFFY-P VKM-E PEFY-P VMR-E-L/R/VMHS-E(-F) PFFY-P VLEM-E/VKM-E2/VCM-E PEFY-P VMS1(L)-E PEFY-VMA(L)(3/4)-E(4)	PAR-FA32MA	PAR-FL32MA
PCFY-P VKM-E	PAR-FA32MA PAR-SL94B-E*1	
PKFY-P VLM-E	Built-in	PAR-FL32MA PAR-SL101A-E
PKFY-P VKM-E	Built-in	PAR-FL32MA
PLFY-P VEM-PA	PAR-FA32MA*2	PAR-FL32MA*3
	PAR-SE9FA-E*2	PAR-SL101A-E
PLFY-P VFM-E1	PAR-FA32MA*2	PAR-FL32MA*3
	PAR-SF9FA-E*2	PAR-SL101A-E

*1 PAR-SL94B-E includes wireless remote controller.
*2 Receiver is not required when using the panel with signal receiver.
*3 PAR-SL101A-E is required for using direct/indirect setting and individual vane setting.

- **No need to configure addresses for group operation**
- **Lit LED keeps you informed of operation - the LED also provides you with error codes via the number of blinks**
- **Can be used with the MA remote controller**
  *When used in group configurations, wiring between indoor units is required.
  *Combining ME remote controller and/or LOSSNAY remote controller in a group is not possible.
- **Multiple indoor units cannot be controlled from the PAR-SL101A-E Only one indoor unit can be used in each group**
- **LCD temperature setting and display in 1°C /2°F increments**

System configuration example



Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Temperature setting	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	*1	*1
Timer operation	One ON/OFF setting can be set per day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *3 If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will sound and an LED will flash.	×	○*3
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. The LOSSNAY will run in interlock with the operation of the indoor unit.	×*2	×

*1 Some models will have a different display for the air flowdirection and fan speed.
Set the air flow direction and fan speed when performing initial setting.
*2 The fan rate and mode cannot be changed.

PI Controller

PAC-YG60MCA



Dimensions: 200(W) x 120(H) x 45(D) mm
7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

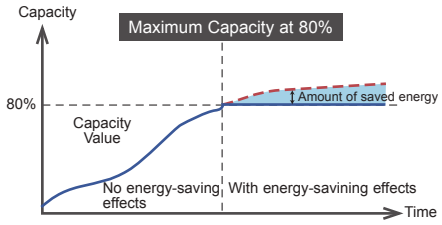
The PI controller counts pulses from a power meter, gas meter, water meter, and calorimeter. Combining the use of the AE-C400E-X / EW-C50E-X allows for calculating the charges for each unit and performing peak cut (e.g., demand control) operation. The meters can be monitored on the AE-C400E-X LCD.

Energy Saving Control (Peak Cut)

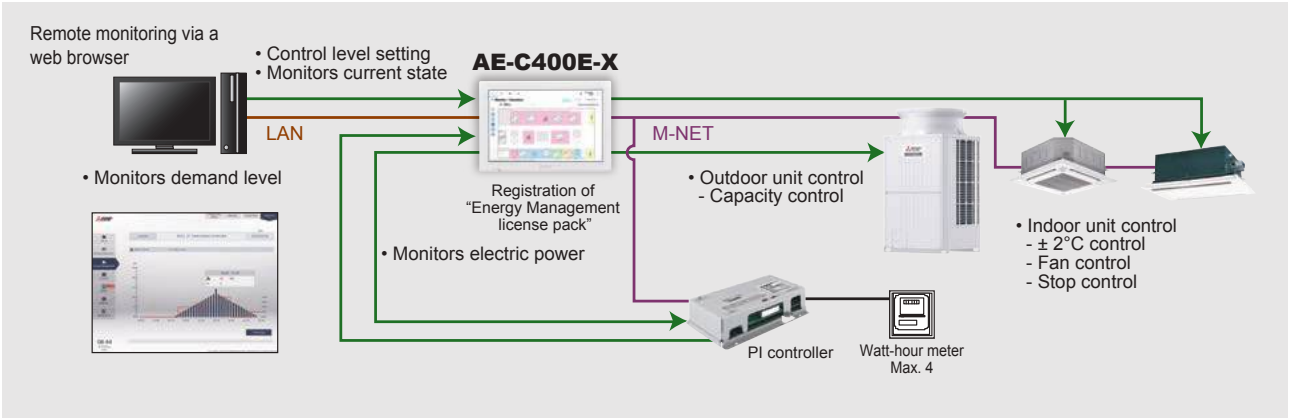
Enables Energy Saving Control with the use of our PI controller. (Registration of "Energy Management license pack" is required.)

To perform energy saving, the capacity of the outdoor unit is controlled.

*Please note that when using an energy saving control, there are no warranties for failures, such as usage over the contracted electricity amount.



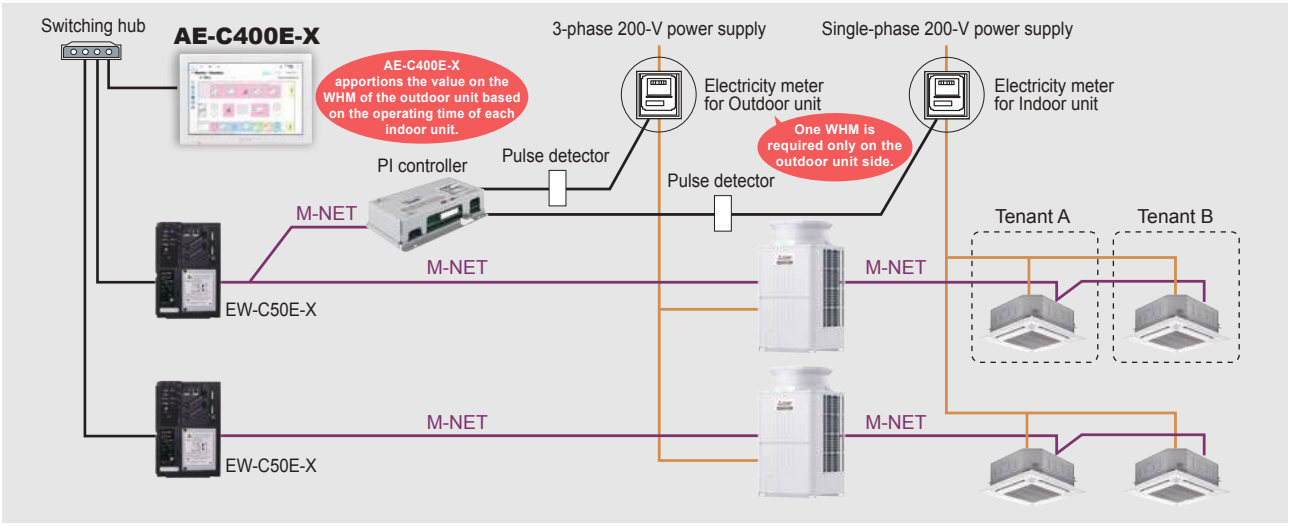
System Structure



Charge Calculation

Enables calculation of charges for each tenant and output it as a CSV file

System Structure



DIDO Controller

PAC-YG66DCA



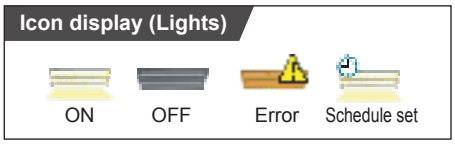
Dimensions	200(W) x 120(H) x 45(D) mm 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The DIDO controller is used in combination with an AE-C400E-X / EW-C50E-X to operate general-purpose equipment, as well as to monitor operating and error status. It is equipped with two sets of standard terminals (Channels 1 and 2), and four sets of expansion connectors for the input/output terminals. Expansion cable is optional.
Operation can be monitored or performed from the AE-C400E-X LCD.
In addition, this device includes a function that interlocks M-NET devices such as indoor units, general equipment, etc.

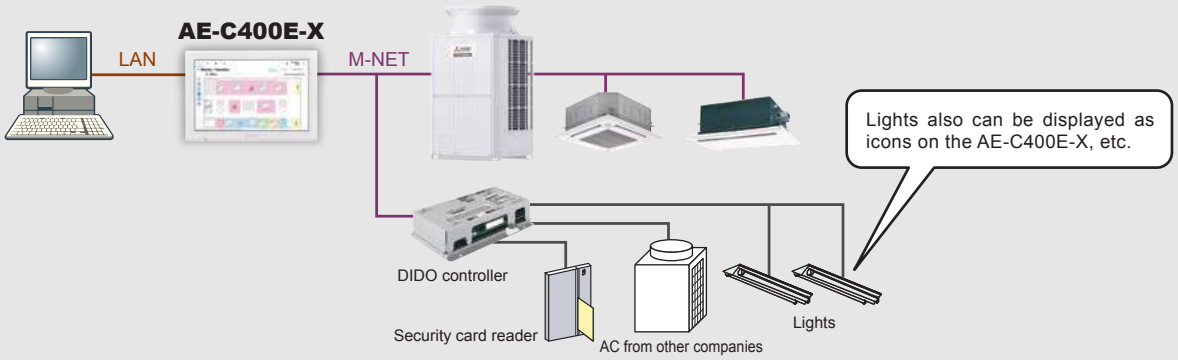
General-purpose equipment Control

Enables controlling and monitoring equipment other than air-conditioners (air-conditioners from other companies, lights, ventilators, etc.)

- In addition to above, the air-conditioners can be interlocked with general-purpose equipment.
  E.g. Interlock between indoor units and security system.
- The indoor units can be turned ON/OFF when the security system is activated/deactivated.



System Structure



AI Controller

PAC-YG63MCA



Dimensions 200(W) x 120(H) x 45(D) mm
7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

The AI controller measures temperature and humidity; it also has an alarm capability if the measurement data exceed defined setpoints.
Historical measurement data can be displayed only via the AE-C400E-X / EW-C50E-X web browser .
Temperature and humidity can be displayed on the AE-C400E-X LCD.
Furthermore, an alarm can be output if measurement data exceeds a preset upper or lower limit.
The AI controller also features a function that interlocks M-NET devices for indoor units, etc.

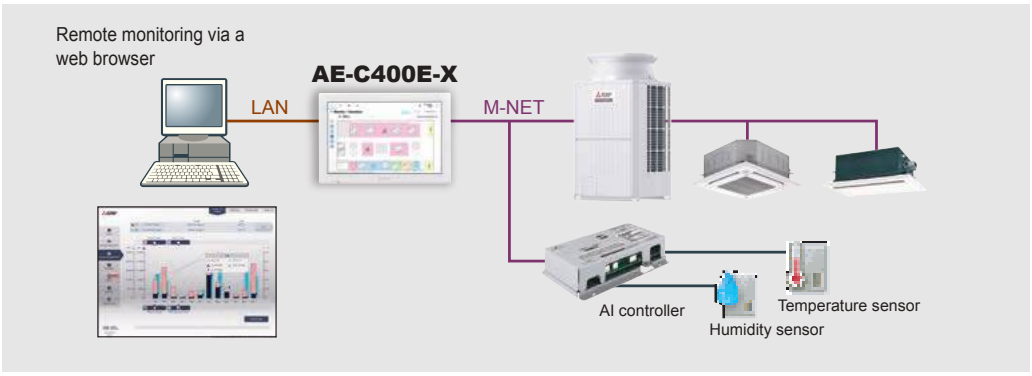
Temperature/Humidity Monitoring

Monitors the values measured by the temperature / humidity sensor connected to the AI controller

Temperature: Pt100, 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC
Humidity: 4 to 20 mA DC, 1 to 5 VDC, 0 to 10 VDC

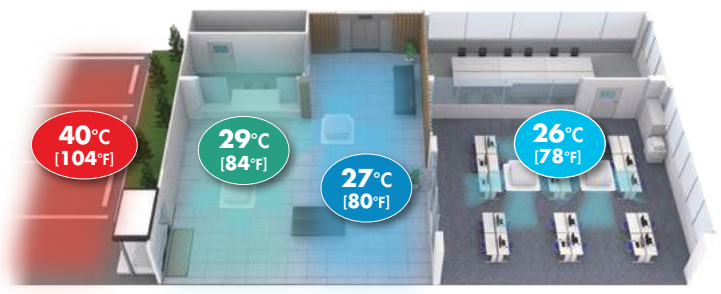
- Trend displays of measurement data can be shown on a web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

System Structure

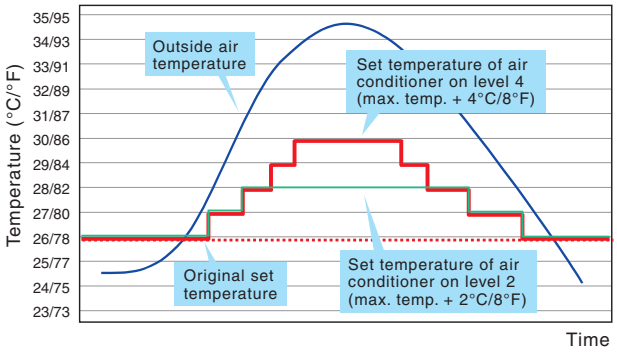


Operation according to outside air temperature

This function controls the air conditioner's operation during the cooling/heating period to reduce the difference between the outside air temperature and the temperature in the building (near the entrance), thereby preventing stress to human health caused by rapid temperature changes. The function is effective in saving energy and can be set for each group.



The degree of change in set temperature from level 1 (1°C/2°F) to 4 (4°C/8°F) can be set for each air conditioner.



Open network supported

The following options are available to enable connection of CITY MULTI to an open network.

BACnet®

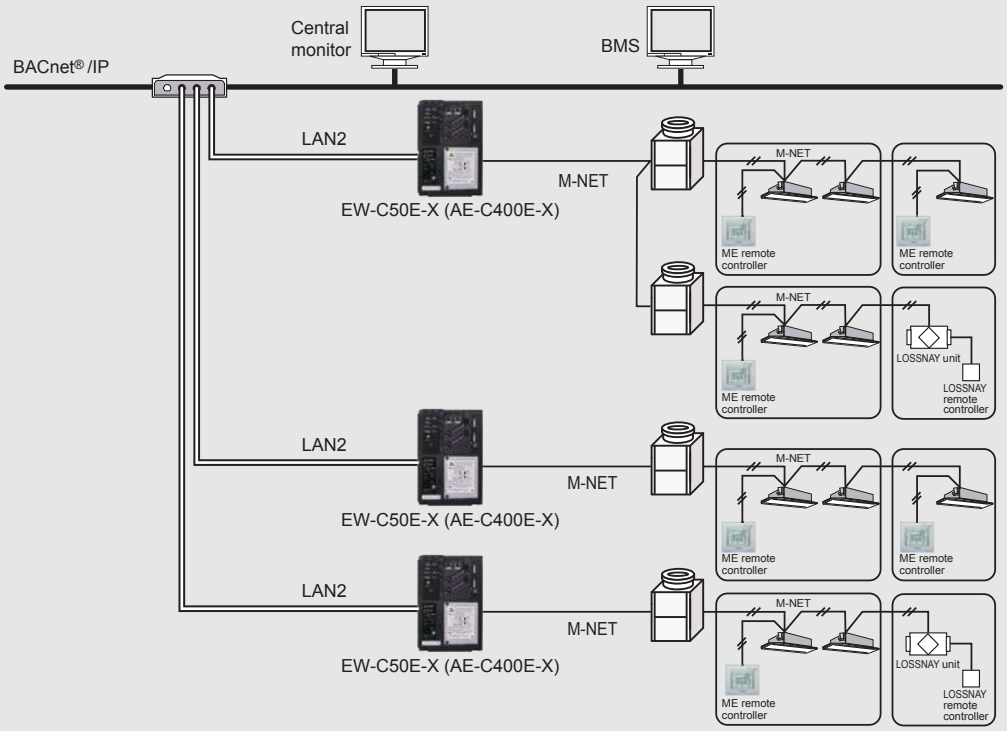
CITY MULTI can easily combine into a Building Management System (BMS) via EW-C50E-X (AE-C400E-X).
BACnet® is an open transmission protocol widely used at BMS, and related equipment control.
CITY MULTI is compatible with large-scaled BMS management via BACnet®.

Dual Set Point

EW-C50E-X (AE-C400E-X) can control up to 50 units/groups (including LOSSNAY).

*To use the BACnet® function on EW-C50E-X (AE-C400E-X), BACnet® license registration is required.

System example



BACnet® and M-NET Function

FUNCTION	CONTENT
Operation	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-60%-80%-100% swing
Set Temperature	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Filter Sign Reset	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Forced Off	Reset/Execute
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/ECO/Hot Water/Antifreeze/Cooling

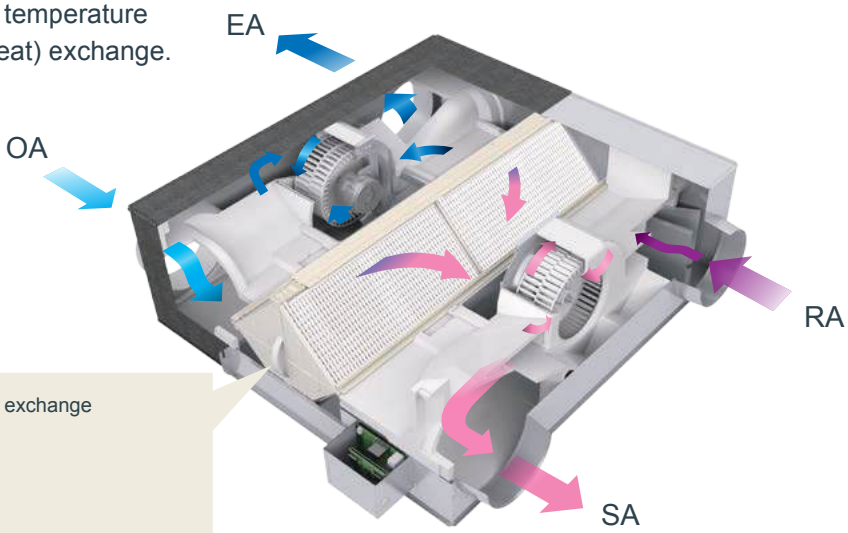
FUNCTION	CONTENT
Monitoring	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-60%-80%-100% swing
Set Temperature	Changes the set temperature. * Set temperature range varies depending on the indoor unit model.
Filter Sign	ON/OFF
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Indoor Temperature	Temperature
Alarm Signal	Normal/Error
Error Code	2 Character code- Indicates all unit alarms
Error Code Detail	4 Character code- Indicates all unit alarms
Communication State	Normal/Error
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/ECO/Hot Water/Antifreeze/Cooling
Apportioned Electric Energy	Group, Interlocked Units 0.1 kWh
PI controller Electric Energy	0.1 kWh
Apportionment Parameter	Available*
Night Purge State	ON/OFF
Thermo On/Off State	ON/OFF
External Heat Source State	ON/OFF
Trend Log	Indoor Temp, Apportioned Electric Energy, PI controller Electric Energy, Apportionment Parameter

* To use this function, the license to charge, AE-C400E-X (not connected to the M-NET), PI controller, watt-hour meter with pulse transmitter (locally available one) are required.

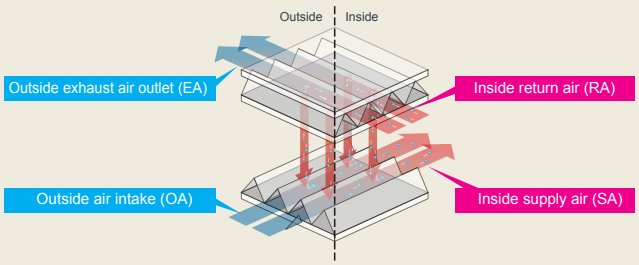
LOSSNAY

Indoor air quality inside a building is optimised through temperature and humidity exchange by Lossnay

Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.



The concept of sensible heat and latent heat exchange using Lossnay core

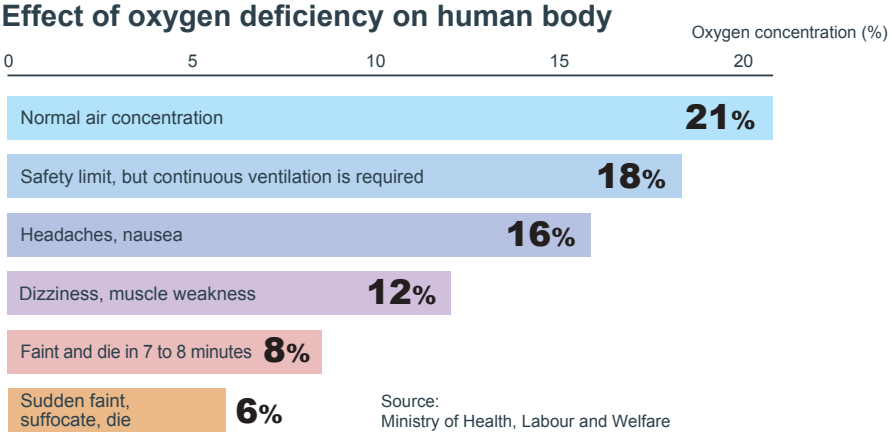


The need for ventilation

The need for fresh air

Poor air quality can be attributed to many problems arising in the workplace and in the home. It is believed to contribute to a significant loss in productivity, low morale and higher rates of sickness. Providing good ventilation in residential and commercial buildings is to provide conditions under which people can live and work comfortably and safely.

Effect of oxygen deficiency on human body

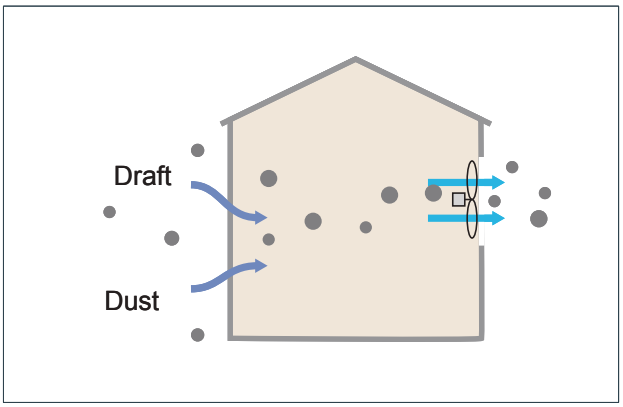


Source:
Ministry of Health, Labour and Welfare

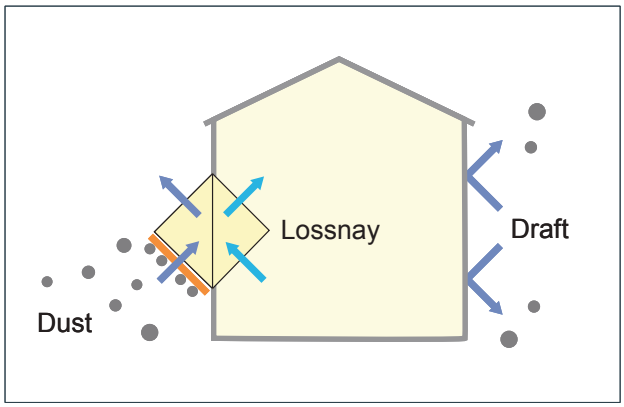
Lossnay realize more comfortable amenities

The filter equipped on Lossnay core eliminates dust and dirt from outside. It provides clean and fresh outdoor air to your rooms. And, supply fan and exhaust fan runs to ensure that the indoor air pressure is well-balanced. It prevents draft from outside, too.

■Conventional ventilation system



■Lossnay ventilation system

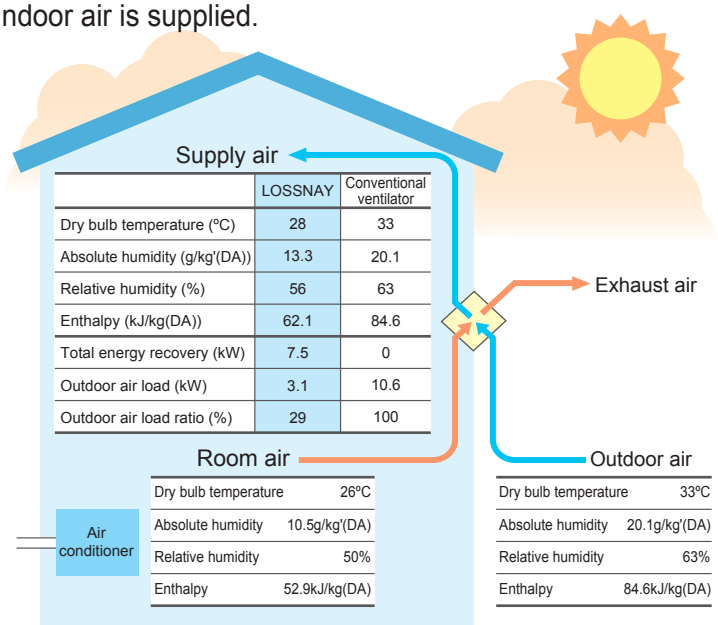


What can be improved by introducing Lossnay?

■Ventilation with maximised comfort

In summer

Air similar to the conditions of the cooled (dehumidified) indoor air is supplied.



	LOSSNAY	Conventional ventilator
Dry bulb temperature (°C)	28	33
Absolute humidity (g/kg'(DA))	13.3	20.1
Relative humidity (%)	56	63
Enthalpy (kJ/kg(DA))	62.1	84.6
Total energy recovery (kW)	7.5	0
Outdoor air load (kW)	3.1	10.6
Outdoor air load ratio (%)	29	100

Room air	
Dry bulb temperature	26°C
Absolute humidity	10.5g/kg'(DA)
Relative humidity	50%
Enthalpy	52.9kJ/kg(DA)

Outdoor air	
Dry bulb temperature	33°C
Absolute humidity	20.1g/kg'(DA)
Relative humidity	63%
Enthalpy	84.6kJ/kg(DA)

Heat recovery calculation

Indoor supply-air temperature (°C) = Outdoor temperature (°C) − {Outdoor temperature (°C) − Indoor temperature (°C)} × Temp recovery efficiency (%)

Calculation example : 28°C=33°C−(33°C−26°C)×71.5%

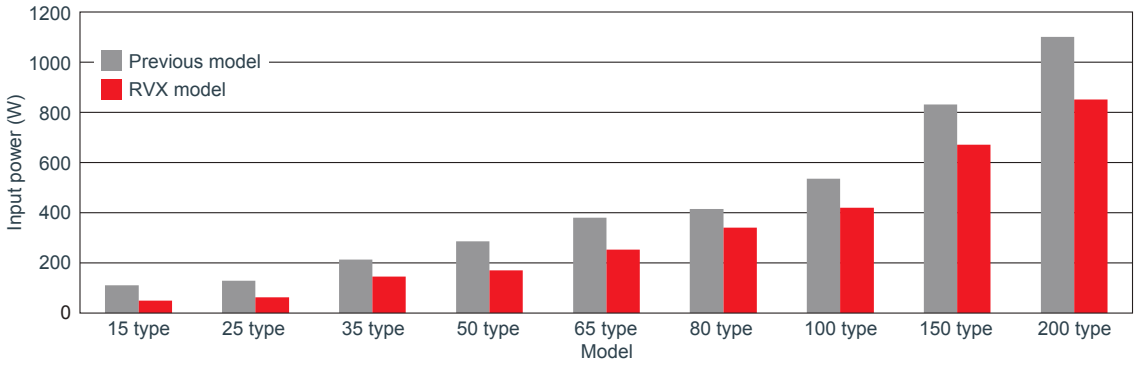
*The above applies to the case of LGH-100RVX (fan speed 4).

Further Energy Saving Features

■Power consumption reduced further with introduction of DC motor

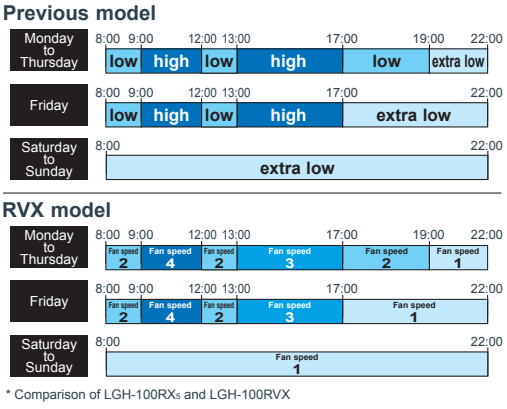
A high efficiency DC motor has been adopted. Compared to models with an AC motor, power consumption is reduced.

Comparison between RVX and previous power consumption (RVX model: Fan Speed 4, Previous model: Extra-High)

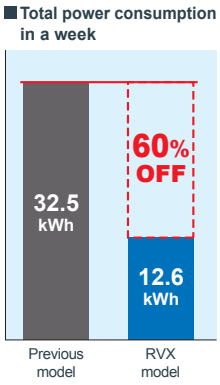


■Weekly timer

The operation pattern for each day of the week, ON / OFF and airflow can be set using the weekly timer function (up to eight zones per day). Compared to previous models, much finer operation control contributes to enhanced energysaving operation. With a wider range of airflow the Lossnay RVX units enable optimised ventilation not just at different times of the day, but for different days of the week as well, enabling further energy savings.



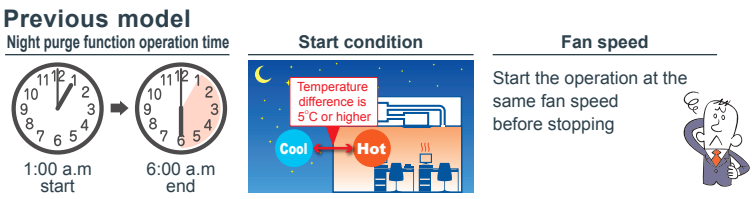
* Comparison of LGH-100RXs and LGH-100RVX



■Night purge

During the summer season, the Night Purge mode draws cooler outside air into the room at night. This energy conservation mode reduces the load when the air conditioning is started up the next morning. With previous models, the unit is operated with only one condition that is set initially. With RVX models, it is possible to freely set* the night purge operation for the start conditions, airflow, and operation time and flexibly answer to the operating environment requests that vary with each customer.

* Settings can only be made using the PZ-61DR-E



RVX model

Operating time	Start condition (inside-outside temperature difference)	Fan speed
Possible to set to any time	Can be set to between 0°C and 7°C (1°C increments)	Select from Fan Speed 1 to 4

Improved Controllability

■Improved Airflow Range

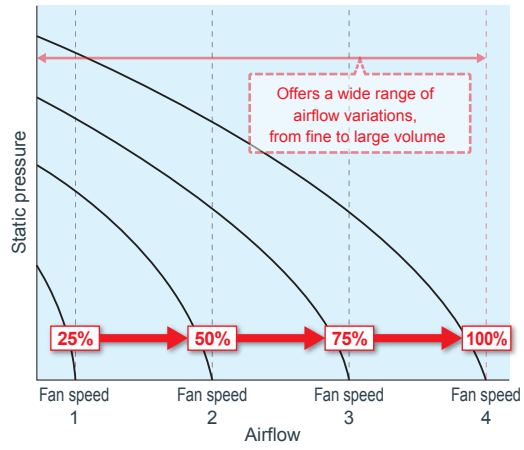
Wide range airflow

Unlike the airflow produced by previous models, in which there are the three settings of “High,” “Low,” and “Extra-low,” the RVX model is equipped with four fan speeds. In addition, each speed has a range setting of 25, 50, 75 and 100%, allowing much finer airflow control.
When used in combination with the CO_2 sensor or timer function, the airflow can be controlled according to conditions that realize better performance and reduce power consumption.

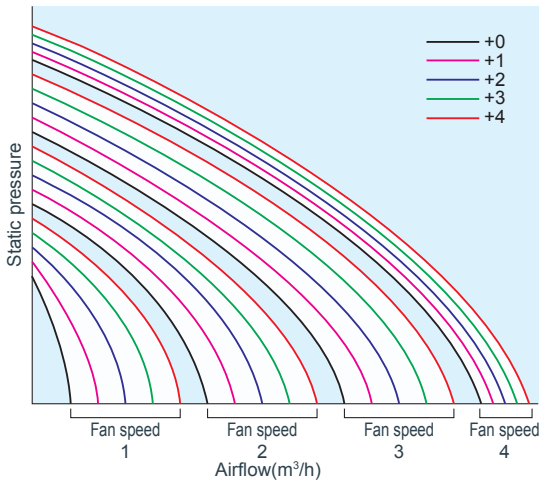
Fan speed adjustment function

The default fan speed value can be adjusted slightly. Use the PZ-61DR-E remote controller to reset the speed.
1)Considering the total hours of Lossnay operation (filter clogging), the fan power can be adjusted automatically after a given period of time.
2)After the unit is installed, when if the airflow is slightly lower than the desired airflow, it is possible to make fine adjustments.

■LGH-RVX series model characteristic curves

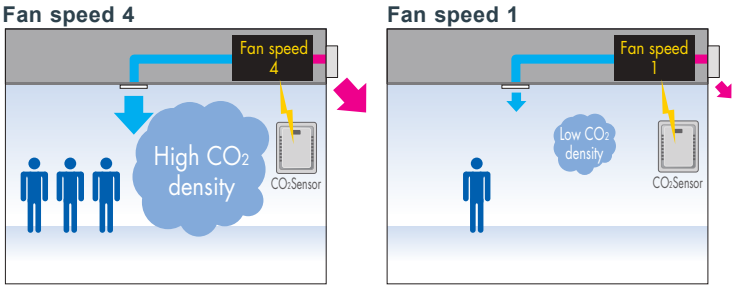


■P-Q curve image



■Airflow control by CO_2 sensor

An external CO_2 sensor can be connected directly to the Lossnay RVX units allowing the fan speed to vary according to the CO_2 levels detected.
When the CO_2 concentration is low, the unit can operate at a lower airflow compared to previous models and this improves total heat exchange efficiency and contributes to energy saving.

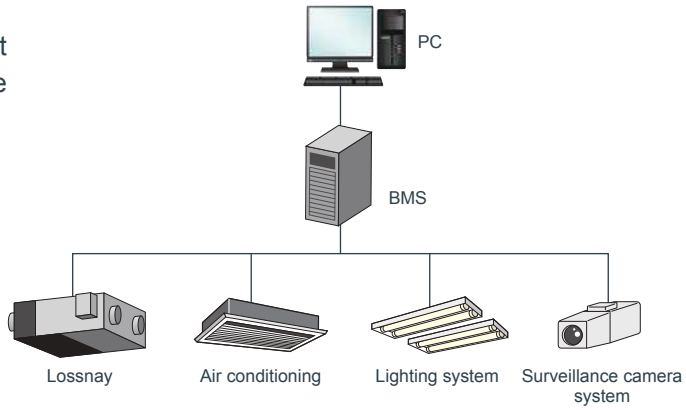


Improved control with BMS

Using a 0-10V signal from the building management system, the airflow of the Lossnay unit can be changed.

Connection example : BMS (Building Management System)

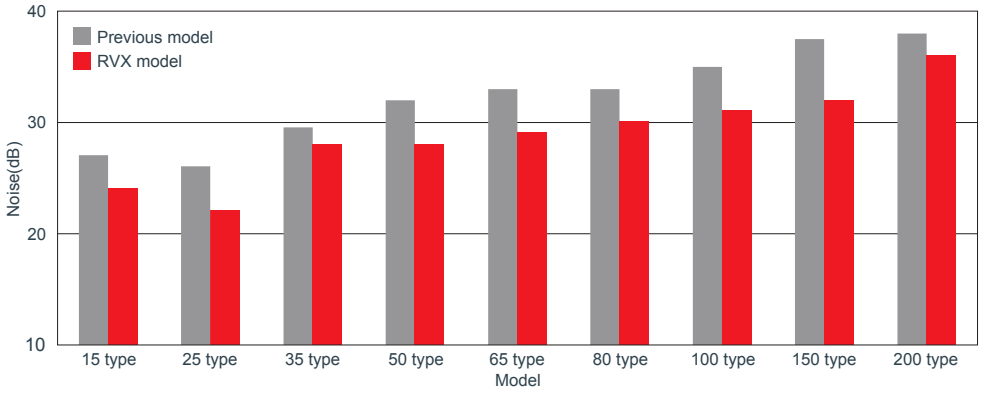
Input voltage [VDC]	Fan speed	Fan speed changing from remote controller
0 -1.0	-	Available
1.5 - 2.5	1	Not available
3.5 - 4.5	2	Not available
5.5 - 7.0	3	Not available
8.5 - 10.0	4	Not available



Low noise design

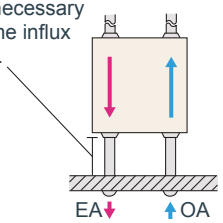
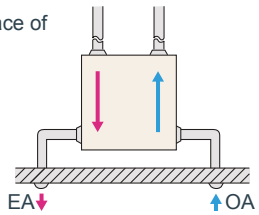
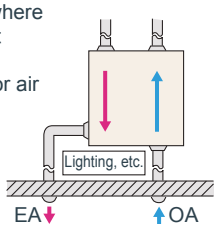
By providing a range of airflow for each fan speed, sound levels can be reduced to achieve low noise.

Noise comparison between RVX and previous models (RVX model: Fan speed 3, previous model: High)



Connect ducts in two different directions (OA, EA side)

Ducts can be connected in two different directions to the outdoor vents thanks to collars and aperture plates that can be interchangeably placed in two different positions. This flexibility allows for installations close to the surface of a wall and helps avoid cases where the stale air exhaust vent would be blocked by an obstruction of some kind. This makes both planning and installation that much simpler.

Standard installation	Installation with duct direction changed
A space is necessary to prevent the influx of rainwater. 	Can be installed close to the surface of the wall.  Avoid installations where the stale air exhaust aperture would be blocked by lighting or air conditioning units. 
	 Remove the flange (factory-standard direction) and the side panel plate and switch their placements. They are both equipped with screw stoppers making the switch extremely simple. The direction of the ducts can only be changed on the outside (OA and EA). The inside cannot be changed (SA and RA).

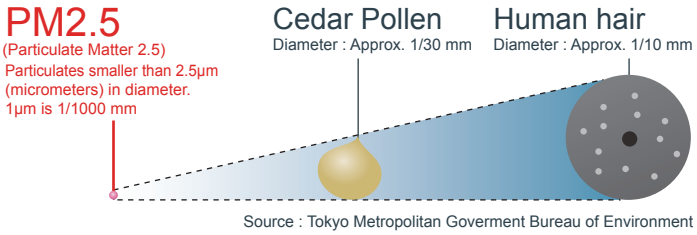
Solution to PM2.5

Why do you need a filter in your ventilation system?

Ventilation is important. However, outside air may not always be fresh and clean, especially if you are living in a smog-choked city. Filtering the outside air before bringing it into your home/office is a solution to reduce your exposure to air pollution.

What is PM2.5?

PM2.5 is airborne particulates that are 2.5µm or smaller in size.
They may carry toxins in the air and can penetrate deep into the lungs, potentially causing health problems.



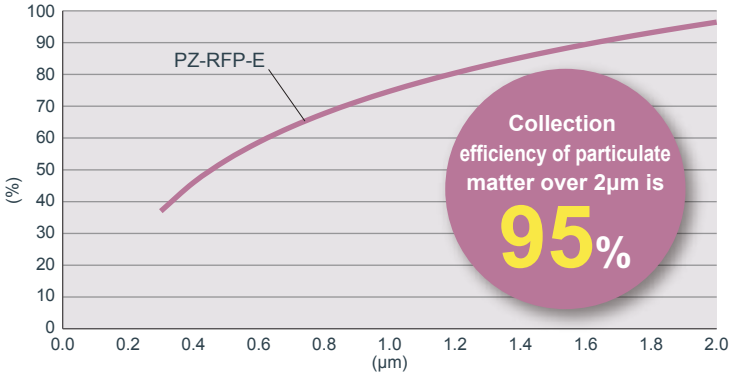
Source : Tokyo Metropolitan Goverment Bureau of Environment

PM 2.5 air pollutant control with Lossnay ventilation

Lossnay offers optional filters, PZ-RFP-E-Series for LGH-RVX and GUF-Series, which are designed to remove approx. 95% of airborne particulates that are 2.0µm or larger.

*The collection efficiency of airborne particulates is measured based on JIS B9908. This method measures filter efficiency by counting the quantity of particulates collected at both front and back sides of the filter.
Note 1: Collection efficiency may vary depending on the airflow speed of the ventilator. The results reported are measured efficiency of filter itself in-house, and the performance of actual equipment may be different.
Note 2: The removal of airborne particulates smaller than 0.3µm is out of data range.
Note 3: Ventilation filters do not remove all harmful substances from the air.

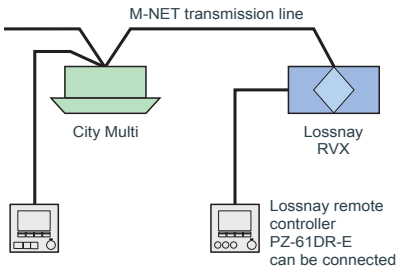
Lossnay filter collection performance by particulate size



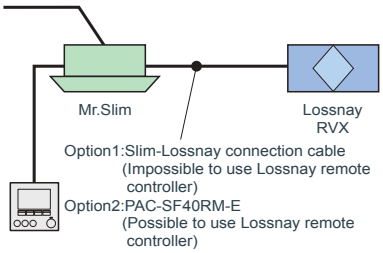
Control

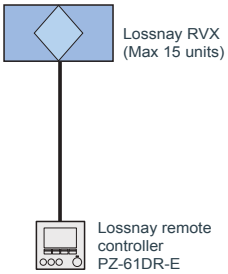
The Remote Controller PZ-61DR-E enables simple control setting

Interlocked with Air conditioners		Lossnay independent
Interlocked with City Multi	Interlocked with Mr.Slim	



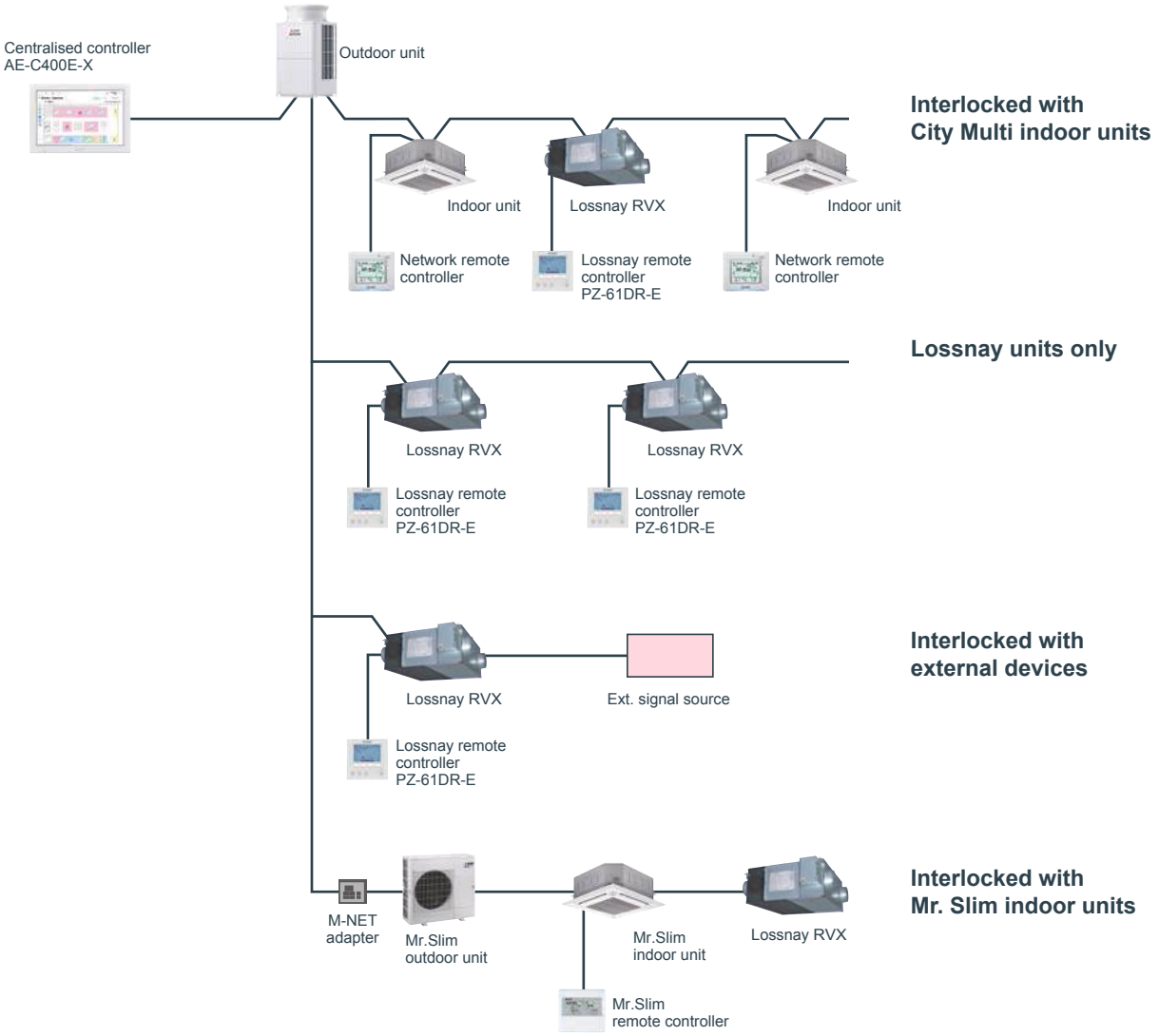
(PZ-43SMF-E can be connected, however, function is limited.)





(PZ-43SMF-E can be connected, however, function is limited.)

Centralised Controller System



Optimised System Integration

■List of Remote Controller Settings and Functions

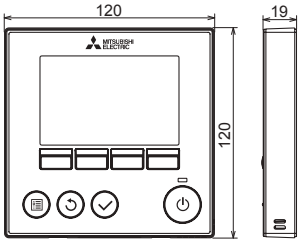
The remote controller provides a wide range of functions and features other than the main functions described below, such as sophisticated energy saving control and easy user interface.

Function (Communicating mode)	PZ-61DR-E	PZ-43SMF-E
Fan speed selection	4 fan speeds	2 of 4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto	Energy recovery / Bypass / Auto
Night-purge (time)	Any time selectable	No
Night-purge (fan speed)	Selectable from 4 fan speeds	No
Dip-switch setting and function setting from RC	Yes	No
Bypass temp. free setting	Yes	No
Heater-On temp. free setting	Yes	No
Fan power up after installation	Yes	No
0 - 10VDC external input	Yes	Yes
ON/OFF timer	Yes	Yes
Auto-Off timer	Yes	No
Weekly timer	Yes	No
Operation restrictions (ON/OFF, Ventilation mode, fan speed)	Yes	No
Operation restrictions (Fan speed skip setting)	Yes	No
Screen contrast adjustment	Yes	No
Language selection	Yes (8 languages)	No (English only)
Initializing remote controller	Yes	No
Filter cleaning sign	Yes	Yes
Lossnay core cleaning sign	Yes	No
Error indication	Yes	Yes
Error history	Yes	No
OA/RA/SA temp. display	Yes	No

Controllers

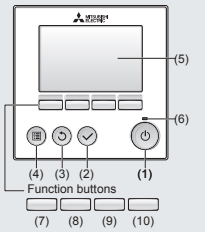
■LOSSNAY remote controller (PZ-61DR-E)





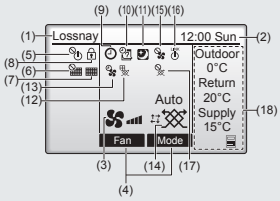
Unit:mm

Operation section



(1) Press to turn ON/OFF the Lossnay unit.
(2) Press to save the setting.
(3) Press to return to the previous screen.
(4) Press to bring up the Main menu.
(5) Operation settings will appear.
When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.
(6) This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.
(7) Main menu : Press to move the cursor down.
(8) Main display : Press to change the fan speed.
Main menu : Press to move the cursor up.
(9) Main display : Press to change the ventilation mode.
Main menu : Press to go to the previous page.
(10) Main menu : Press to go to the next page.

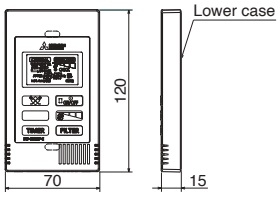
Display section



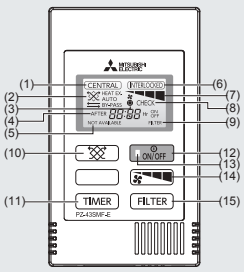
(1) Lossnay is always displayed.
(2) Current time appears here
(3) Fan speed setting appears here.
(4) Functions of the corresponding buttons appear here.
(5) Appears when the ON/OFF operation is centrally controlled.
(6) Appears when the filter reset function is centrally controlled.
(7) Indicates when filter and/or Lossnay core needs maintenance.
(8) Appears when the buttons are locked and/or a fan speed is skipped.
(9) Appears when the On/Off timer, or Auto-off timer function is enabled.
(10) Appears when the Weekly timer is enabled.
(11) Appears when the night-purge function is available.
(12) Appears when performing operation to protect the equipment.
(13) Appears when performing the power supply/exhaust function or the delay operation at the start of operation.
(14) Indicates the ventilation mode setting.
(15) Appears when external fan speed operation.
(16) Appears when operation interlocked with external unit.
(17) Appears when external ventilation mode operation.
(18) Displays the outdoor temperature, return temperature, and supply temperature (calculated value).

■LOSSNAY remote controller (PZ-43SMF-E)





Unit:mm



(1) Displayed during remote operation prohibited by centralsed control unit, etc.
(2) Displays the ventilation mode status.

Heat exchange	HEAT EX.
By-pass	BY-PASS
Automatic (HEAT EX./BY-PASS)	HEAT EX. AUTO or AUTO BY-PASS

(3) Displayed while the Lossnay remote controller is powered on.
(4) Displays on-timer or off-timer duration.
(5) When a button is pressed for a function which the Lossnay unit cannot perform, this display flashes concurrently with the display of the function.
(6) Displayed when the Lossnay starts off by interlocked indoor unit or external signal.
(7) Displays the selected fan speed.
(8) Displayed together with the malfunctioning unit (3 digits) and an error code (4 digits).
(9) Displayed when the accumulated operating time reaches the time set for filter maintenance.
(10) Used to select the ventilation mode among heat exchange, by-pass or automatic.
(11) Increasing 0:30 by pressing it once. Keep pressing the button for fast-forwarding.
(12) Switch for start and stop.
(13) On during operation. Flashes when a malfunction occurs.
(14) Used to select the fan speed either “Low” or “High”.



(15) Press twice to reset the filter sign display.

Filters

Standard filters



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Non-woven fabrics	Coarse 35%	G3 *	PZ-15RF$_8$-E	2	LGH-15RVX-E	2
			PZ-25RF$_8$-E	4	LGH-25RVX-E	4
			PZ-35RF$_8$-E	4	LGH-35RVX-E	4
			PZ-50RF$_8$-E	4	LGH-50RVX-E, GUF-50RD4	4
			PZ-65RF$_8$-E	4	LGH-65RVX-E	4
			PZ-80RF$_8$-E	4	LGH-80RVX-E	4
					LGH-150RVX-E	8
			PZ-100RF$_8$-E	4	LGH-100RVX-E, GUF-100RD4	4
					LGH-200RVX-E	8

* The classification in EN779 (2002) is G3.

High-efficiency filters Optional



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	EN779 (2012)				
Synthetic fiber	ePM$_{10}$ 75%	M6 *	PZ-15RFM-E	1	LGH-15RVX-E	1
			PZ-25RFM-E	2	LGH-25RVX-E	2
			PZ-35RFM-E	2	LGH-35RVX-E	2
			PZ-50RFM-E	2	LGH-50RVX-E, GUF-50RD4	2
			PZ-65RFM-E	2	LGH-65RVX-E	2
			PZ-80RFM-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFM-E	2	LGH-100RVX-E, GUF-100RD4	2
					LGH-200RVX-E	4

* The classification in EN779 (2002) is F7.

Advanced high-efficiency filters Optional



Filter					Lossnay	
Filter material	Classification		Model name	Included piece/set	Applicable model	Required filter pieces
	ISO 16890	ASHRAE52.2 (2017)				
Synthetic fiber	ePM$_1$ 75% ePM$_{2.5}$ 80% ePM$_{10}$ 95%	MERV16	PZ-15RFP$_2$-E	1	LGH-15RVX-E	1
			PZ-25RFP$_2$-E	2	LGH-25RVX-E	2
			PZ-35RFP$_2$-E	2	LGH-35RVX-E	2
			PZ-50RFP$_2$-E	2	LGH-50RVX-E, GUF-50RD4	2
			PZ-65RFP$_2$-E	2	LGH-65RVX-E	2
			PZ-80RFP$_2$-E	2	LGH-80RVX-E	2
					LGH-150RVX-E	4
			PZ-100RFP$_2$-E	2	LGH-100RVX-E, GUF-100RD4	2
					LGH-200RVX-E	4

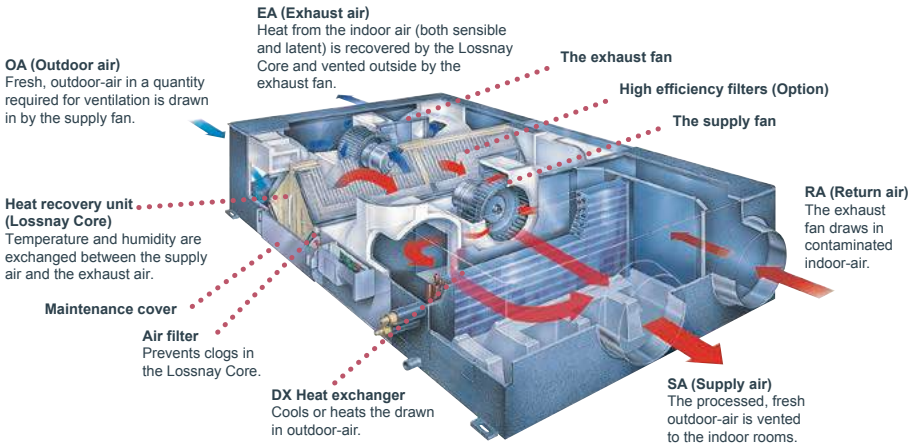
OA Processing Units

GUF-RD4-Series

A Total Air Conditioning Package Manifesting Remarkable Power

Lossnay Ventilation and Air Conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants preventing ailments such as sick building syndrome. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.

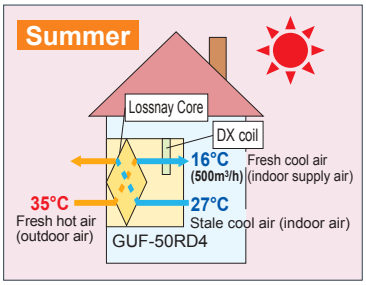


The Air Conditioning Function

Two Units in One

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy. Also, with ventilation and air conditioning integrated, space is saved and installation expense kept to a minimum. What's more, the air temperature in any room can be perfectly adjusted to the desired temperature of the occupants via the OA Processing Unit, which can be used as the indoor unit of the CITY MULTI air conditioning system. The heat recovery function maximizes efficiency and saves energy, benefiting the environment and helping companies cut costs. It also reduces the refrigerant load and lowers the amount of horsepower required by the outdoor unit.

Temperature simulation (Example : GUF-50RD4)



Installation information

＊Refer to the enclosed Installation Manual for details on installation. Arrange to have an expert install the system correctly.

1. General precautions

1-1. Usage

- The air-conditioning system described in this catalogue is designed for human comfort.
- This product is not designed to assist in the preservation of food, provide conditions to maintain plants or animals, or stabilize environments for the preservation of precision equipment or art objects. To prevent loss of quality, do not use the product for purposes other than those 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 an area where the voltage changes significantly, 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 environments.
- Installation should not be performed in locations exposed to chlorine or other corrosive gases. Avoid installation near sewers.
- To reduce the risk of fire, do not install the unit in an area where flammable gas may leak or flammable material is present.
- This air-conditioning unit has a built-in microcomputer. The effects of noise should be taken into consideration when deciding on the installation position. It is recommended that the air-conditioning unit be installed in a position away from antennas or electronic devices.
- Install the unit on a solid foundation in accordance with local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, or falling.

1-3. Backup system

- In regions in which the malfunctioning of the air conditioner may have a critical effect, it is recommended to have two or more systems made up of single outdoor/heat source units and multiple indoor units.

1-4. Unit characteristics

- The heat pump efficiency of the outdoor unit depends on the outdoor temperature. In heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air will continue to be trapped near the ceiling and the floor level will remain cold. In such cases, heat pumps require a supplemental heating system or air circulator. Before purchasing, consult your local distributor for assistance in selecting the unit and system.
- When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor/heat source unit side tends to collect frost, which reduces its heating performance. The Auto-defrost function will be activated in order to remove the frost, and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of the defrost process.
- An 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.
- Sound levels were obtained in an anechoic room. 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 operating conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Try to avoid positioning the air conditioner in locations where quietness is required.
  With regard to the BC controller, it is recommended that the unit be installed in areas such as corridor ceilings, restrooms and plant rooms.
- The total capacity of the connected indoor units can be greater than the capacity of the outdoor/heat source 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 the power comes on, i.e. after a power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires a maximum of 90 minutes to complete, depending on the operating load.
- When the unit is operating out of the operation temperature range, the unit may stop to prevent malfunction.

1-5. Related 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 an inverter type, select an earth leakage breaker able to respond to high harmonic waves and surges.
- Leakage current is generated not only through the air-conditioning unit but also through the power wires. The leakage current of the main power supply is therefore greater than the total leakage current of each unit. Take the capacity of the earth leakage breaker or leakage alarm into consideration 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 in the measurement value.
- Do not install a phase-advancing capacitor on a unit connected to the same power system as an inverter-type unit and its related equipment.
- If a large current flows due to the malfunctioning of the product 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 that 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, power leakage, system breakdown, or fire.
- Some optional accessories may not be compatible for use with the air-conditioning unit 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 in the 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 leaks.
- If the units operate in cooling mode at a humidity above 80%, condensation may collect and drip from the indoor units.
- Regular checking and cleaning of the drain drainage paths, such as the drain pan or the drain pump, is recommended to prevent clogging. The neglect of a clogged drain pump may trigger the water-leakage protection function which stops operation of the entire system.

2-2. Unit characteristics

- The return air temperature display on the remote controller may differ from the displays 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 measured by the built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- Use the 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 areas 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 operating noise may increase.
- The room temperature may increase above the preset temperature in environments in which the heating or air-conditioning load is small.

2-3. Unit installation

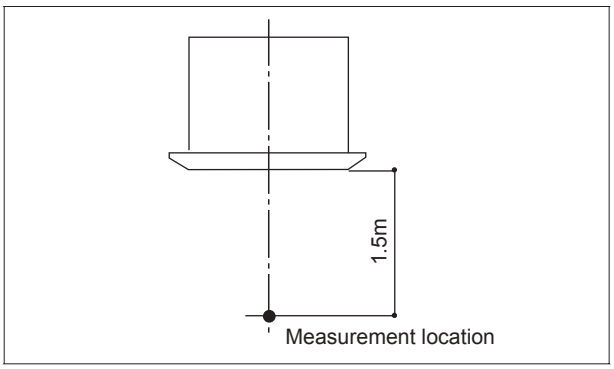
- Do not have any branching points on the downstream of the refrigerant pipe header.
- When a field-supplied external thermistor is installed or when a device for demand control is used, the unit may stop abnormally or damage may occur to the electromagnetic contactor. Consult your local distributor for details.
- When indoor units employ fresh air intake, install a filter in the duct (locally procured) to remove 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.
- Employing fresh air intake for the indoor unit may increase the sound pressure level.
- When installing the ceiling concealed type, secure enough access space to allow for the maintenance according to the installation manual.
- Do not install the unit above the cooking or food processing area.

2-4. Noise level (Sound pressure level)

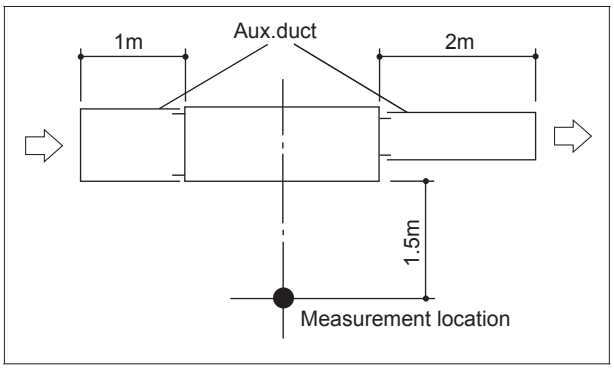
- The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the value indicated in this catalogue due to the influence of ambient noise and echoes.

<Measurement location>

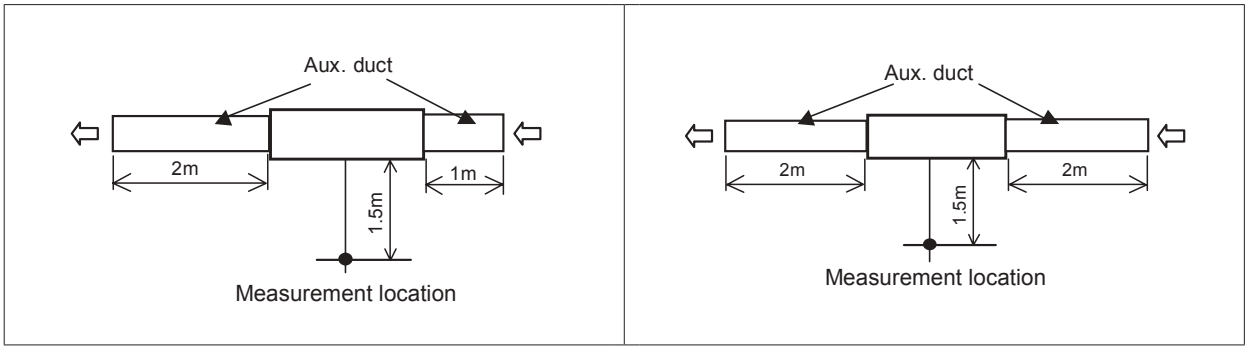
■ PLFY-P-VEM-PA, PLFY-P-VFM-E1, PLFY-P-VMMD-E, PMFY-P-VBM-E



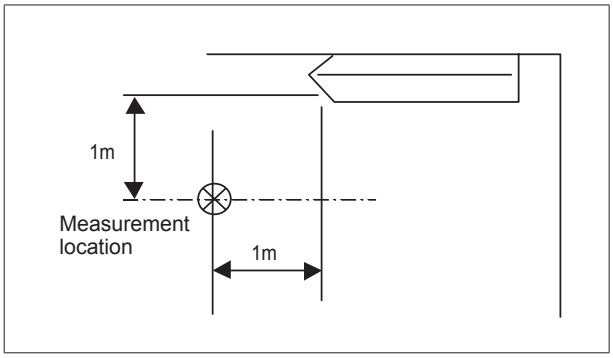
■ PEFY-P-VMR-E-L/R, PEFY-P-VMS1(L)-E, PEFY-P-VMHS-E, PEFY-P-VMHS-E-F, PEFY-P-VMA(L)-E4, PEFY-P-VMA4-E



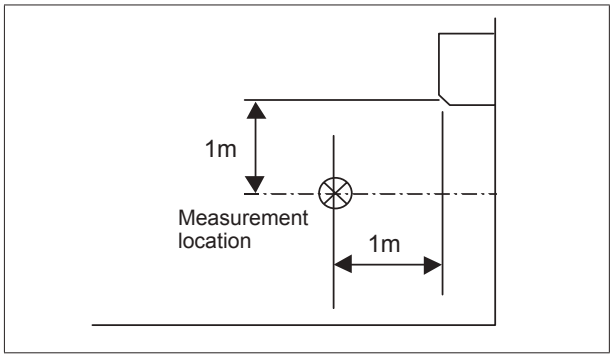
■ PEFY-P-VMA3-E



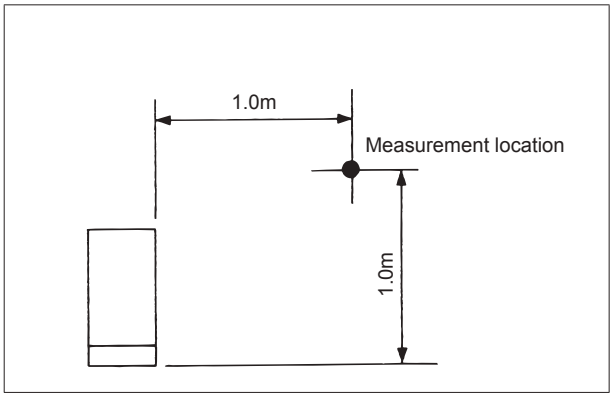
■ PCFY-P-VKM-E



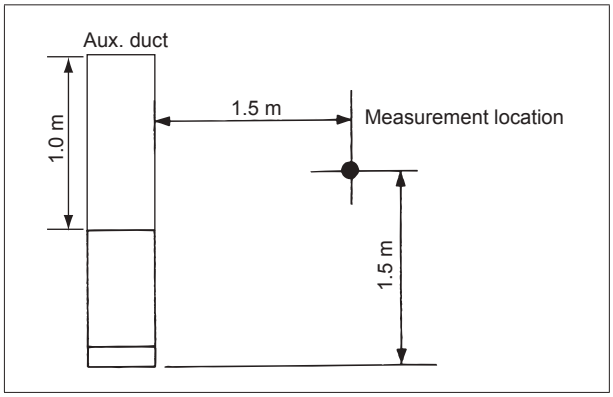
■ PKFY-P-VLM-E, PKFY-P-VKM-E



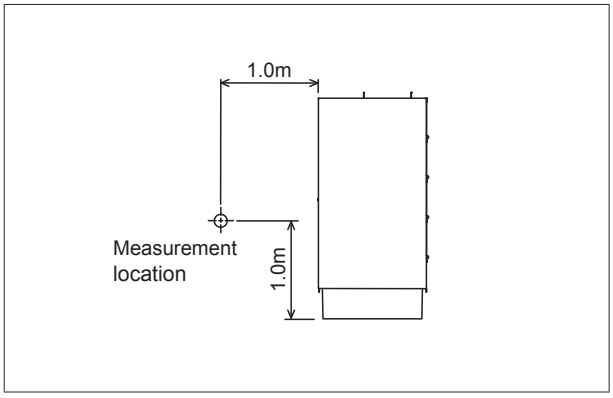
■ PFFY-P-VKM-E2, PFFY-P-VLEM-E



■ PFFY-P VCM-E



■ PFFY-P-YM(H)-E, PFFY-P-YM-E-F



3. Precautions for Fresh air intake type indoor unit

3-1. Usage

- The fresh air intake-type indoor unit is designed to supply pretreated outside air into the room. Do not use to handle internal thermal load.

3-2. Unit characteristics

For PEFY-P-VMH-E-F and PEFY-P-VMHS-E-F

- This unit cannot perform drying operation. The unit will continue 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 temporarily when the unit is connected to a simultaneous cooling/heating operation-type outdoor/heat source unit (R2, WR2-Series) or during the defrost cycle.
- If only this unit is used as an indoor unit, condensation may form at the supply air grille while the unit is operated in cooling mode. This unit cannot perform dehumidifying operation.
- The maximum connectable indoor units for 1 outdoor unit is 110% (100% in case of heating below -5°C).
- When fresh air intake-type indoor units are connected to an outdoor unit together with other types of indoor unit, the total capacity of the fresh air intake-type indoor units must be no more than 30% of the capacity of the connected outdoor unit.
- The AUTO mode on the local remote controller is available only when the fresh air intake-type indoor unit is connected to the R2 or WR2-Series outdoor units.
- The system changeover function is available only when all the connected indoor units are fresh air intake-type indoor units.
- Untreated outside air such as humid air or cold air will be blown into the indoor environment during Thermo OFF operation, which may cause dew condensation on the grilles and ducts. Ensure that the grilles, ducts, and rooms are properly insulated to prevent dew condensation.
- An air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible if using locally procured filters.
- This model requires the use of a duct.

For PEFY-P-VMHS-E-F

- The outside air temperature ranges for operation are as follows:
  Cooling: 17ºCD.B./15.5ºCW.B.–43ºCD.B./35ºCW.B.
  Heating: -10ºCD.B.–+20ºCD.B.
  The unit is forced to operate in Thermo OFF (fan operation) mode when the outside air temperature is as follows:
  Cooling: 17ºCD.B. or below
  Heating: 20ºCD.B. or above
- Outside air is directly supplied into the room during Thermo OFF. Be careful with regard to cold supply air due to low outside air temperatures and of condensation in the room due to high humidity of the outside air.
- If the airflow rate is higher than the usable range, condensation may drip from the air outlet, and the air flow rate will be automatically reduced by the fan motor control. If the air flow rate is lower than the usable range, condensation may form on the surface of the unit.
- Combining fresh air intake-type indoor units with other types of indoor units to respond to the internal thermal load may cause conflict in operating modes. It is not recommended when a fresh air intake-type indoor unit is connected to a Y or WY-Series unit.
- Depending on the air-conditioning load, outside temperature, and the activation of protection functions, the desired preset temperature may not always be achieved and the discharge temperature may swing. Note that untreated outside air may be delivered directly into the room upon the activation of protection functions.
- Fresh air intake-type indoor units cannot be connected to PUMY and cannot be connected to an outdoor unit together with PWFY-Series units.

4. Precautions for Outdoor unit

4-1. Installation environment

- The outdoor unit with the salt-resistant specification is recommended for use in an area in which it will be exposed to salt air.
- Even when the unit with the salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in the Instruction Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to in the guidelines published by JRAIA (JRA9002).
- Install the unit in an area where the flow of discharge air is not obstructed. If the flow of discharge air is obstructed, short-cycling of discharge air may occur.
- Provide proper drainage around the base of the units; condensation may collect and drip from outdoor units. Provide water-proofing protection to the floor when installing the unit on the rooftop.
- In regions where snowfall can be 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 a SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and be careful with 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 0ºC, take appropriate measures, such as the use of a unit base heater, to prevent ice forming 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 approximately 50 cm or more of snow accumulates on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand loads caused by snow in areas 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 so 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 to ensure that the oxygen dissolved in the water is 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 following to prevent the freezing and bursting of pipes when the heat source unit is installed in an area where the ambient temperature can be 0ºC or below.
  - ♦ Keep the water circulating to prevent it from freezing when the ambient temperature is 0ºC or below.
  - ♦ Before a long period of non-use, be sure to purge the water from the unit.
- The salt-resistant unit is resistant to salt corrosion, but not salt-proof. Please note the following when installing and maintaining outdoor units in a marine environment.
  1. Install the salt-resistant unit in an area in which it is not directly exposed to sea breezes, and minimize exposure to salt water mist.
  2. Avoid installing a sun shade over the outdoor unit, so that rain will wash away salt deposits off the unit.
  3. Install the unit horizontally to ensure proper water drainage from the base of the unit. Accumulation of water in the base of the outdoor unit will significantly accelerate corrosion.
  4. Periodically wash salt deposits off the unit, especially when the unit is installed in a coastal area.
  5. Repair all noticeable scratches after installation and during maintenance.
  6. Periodically check the unit, and apply an anti-rust agent and replace corroded parts as necessary.

4-2. Circulating water

- Regularly check the quality of the water in the heat source unit, following the guidelines published by JRAIA (JRA-GL02-1994).
- A cooling tower and heat source water circuit should be a closed circuit so 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 to ensure that the oxygen dissolved in the water is 1 mg/L or less.

4-3. Unit characteristics

- When the Thermo ON and OFF is frequently repeated on the indoor unit, the operating status of outdoor/heat source units may become unstable.

4-4. Related equipment

- Provide grounding in accordance with the local regulations.

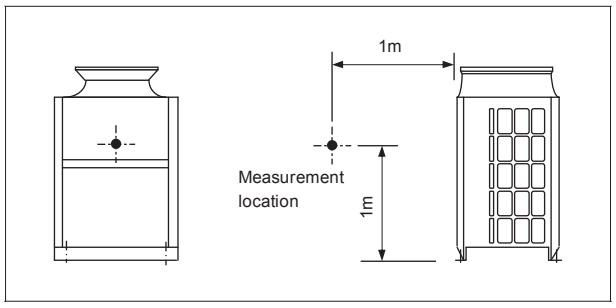
4-5. Noise level (Sound pressure level)

- The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JIS standard. The sound pressure level actually measured at the installation site is usually higher than the indicated value in this catalogue due to the influence of ambient noise and echoes.
  Valve operation noise and refrigerant flow noise may occur from inside the outdoor unit/heat-source unit.

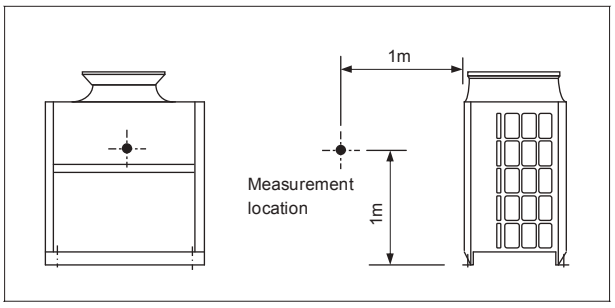
<Measurement location>

■ PUCY-(E)P-Y(S)KD1(-BS), PUHY-(E)P-Y(S)KD1(-BS)

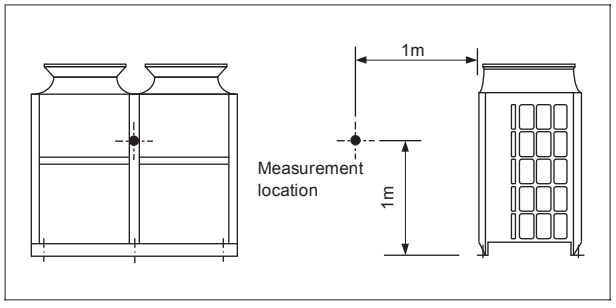
PUCY-P200, 250, 300YKD1(-BS)
PUHY-P200, 250, 300YKD1(-BS)



PUCY-P350, 400, 450YKD1(-BS)
PUHY-P350, 400, 450YKD1(-BS)



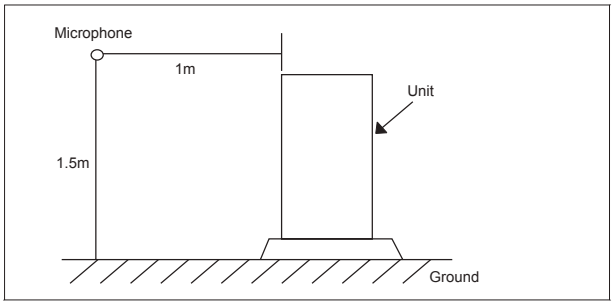
PUCY-P500YKD1(-BS)
PUHY-P500YKD1(-BS)



*See the DATA BOOK for information on the combination models.

■ PUMY-CP-VKM2-U, PUMY-CP-YKM(2)-U, PUMY-CP-YBM-U, PUMY-P-YKM2-U, PUMY-P YBM-U

PUMY-CP100, 125, 140VKM2-U(-BS)
PUMY-CP100, 125, 140, 175, 200, 225YKM(2)-U(-BS)
PUMY-CP250, 300YBM-U(-BS)
PUMY-P112, 125, 140VKM7-SA(-BS)
PUMY-P175, 200, 225YKM2-U(-BS)
PUMY-P250, 300YBM-U(-BS)



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-C400E-X / EW-C50E-X, 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-C400E-X / EW-C50E-X, separate watt-hour meters should be used for A-control units, K-control units, and CITY MULTI packaged air conditioners. It is recommended that an individual watt-hour meter should be used for large-capacity indoor units (with two or more addresses).
- When using the peak cut function on the AE-C400E-X / EW-C50E-X, 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 the AE-C400E-X / EW-C50E-X 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-C400E-X / EW-C50E-X / PAC-YG66DCA or PAC-YG63MCA, do not use the control for fire prevention or security. (This function should never be used in a way that would put people's lives at risk.) Employ any methods or circuits that allow ON/OFF operation using an external switch in case of failure.

5-2. Installation environment

- Surge protection may be required for the transmission line in areas where lightning strikes occur frequently.
- The 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 the receiver.
- When the auto-elevating panel is used and the system is operated using a wired remote controller, install the wired remote controller in a place where all the air conditioners being 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; be sure to use a wireless remote controller designed for use with the elevating panel (sold separately).
- Install the wired remote controller (switch box) in a place where the following conditions are met.
  - ♦ Where the installation surface is flat
  - ♦ Where the remote controller can detect an accurate room temperature
    The temperature sensors that detect the room temperature are installed both in the remote controller and in the indoor unit.
    When the room temperature is detected using the sensor in the remote controller, the main remote controller is used to detect the room temperature. In this case, follow the instructions below.
    > Install the controller in a place where it is not affected by a heat source.
    (If the remote controller faces direct sunlight or the direction of the supply air flow, the remote controller cannot detect the accurate room temperature.)
    > Install the controller in a place where the 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 the AE-C400E-X / EW-C50E-X 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.

When the equipment is used under the following conditions, the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where temperature and humidity are high or change dramatically
- When equipment is used in an environment where 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 long periods (24-hour air-conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours
Motor (Fan, louver, drain pump)		20,000 hours
Bearings		15,000 hours
Electric board		25,000 hours
Heat exchanger		5 years

Major components	Checking cycle	Maintenance cycle
Expansion valve	1 year	20,000 hours
Valve (solenoid valve, four-way valve)		20,000 hours
Sensor (thermistor, pressure sensor)		5 years
Drain pan		8 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.) The Checking/ Maintenance cycle may be shorter than the one shown on this table depending on the contents of the maintenance check contract.

- Sudden unpredictable accidents may occur even if check-ups are performed.

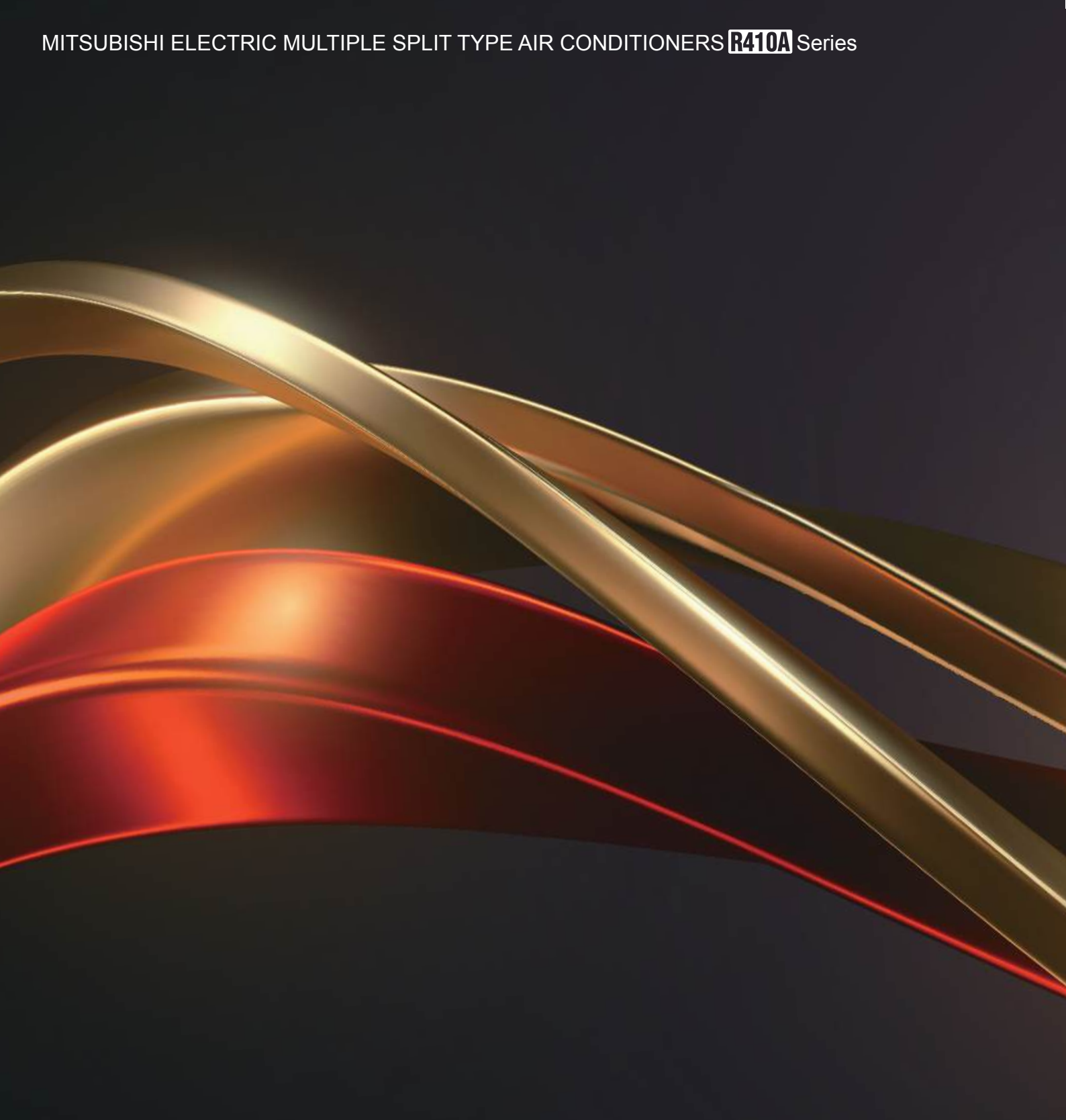
Replacement cycle for consumable components
[Note that replacement cycle does not mean guarantee period.]

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 replacement. Use this cycle for planning maintenance (budgeting expenses for replacing equipment, etc.)

MITSUBISHI ELECTRIC MULTIPLE SPLIT TYPE AIR CONDITIONERS R410A Series



⚠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, 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 equipment and heat pumps contain a fluorinated greenhouse gas, R410A.

MITSUBISHI ELECTRIC CORPORATION

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R410A CITY MULTI

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