



**MITSUBISHI
ELECTRIC**

AIR CONDITIONING SYSTEMS



Natural Comfort for Everybody

Mr. SLIM

R410A

Mitsubishi
Electric
MEQ Quality

COMFORT TAKES ON NEW MEANING WITH THE POWER OF TECHNOLOGY

Our technologically advanced Mr. Slim Power Inverter systems improve comfort, operate with significantly less noise, and provide increased energy savings.

Mr. SLIM

NEW REFRIGERANT

R410A

Our air conditioners use R410A, HFC refrigerant.

Advanced Power Inverter

Mitsubishi Electric's Power Inverter systems drastically reduce power consumption

To better meet the needs of shops and offices, our outdoor units are offered in three-phase power supply models in addition to the existing line-up of single-phase models. Select the model to best match your needs from our expanded model range.

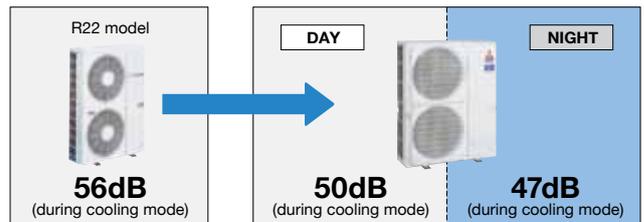


Outdoor Line-up (PUAZ-RP series)						
	71	100	125	140	170	200
Single-phase	●	●	●	●	●	
Three-phase		●	●	●	●	●

Silent Control

Fan speed during cooling operation is automatically reduced when the outdoor temperature drops, resulting in quiet, low-noise operation. Operating noise is reduced by 3dB.

Model RP140 (cooling) "Silent Control" reduces sound further

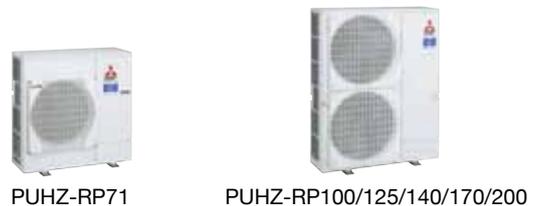


	R22	R410A	
	Non-inverter units	Inverter units (PUAZ-RP) Normal	Low-noise Mode
71 class	52	47	44
100 class	55	49	46
125 class	55	50	47
140 class	56	50	47

*Sound pressure level (dBA)

Side-flow Outdoor Units

Operating capacities up to 20kW units have been unified to the side-flow. All operating capacities have been unified to the side-flow configuration. Even for locations requiring large capacities, the small footprint of these outdoor units enable them to be used anywhere.



Longer Maximum Piping Length

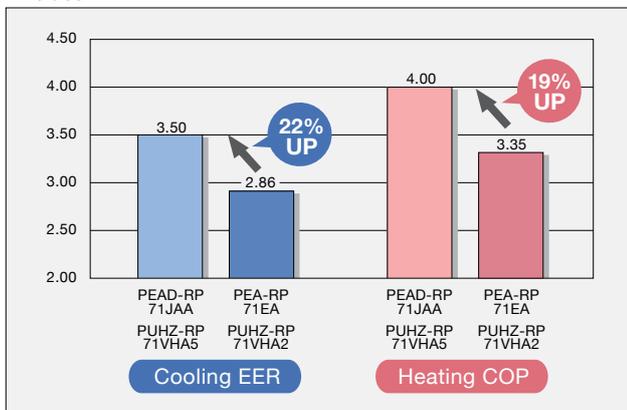
As a result of increasing the volume of refrigerant, piping length has been increased to a maximum of 75m, expanding the range of layout possibilities for unit installation.

Max. piping length	Max. height difference	Max. piping length
PUAZ-RP71	30m	50m
PUAZ-RP 100/125/140/170/200	30m	75m

High Energy Efficiency

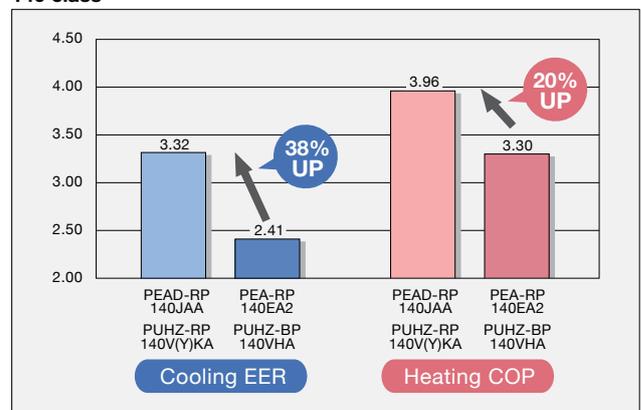
With the latest inverter technology, energy-saving efficiency has been improved in cooling operation and heating operation from the previous model. This contributes to further reductions in operating cost.

71 class



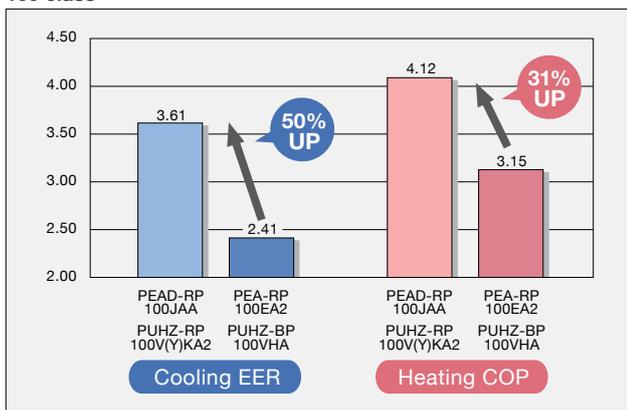
*EER and COP are measured at rated condition.

140 class



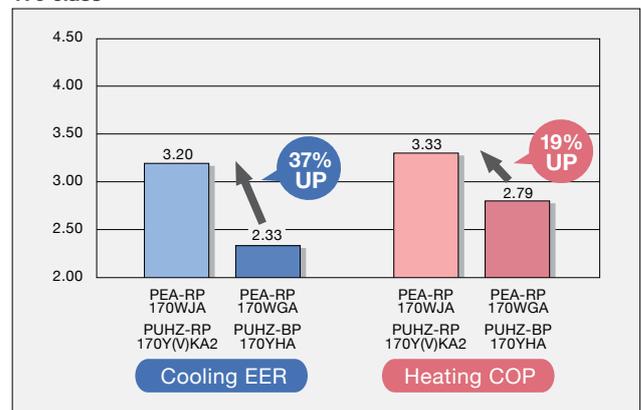
*EER and COP are measured at rated condition.

100 class



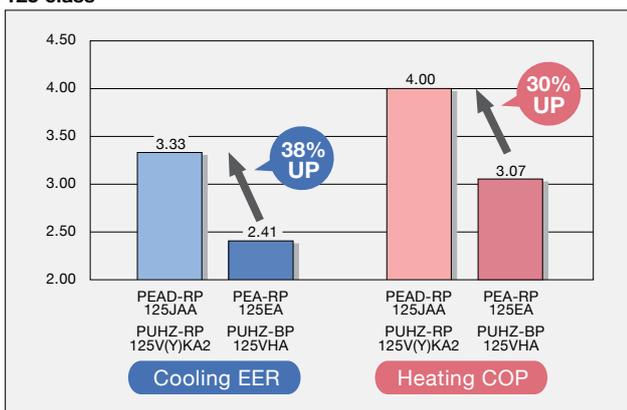
*EER and COP are measured at rated condition.

170 class



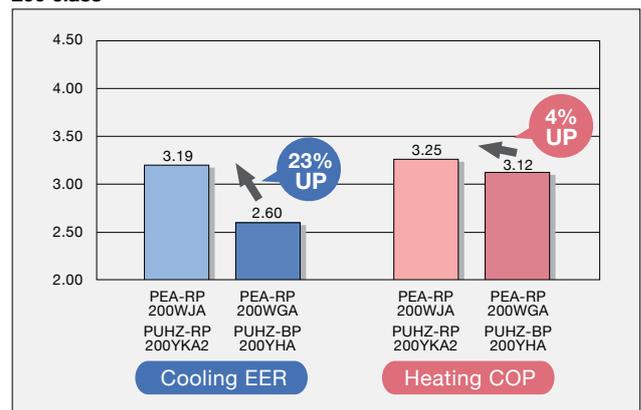
*EER and COP are measured at rated condition.

125 class



*EER and COP are measured at rated condition.

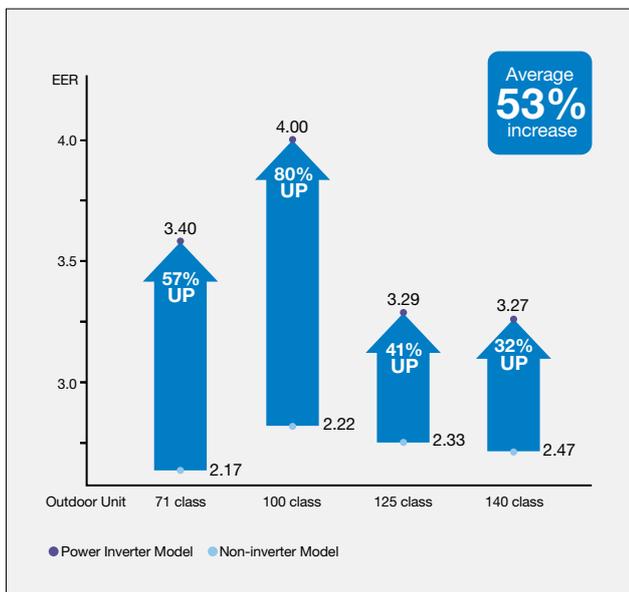
200 class



*EER and COP are measured at rated condition.

Comparison of EER (cooling mode)

Comparison of EER between non-inverter and Power Inverter (4-way ceiling cassette) models.



High Power

More Power for Faster Cooling/Heating

Powerful Cooling/Heating Performance

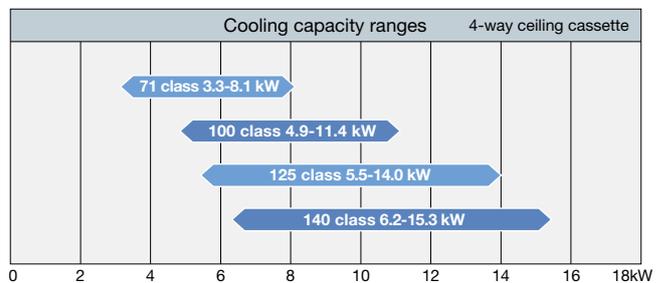
The maximum operating cooling/heating capacity of the Mr. Slim Power Inverter units have been improved (compared to conventional non-inverter models) when operating in either low or high outdoor temperatures.

	Cooling capacity (kW) 4-way ceiling cassette	
	R22 Non-inverter	R410A Power inverter max. (PUHZ-RP)
71 class	7.7	8.1 (105%)
100 class	9.7	11.4 (118%)
125 class	12.4	14.0 (113%)
140 class	14.0	15.3 (109%)

	Heating capacity (kW) 4-way ceiling cassette	
	R22 Non-inverter	R410A Power inverter max. (PUHZ-RP)
71 class	8.4	10.2 (121%)
100 class	10.4	14.0 (135%)
125 class	14.0	16.0 (114%)
140 class	16.1	18.0 (112%)

Wider Performance Range

Operation is now possible at lower speeds, thus cutting energy losses produced by the repeated On/Off operation of non-inverter models. Comfort is improved while power consumption is reduced.



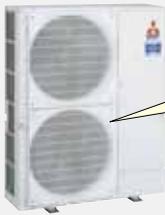
Advanced Energy-saving Technologies

Highly efficient fan and grille for outdoor unit

The shapes of the fan and grille of the outdoor unit were redesigned, realising an increase in blowing capacity and more efficient heat exchange while maintaining the same operating noise level.

Outdoor unit fan opening increased <PUHZ-RP100-200>

The diameter of the opening for the fan in the outdoor unit has been increased from 490 to 550mm. Blowing capacity has been increased while maintaining the same fan rotation speed.



Opening increased from 490 to 550mm in diameter

Grille shape changed <PUHZ-RP71-200>

The shape of the air outlet grille has been changed to reduce pressure loss. This has helped improve heat exchange performance.



<PUHZ-RP•HA>

<PUHZ-RP•KA>

Inflexed fan <PUHZ-RP100-200>

Adoption of a fan with improved ventilation characteristics and a newly designed rear edge that suppresses wind turbulence raises fan operation efficiency.



Fan rear edge

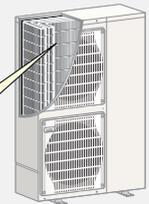
Highly efficient heat exchanger

A high density and increase in surface area have improved the heat-exchange efficiency of the heat exchanger.

High-density heat exchanger <PUHZ-RP100-200>

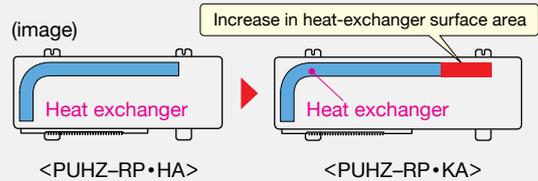
The pipe diameter has been changed from 9.52 to 7.94mm, resulting in a high-density heat exchanger.

2 lines, 52 columns
↓
2 lines, 64 columns (RP100-200)



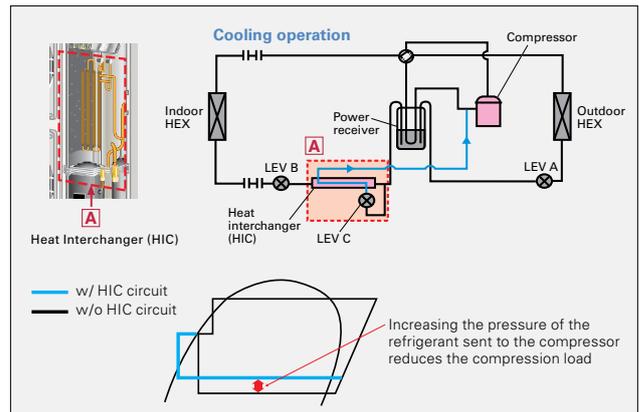
Heat-exchange surface area increased <PUHZ-RP100-200>

Heat exchanger size extended horizontally, increasing the surface area.



Heat Interchanger (HIC) Added <RP140>

An HIC circuit has been added to improve energy efficiency during cooling operation. Liquid refrigerant is rerouted, transformed into a gas state and injected back into the system to increase overall pressure of the refrigerant being sent to the compressor, thereby reducing the load on the compressor and raising efficiency.

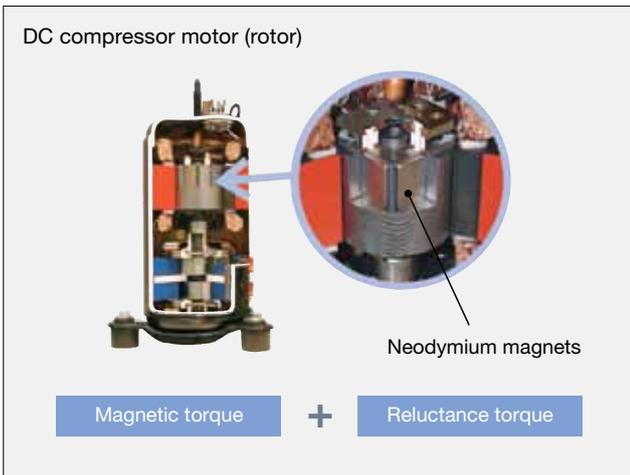


Advanced Technology for High Efficiency

Numerous Leading-edge Technologies Assure High Efficiency

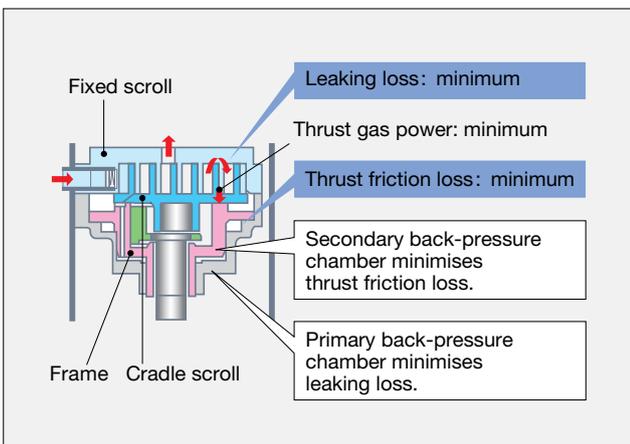
Reluctance DC Rotary Compressor (PUHZ-RP71)

The reluctance DC motor has a rotor equipped with powerful neodymium magnets. The magnetic torque produced by the neodymium magnets and reluctance torque results in more efficient operation.



Highly Efficient Scroll Compressor (PUHZ-RP100/125/140/170/200)

Higher efficiency has been achieved by adding a frame compliance mechanism to the DC scroll compressor. The mechanism allows movement in the axial direction of the frame supporting the cradle scroll, thereby greatly reducing the leakage and friction loss, and ensuring extremely high efficiency at all speeds.



DC Fan Motor (PUHZ-RP71/100/125/140/170/200)

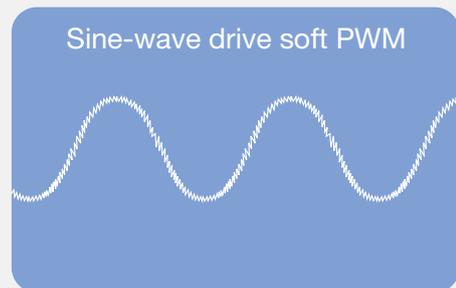
A highly efficient DC motor has been installed to drive the fan of outdoor units, realising up to 60% higher efficiency when compared to an equivalent AC motor.

Vector-Wave Eco Inverter

This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As a result, operating efficiency in all speed ranges is improved, less power is used and annual electricity costs are reduced.

Smooth AC wave pattern

The inverter has been made more compact by inserting the circuitry inside a synthetic resin molding. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.

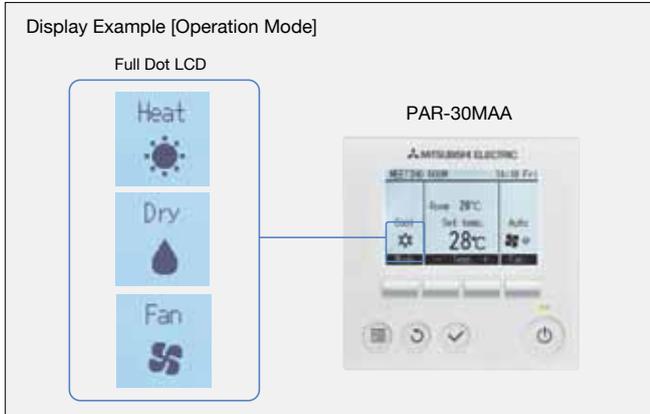


Power Receiver and Twin LEV Control (PUHZ-RP71/100/125/140/170/200)

Mitsubishi Electric has developed a power receiver and twin linear expansion valves (LEVs) that optimise the performance of the compressor. By ensuring optimum control in response to the operating waveform and outdoor temperature, this technology is tailored to the characteristics of the new refrigerant to enhance operating efficiency.

Full Dot Liquid-crystal Display Adopted

Easier to read thanks to use of a full dot liquid-crystal display with backlight, and easier to use owing to adopting a menu format that has reduced the number of operating buttons.



Easy To Read & Easy To Use

Multi-language

Multi-language Display

Control panel operation in eight different languages

Choose the desired language, among the following languages.



Energy-efficient Control

Operation Control Functions

Energy-saving Schedule

Precise control of power consumption <PUHZ-RP71-200>

The amount of power consumed in each time period is managed so that the demand value is not exceeded. The demand control function can be set to start and finish in 5-minute units. Additionally, the level can be adjusted to 0, 50, 60, 70, 80 or 90% of maximum capacity, and up to 4 patterns can be set per day. Air-conditioning operation is automatically controlled to ensure that electricity in excess of the contracted volume is not consumed.

Setting pattern example

Start time	Finish time	Adjusted capacity level
8:15	→ 12:00	80%
12:00	→ 13:00	50%
13:00	→ 17:00	90%
17:00	→ 21:00	50%

Auto-return

Prevents wasteful operation by automatically returning to the preset temperature after specified operating time

After adjusting the temperature for initial heating in winter or cooling on a hot summer day, it is easy to forget to return the temperature setting to its original value. The Auto-return function automatically resets the temperature back to the original setting after a specified period of time, thereby preventing overheating/overcooling. The Auto-return activation time can be set in 10-minute units, in a range between 30 and 120 minutes.

*Auto-return cannot be used when Temperature Range Restriction is in use.

Night Setback

Keep desired room temperatures automatically

This function monitors the room temperature and automatically activates the heating mode when the temperature drops below the preset minimal temperature setting. It has the same function for cooling, automatically activating the cooling mode when the temperature rises above the preset maximum temperature setting.

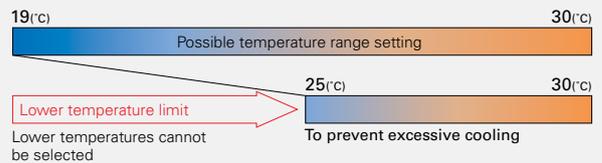
Temperature Range Restriction

Temperature Range Restriction prevents overheating/overcooling

Using a temperature that is 1°C lower/higher for heating/cooling results in a 10% reduction in power consumption.* Temperature Range Restriction limits the maximum and minimum temperature settings, contributing to the prevention of overheating/overcooling.

*In-house calculations

Cooling/Dry (Setting example of minimum temp. in 25°C)



Recommended for Office Restaurant

Auto-off Timer

Turns heating/cooling off automatically after preset time elapses

When using Auto-off Timer, even if one forgets to turn off the unit, operation stops automatically after the preset time elapses, thereby preventing wasteful operation. Auto-off Timer can be set in 10-minute units, in a range between 30 minutes and 4 hours. Eliminates all anxiety about forgetting to turn off the unit.

Recommended for Meeting room Changing room

Operation Lock

Fixed temperature setting promotes energy savings

In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous operation or tampering.

Recommended for Office School Public hall
Hospital Computer server facility

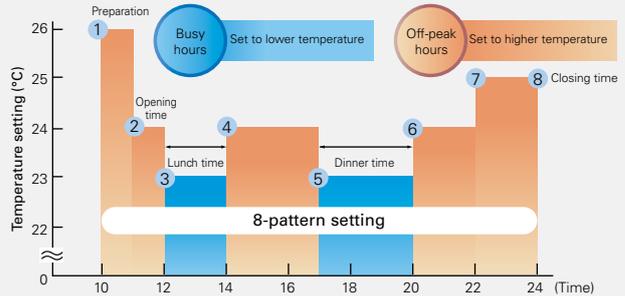
Weekly Timer

Set up to 8 patterns per day including temperature control

The Weekly Timer enables the setting of operation start and finish times and adjusting the temperature as standard features. Up to 8 patterns per day can be set, providing operation that matches the varying conditions of each period, such as the number of customers in the store.

*Weekly Timer cannot be used when On/Off Timer is in use.

Setting Example (restaurant in summer time)



Necessary to change temperature settings for cooling/heating times.
*Joint research conducted with Japan Facility Solutions, Inc.

Installation/Maintenance Support Functions

Smooth Maintenance

Outdoor unit data accessed immediately, enabling fast maintenance <PUHZ-RP71-200>

Using the Stable Operation Control (fixed frequency) of the Smooth Maintenance function, the operating status of the inverter can be checked easily via the screen on the remote controller.

Smooth Maintenance Function Operating Procedure



Display information (11 items)

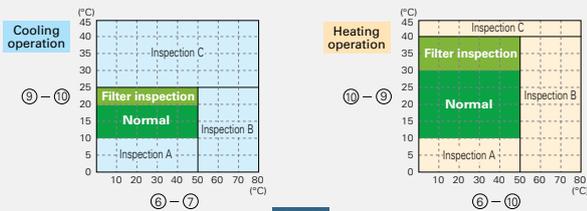
Compressor		⑥	OUTH4 temp. (°C)
①	COMP current (A)	⑦	OUTH6 temp. (°C)
②	COMP run time (Hr)	⑧	OUTH7 temp. (°C)
③	COMP ON/OFF (times)	Indoor Unit	
④	COMP frequency (Hz)	⑨	IU air temp. (°C)
Outdoor Unit		⑩	IU HEX temp. (°C)
⑤	Sub cool (°C)	⑪	IU filter operating time* (Hr)

*IU filter operating time is the time elapsed since filter was reset.

Inspection Guidelines

The computed temperature difference is plotted as in the graph below and operating status is determined.

	Operation	Item
Temp. difference	Cooling	(⑥ OUTH4 temp.) - (⑦ OUTH6 temp.)
		(⑨ IU air temp.) - (⑩ IU HEX temp.)
	Heating	(⑥ OUTH4 temp.) - (⑩ IU HEX temp.)
		(⑩ IU HEX temp.) - (⑨ IU air temp.)



Normal	Normal operating status.
Filter inspection	Filter may be blocked.*1
Inspection A	Capacity is reduced. Detailed inspection is necessary.
Inspection B	Refrigerant level is low.
Inspection C	Filter or indoor unit heat exchanger is blocked.

*1: Due to indoor and outdoor temperatures, "Filter inspection" may be displayed even if the filter is not blocked.
 * The above graphs are based on trial data. Results may vary depending on installation/temperature conditions.
 * Stable operation may not be possible under the following temperature conditions:
 a) In cooling mode when the outdoor induction temperature is over 40°C or the indoor induction temperature is below 23°C.
 b) In heating mode when the outdoor induction temperature is over 20°C or when the indoor induction temperature is over 25°C.
 * If the above temperature conditions do not apply and stable operation is not achieved after 30 minutes has passed, please inspect the units.
 * The operating status may change due to frost on the outdoor heat exchanger.

Manual Vane Angle Setting
(4-way ceiling cassette)

Direction of vertical airflow for each vane can be set

Setting the vertical airflow direction for each individual vane can be performed simply via illustrated display. Seasonal settings such as switching between cooling and heating are easily changed as well.

Auto-descending Panel Operation
(4-way ceiling cassette)

Easily raise/lower panels using the remote controller

Auto-descending panel operation is available as an option. Panels can be lowered/raised using a button on the wired remote controller. Filter cleaning can be performed easily.

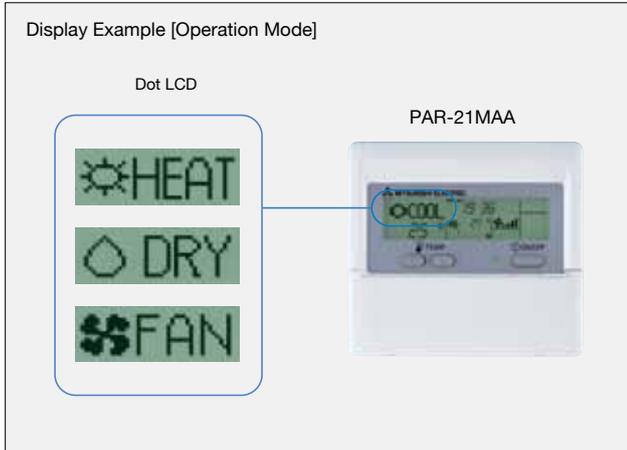
Reassuring Troubleshooting Navigation Function

Contact Details Displayed When Abnormality Occurs
Easily contact a service company when there is a problem.

The telephone number of a service company and other information can be input and stored in advance. When a problem occurs, the contact details are displayed automatically, and a call for help can be made without delay.

Dot Liquid-crystal Display Adopted

The adoption of dot liquid-crystal display (LCD) technology and a large display screen for the control panel optimises visibility. Operation and control status are easily read at a glance.



Easy to Read/Easy to Use

Multi-language Display

Multi-language

Control panel operation in eight different languages

Choose the desired language, among the following languages.



Energy-efficient Control

Operation Control Functions

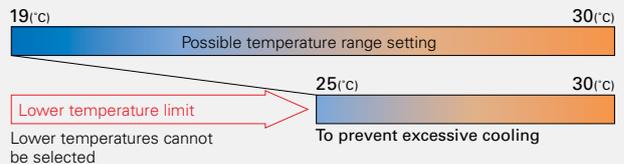
Temperature Range Restriction

Air conditioner operation restricted to within a specified operating range

Set the upper and lower limits for the temperature range during operation. Excessive heating or cooling is prevented, leading to increased energy savings.

Cooling/Dry

(Setting example of minimum temp. in 25°C)



Recommended for **Office** **Restaurant**

Auto-off Timer

Automatically turns off air conditioner

Set the time for the air conditioner to turn off automatically. The timer can be set in the range from 30 minutes up to 4 hours in 30-minute intervals.

The “Simple Timer”— starts/stops in units of 1 hour in a 72-hour period — is set at the time of shipment from the factory. It can be changed to the “Auto-off Timer” function using the remote controller.

Recommended for **Meeting room** **Changing room**

Operation Lock

Prevent operation settings from being changed

Units can be set so that the operation mode cannot be changed. When “Operation Lock” is activated, new temperature setting commands are not accepted, thereby ensuring that the unit runs in the specified (locked in) temperature range. This promotes energy savings and prevents erroneous/ mischievous operation.

Only the administrator can change settings when using the Operation Lock mode.

Recommended for **Office** **School** **Public hall**
Hospital **Computer server facility**

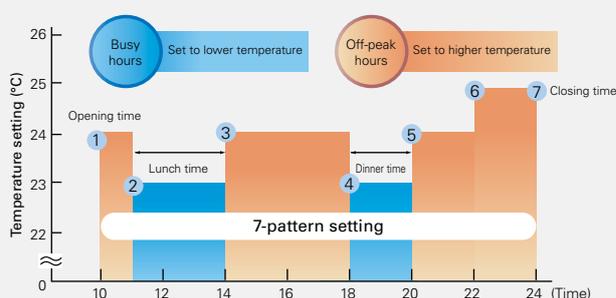
Weekly Timer

Introduced in response to market demand

Control temperature on a weekly basis

Temperature settings and On/Off control can be managed over a period of one week using the Weekly Timer. Up to eight setting patterns per calendar day are possible.

Setting Example (restaurant in summer time)



(Results of cooperative study with Japan Facility Solutions, Inc.)

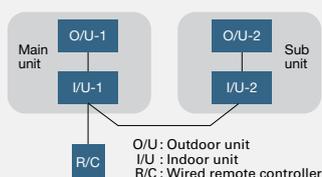
Rotation, Back-up and 2nd Stage Cut-in Functions (PAR-30MAA and PAR-21MAA)

(1) Rotation and Back-up Functions

Function Outline

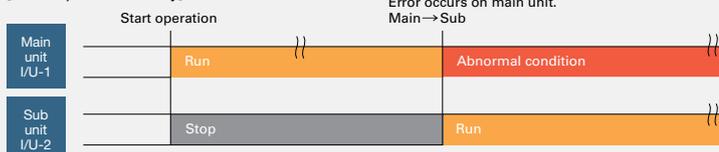
- Main and sub units take turns operating according to a rotation interval setting.
- If one unit malfunctions, the other unit automatically begins operation (Back-up function)

System Image



Operation Pattern

[Back-up function only]



[Rotation function] & [Back-up function]



(Ex: When the request code is "313", each unit operates alternately in daily cycle.)

(2) 2nd Stage Cut-in Function

Function Outline

- Number of units operating is based on room temperature and predetermined settings.
- When room temperature rises above the desired setting, the standby unit starts (2-unit operation).
- When the room temperature falls 4°C below the predetermined setting, the standby unit stops (1-unit operation).

System Constraint

- This function is only available for rotation operation and when the back-up function is in cooling mode.

Operation Pattern (When cooling)

[2nd stage cut-in function]



Easy Maintenance Function (Mr. Slim Power Inverter only)

- Nearly maintenance-free operation
 - Monitor operation data of the indoor and outdoor units via the remote controller.
- Remote controller also lets you set the operating frequency, allowing easier inspection.



Easy Maintenance Information

Compressor		Outdoor Unit		Indoor Unit	
①	Accumulated operating time (×10hr)	④	Heat exchanger temperature (°C)	⑦	Intake-air temperature (°C)
②	Number of ON/OFF times (×100 times)	⑤	Discharge temperature (°C)	⑧	Heat exchanger temperature (°C)
③	Operating current (A)	⑥	Outdoor-air temperature (°C)	⑨	Filter operating time* (hr)

*The filter operating time is the time elapsed since the filter button was reset.

Refrigerant Leakage Check (Mr. Slim Power Inverter only)

The Mr. Slim Power Inverter units come equipped with a useful new "Refrigerant Leakage Check" function. Using a wired remote controller, it is easy to check if refrigerant has been lost over a long period of use. This reduces service time and gives an added sense of safety.



Product Line-up		2.5kW	3.5kW	5.0kW	6.0kW
4-way ceiling cassette 	SLZ Compact cassette	 SLZ-KA25VAQ(L)		 SLZ-KA50VAQ(L)	
	PLA Wide Power cassette				 PLA-RP60BA
Compact bulkhead 	SEZ	 SEZ-KD25VAQ(L)	 SEZ-KD35VAQ(L)	 SEZ-KD50VAQ(L)	 SEZ-KD60VAQ(L)
Ceiling-concealed 	PEAD PEA				
Ceiling-suspended 	PCA			 PCA-RP50KAQ	 PCA-RP60KAQ
Wall-mounted 	PKA				
Outdoor unit		 SUZ-KA25VA3	 SUZ-KA35VA2	 SUZ-KA50VA3	 SUZ-KA60VA3

*SEZ/SLZ indoor units should be connected to an SUZ outdoor unit.
 *PKA-RP71: only for PUHZ-RP outdoor connection.
 *PEA-RP: No wireless remote controller as optional parts.

7.1kW	10.0kW	12.5kW	14.0kW	17.0kW	20.0kW	Remote controller	See page
						 optional for SLZ-VAQ  optional for SLZ-VAQ  standard for SLZ-VAL	19
 PLA-RP71BA	 PLA-RP100BA	 PLA-RP125BA	 PLA-RP140BA			 optional  optional  optional	13 14
 SEZ-KD71VAQ(L)						 optional for SEZ-VAQ  optional for SEZ-VAQ  standard for SEZ-VAL	19
 PEAD-RP71JAA	 PEAD-RP100JAA	 PEAD-RP125JAA	 PEAD-RP140JAA  PEA-RP140WJA	 PEA-RP170WJA	 PEA-RP200WJA	 optional for PEAD and PEA  optional for PEAD and PEA  optional for PEAD	15 16
 PCA-RP71KAQ	 PCA-RP100KAQ	 PCA-RP125KAQ	 PCA-RP140KAQ			 optional  optional  optional	17
Combination only with PUHZ-RP71  PKA-RP71KAL	 PKA-RP100KAL					 optional  optional  standard	18
 SUZ-KA71VA3  PUHZ-RP71VHA5	 PUHZ-RP100V/YKA2	 PUHZ-RP125V/YKA2	 PUHZ-RP140V/YKA2	 PUHZ-RP170V/YKA2	 PUHZ-RP200V/YKA2		

PLA SERIES



(i-see Sensor: optional)

PLA-RP60/71
100/125/140BA



optional

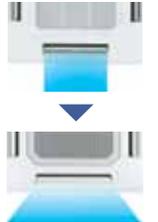


Advancements in PLA series improve style and performance for ensured indoor comfort

Wide Airflow

Wide-angle outlets distribute airflow to all corners of the room, ensuring the room is sufficiently cooled/heated. Horizontal airflow and a fan speed reduced by 20% compared to conventional models also contribute to increased comfort for occupants.

Conventional model



PLA-RP**BA

Less Cold Draught

The horizontal airflow function prevents cold draughts from striking the body directly, thereby keeping the body from becoming over-chilled.



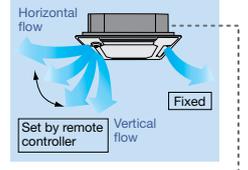
Horizontal airflow prevents draughty feeling

Independent Vane Direction Setting

Use the wired remote controller to set the airflow pattern of each vane independently. Easily adjust airflow to the interior layout and seasonal conditions, and ensure an even temperature distribution all the time.

Using wired remote controller, set airflow direction for each vane (manual setting also possible)

*Wired remote controller (PAR-21MAA/PAR-30MAA) has Independent Vane Direction Setting. This function is only available when indoor unit connects with PUHZ series.



Settings can be changed anytime using a wired remote controller.

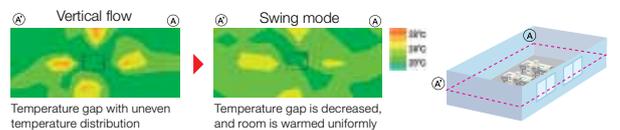
Wave Airflow Mode for Heating

The airflow direction at each outlet changes intermittently, providing a consistent temperature throughout the room.

● "Wave Airflow" operation image



● Wave control effect thermograph



Specifications: 4-way ceiling-cassette (PLA)					
Indoor unit		PLA-RP60BA		PLA-RP71BA	
Outdoor unit		SUZ-KA60VA3		SUZ-KA71VA3	
Function		Cooling	Heating	Cooling	Heating
Capacity (min.-max.)	(kW)	6.1 (1.1-6.3)	6.9 (0.9-8.0)	7.1 (0.9-8.1)	8.0 (0.9-10.2)
Input	(kW)	1.78	1.97	2.07	2.19
Rated EER/COP		3.43	3.50	3.43	3.65
Rated AEER/ACOP		3.36	3.44	3.38	3.60
AEER/ACOP (part-load %)*					
Indoor unit		PLA-RP60BA		PLA-RP71BA	
Power supply					
Airflow (Lo-Mi2-Mid-Hi)		CMM	12-14-16-18	14-16-18-21	
		L/S	200-233-267-300	233-267-300-350	
Sound pressure level		(dB)	28-29-31-32	28-30-32-34	
Dimensions	Height	(mm)	Unit: 258, Panel: 35		
	Width	(mm)			
	Depth	(mm)			
Weight	(kg)	Unit: 23, Panel: 6			

* MEPS compliant at part load

Auto Fan Speed Mode

The fan speed is adjusted automatically, thereby maintaining a comfortable room environment at all times. At the start of operation, a high fan speed realises quick heating/cooling of the room. Once the desired temperature is reached, the fan speed is reduced for stable heating/cooling and greater comfort.

Fan speed setting by remote controller (four levels)



*Special setting is required for wireless remote controller.

Quiet Operation

An improved airflow path and powerful high-capacity flow fan contribute to the realisation of quieter operation.



Power flow fan

“Pure White” Colour

Stylish, pure white-coloured panels and wired remote controller express a clean, streamlined image that is a suitable match for any interior.

Other Features

- Stylish indoor-unit vane covers (when unit is turned off)
- Maximum upward draining of 850mm
- Wireless remote controller available
- Duct flange for Fresh-air Intake
- Branch duct

Automatic Grille Lowering Function (Option)

Easy to use/Simple maintenance

An automatic grille lowering function capable of stopping at eight different heights is available to simplify filter maintenance.

Automatic elevation to four metres

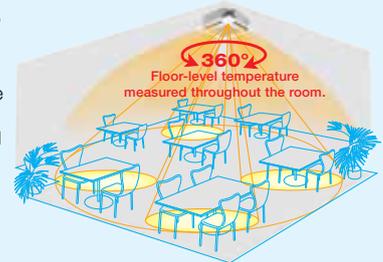
Elevating (up-down) controller

Wired remote controller (PAR-21MAA/PAR-30MAA) has automatic grille lowering function. This function is only available when indoor unit connects with PUHZ series.

PLA-RP71BA		PLA-RP100BA		PLA-RP125BA		PLA-RP140BA	
PUHZ-RP71VHA5		PUHZ-RP100V/YKA2		PUHZ-RP125V/YKA2		PUHZ-RP140V/YKA2	
Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
7.1 (3.3-8.1)	8.0 (3.5-10.2)	10.0 (4.9-11.4)	11.2 (4.5-14.0)	12.5 (5.5-14.0)	14.0 (5.0-16.0)	13.0 (6.2-15.3)	16.0 (5.7-18.0)
2.09	2.17	2.50	2.95	3.80	3.71	3.97	4.43
3.40	3.69	4.00	3.80	3.29	3.77	3.27	3.61
3.22	3.49	3.67/3.63	3.54/3.50	3.10/3.08	3.56/3.54	3.10/3.08	3.44/3.42
				4.13/4.05		3.95/3.89	
PLA-RP71BA		PLA-RP100BA		PLA-RP125BA		PLA-RP140BA	
V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V							
14-16-18-21		20-23-26-30		22-25-28-31		24-26-29-32	
233-267-300-350		334-384-434-501		367-417-467-517		400-434-484-534	
28-30-32-34		32-34-37-40		34-36-39-41		36-39-42-44	
Unit: 840, Panel: 950							
Unit: 840, Panel: 950							
Unit: 25, Panel: 6				Unit: 27, Panel: 6			

4-way cassettes can be equipped with the i-see Sensor, a radiation-based sensor that monitors floor-level temperatures throughout the room to ensure room comfort.

i-see Sensor works to ensure even temperature distribution and save energy (requires optional corner panel)



i-see Sensor improves energy efficiency and enhances room comfort

The i-see Sensor is an innovative Mitsubishi Electric technology that uses a radiation-based sensor to monitor temperature throughout the entire room. When connected to the air conditioner control panel, i-see Sensor works to maximise room comfort through 360° sensing that covers the whole floor space.

i-see Sensor Operation

The i-see Sensor rotates 90° and takes 5-second measurements to accurately determine floor-level temperatures on all sides of the room.

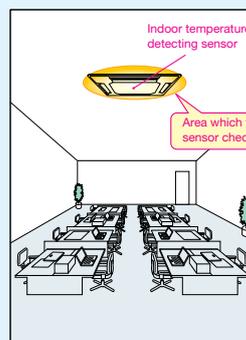
- The i-see Sensor calculates the temperature by measuring the infrared rays emanating from the walls and floors, and measuring the floor-level temperature.
- The sensor rotates 360-degrees once every two minutes when there is significant temperature disparity and once every five minutes when a stable, even temperature has been reached.

“I Feel” Temperature Control

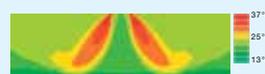
The sensory temperature is calculated by measuring the air-intake temperature and the floor temperature. This technology makes it possible to avoid overcooling or overheating.

Without i-see Sensor

Only intake-air temperature at the ceiling is measured, resulting in uneven temperature distribution.

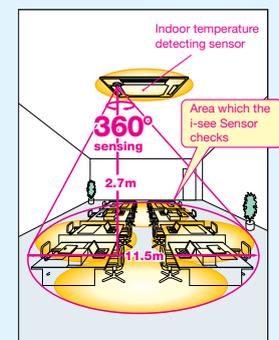


Heating
Set temperature: 23°C
without i-see Sensor



With i-see Sensor

Both floor-level and intake-air temperatures are measured, providing operation that creates a comfortable room environment from ceiling to floor.



Heating
Set temperature: 20°C
with i-see Sensor + Auto Fan Speed



PEAD SERIES

NEW



PEAD-RP71/100/125/140JAA



optional

The thin, ceiling-concealed indoor units of the PEAD series are the perfect answer for the air conditioning requirements of buildings with minimum ceiling installation space and wide-ranging external static pressure. Energy-saving efficiency has been improved, thereby reducing electricity consumption and contributing to a further reduction in operating cost.

Compact Indoor Units

The height of the PEAD (7.1kW-14.0kW) models has been unified to 250mm. Compared to the previous PEA-RP models, the height has been reduced by as much as 178mm, making installation possible in low ceilings with minimal clearance space.



Lighter Weight

Compared to the previous PEA-RP•EAQ (7.1kW-14.0kW) models, unit weight has been reduced by an average of 27kg. This significant weight reduction has led to increased ease of installation.

Wide Selection of Fan Speeds and External Static Pressure

Five-stage external static pressure conversions and three fan speed selections are available. Capable of being set to a maximum of 125Pa, units are applicable to a wide range of building types.

High Energy-Saving Efficiency

Compared to the previous PEA-RP•EAQ (7.1kW-14.0kW) models, PEAD-RP models achieve enhanced energy savings through adopting a highly efficient DC fan motor. This contributes to an impressive reduction in electricity costs.

Capacity	Rated EER/COP	PEA-RP	PEAD-RP	
7.1kW	Rated EER	2.86	3.50	< 22% UP
	Rated COP	3.35	4.00	< 19% UP
10.0kW	Rated EER	3.28	3.61	< 10% UP
	Rated COP	3.54	4.12	< 16% UP
12.5kW	Rated EER	2.95	3.33	< 13% UP
	Rated COP	3.64	4.00	< 10% UP
14.0kW	Rated EER	2.90	3.32	< 14% UP
	Rated COP	3.74	3.96	< 6% UP

Specifications: Ceiling-concealed (PEAD)													
Indoor unit		PEAD-RP71JAA		PEAD-RP71JAA		PEAD-RP100JAA		PEAD-RP125JAA		PEAD-RP140JAA			
Outdoor unit		SUZ-KA71VA3		PUHZ-RP71VHA5		PUHZ-RP100V/YKA2		PUHZ-RP125V/YKA2		PUHZ-RP140V/YKA2			
Function		Cooling		Heating		Cooling		Heating		Cooling		Heating	
Capacity (min.-max.)	(kW)	7.1 (0.9-8.1)	8.0 (0.9-10.2)	7.1 (3.3-8.1)	8.0 (3.5-10.2)	10.0 (4.9-11.4)	11.2 (4.5-14.0)	12.0 (5.5-14.0)	14.0 (5.0-16.0)	13.0 (6.2-15.3)	16.0 (5.7-18.0)		
Input	(kW)	2.10	2.04	2.03	2.00	2.77	2.72	3.60	3.50	3.91	4.04		
Rated EER/COP		3.38	3.92	3.50	4.00	3.61	4.12	3.33	4.00	3.32	3.96		
Rated AEER/ACOP		3.33	3.86	3.31	3.78	3.34/3.31	3.81/3.78	3.14/3.11	3.76/3.74	3.09/3.07	3.76/3.73		
AEER/ACOP (part-load %)*										3.68/3.63			
Indoor unit		PEAD-RP71JAA		PEAD-RP71JAA		PEAD-RP100JAA		PEAD-RP125JAA		PEAD-RP140JAA			
Power supply		V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V											
Airflow	CMM	17.5-21-25				24-29-34		29.5-35.5-42		32-39-46			
	L/S	292-350-417				400-483-567		492-592-700		533-650-767			
External static pressure Pa		35/50/70/100/125											
Sound pressure level	(dB)	30-34-39				33-38-42		36-40-44		40-44-49			
Return air spigot size	(mm)	1,058×210				1,358×210		1,358×210		1,558×210			
Supply air spigot size	(mm)	1,060×178				1,360×178		1,360×178		1,560×178			
Dimensions	Height	250											
	Width	1,100				1,400				1,600			
	Depth					732							
Weight	(kg)	29				38		39		43			

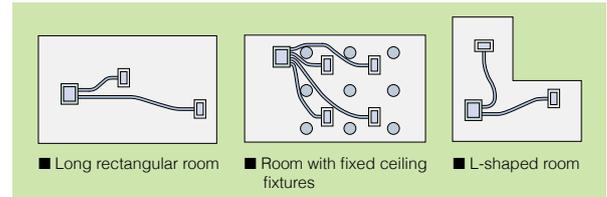
* MEPS compliant at part load

PEA SERIES

For elegance and style, the PEA series complements the room environment with aesthetically pleasing ceiling installation and a vast line-up of performance functions.

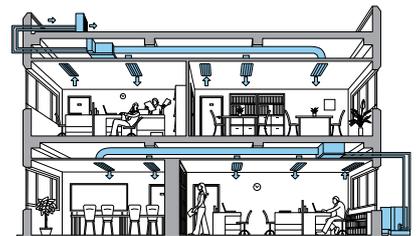
Freedom in Installation

Versatile and easy installation is possible; for example, it is possible to adjust the distance between the air-intake and air-outlet vents to create the optimal airflow configuration.



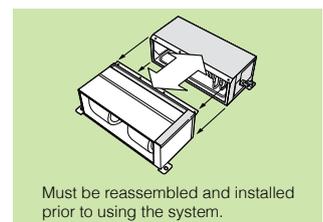
Flexible Duct Design Enables Use of High-pressure Static Fan

A flexible duct design and 150Pa external static high-pressure are incorporated. The increased variation in airflow options ensures operation that best matches virtually all room layouts.



Easier Handling

The new ducted fan coil unit (PEA-RP140/170/200WJA) now has a two-piece construction. This allows separation of the indoor unit heat exchanger and the fan deck assembly for easier handling into the roof space.



Computerised Dehumidification

The fan speed is controlled electronically in dehumidifying mode, increasing the range and efficiency of dehumidification.



PEA-RP140/170/200WJA



Specifications: Ceiling-concealed (PEA)									
Indoor unit		PEA-RP140WJA		PEA-RP170WJA		PEA-RP200WJA			
Outdoor unit		PUHZ-RP140V/YKA2		PUHZ-RP170V/YKA2		PUHZ-RP200YKA2			
Function		Cooling		Heating		Cooling		Heating	
Capacity (min.-max.)	(kW)	14.0 (6.2-15.3)	16.0 (5.7-18.0)	16.0 (9.0-20.0)	20.0 (9.5-22.4)	18.9 (9.0-22.4)	22.4 (9.5-25.0)		
Input	(kW)	4.35	4.04	5.00	6.00	5.92	6.89		
Rated EER/COP*1		3.22	3.96	3.20	3.33	3.19	3.25		
Rated AEER/ACOP		3.12/3.10	3.76/3.73	3.16/3.11	3.22/3.18	3.04	3.12		
AEER/ACOP (part-load %)*2						3.71			
Indoor unit		PEA-RP140WJA		PEA-RP170WJA		PEA-RP200WJA			
Power supply		V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V							
Airflow	CMM	50-61-72							
	L/S	833-1,017-1,200							
External static pressure Pa		60/75/100/150							
Sound pressure level*3	(dB)	38-41-44							
Return air spigot size		1,100x420							
Supply air spigot size		1,100x340							
Dimensions	Height	(mm) 470							
	Width	(mm) 1,370							
	Depth	(mm) 1,120							
Weight	(kg)	108							

*1 Rated EER/COP for PEA-RP170/200WJA are measured at ESP 75 Pa.
 *2 MEPS compliant at part load
 *3 Sound pressure level for PEA-RP140/170/200WJA are measured in anechoic chamber at ESP 150 Pa.

PCA SERIES

A stylish indoor unit design and airflow settings for both high- and low-ceiling interiors expand installation possibilities

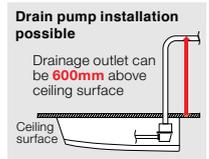
Stylish Indoor Unit Design

A stylish square-like design is adopted for the indoor units of all models. As a result, the units blend in better with the ceiling.



Optional Drain Pump for Full-capacity Models

The pumping height of the optional drain pump has been increased from 400mm to 600mm, expanding flexibility in choosing unit location during installation work.



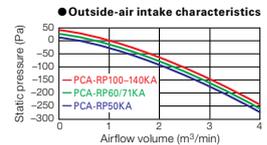
Equipped with Automatic Air-speed Adjustment

In addition to the conventional 4-speed setting, 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.



Fresh Outside-air Intake

Units are equipped with a knock-out hole that enables the induction of fresh outside-air.



Equipped with High- /Low-ceiling Modes

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

Capacity	High ceiling	Standard ceiling	Low ceiling
50	3.5m	2.7m	2.5m
60	3.5m	2.7m	2.5m
71	3.5m	2.7m	2.5m
100	4.2m	3.0m	2.6m
125	4.2m	3.0m	2.6m
140	4.2m	3.0m	2.6m



PCA-RP50/60/71/100/125/140KAQ



Specifications: Ceiling-suspended (PCA)																	
Indoor unit		PCA-RP50KAQ		PCA-RP60KAQ		PCA-RP71KAQ		PCA-RP71KAQ		PCA-RP100KAQ		PCA-RP125KAQ		PCA-RP140KAQ			
Outdoor unit		SUZ-KA50VA3		SUZ-KA60VA3		SUZ-KA71VA3		PUHZ-RP71VHA5		PUHZ-RP100V/YKA2		PUHZ-RP125V/YKA2		PUHZ-RP140V/YKA2			
Function		Cooling		Heating		Cooling		Heating		Cooling		Heating		Cooling		Heating	
Capacity (min.-max.)	(kW)	4.9 (1.1-5.6)	5.5 (0.9-6.6)	5.7 (1.1-6.3)	6.9 (0.9-8.0)	7.1 (0.9-8.1)	7.9 (0.9-10.2)	7.1 (3.3-8.1)	8.0 (3.5-10.2)	10.0 (4.9-11.4)	11.2 (4.5-14.0)	12.0 (5.5-14.0)	14.0 (5.0-16.0)	13.0 (6.2-15.3)	16.0 (5.7-18.0)		
Input	(kW)	1.49	1.68	1.67	2.02	2.06	1.96	1.96	2.21	2.63	3.02	3.66	3.88	3.97	4.43		
Rated EER/COP		3.29	3.27	3.41	3.42	3.45	4.03	3.62	3.62	3.80	3.71	3.28	3.61	3.27	3.61		
Rated AEER/ACOP		3.22	3.22	3.35	3.36	3.39	3.96	3.42	3.44	3.50/3.47	3.46/3.43	3.09/3.07	3.41/3.39	3.10/3.08	3.41/3.39		
AEER/ACOP (part-load %)*												4.19/4.11	3.91/3.85				
Indoor unit		PCA-RP50KAQ		PCA-RP60KAQ		PCA-RP71KAQ		PCA-RP71KAQ		PCA-RP100KAQ		PCA-RP125KAQ		PCA-RP140KAQ			
Power supply		V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V															
Airflow (Lo-Mid-Mid-Hi)	CMM	10-11-13-15		15-16-17-19		16-17-18-20		22-24-26-28		23-25-27-29		24-26-29-32					
	L/S	167-183-217-250		250-267-283-317		267-283-300-333		367-400-433-467		383-417-450-483		400-433-483-533					
Sound pressure level	(dB)	32-34-37-40		33-35-37-40		35-37-39-41		37-39-41-43		39-41-43-45		41-43-45-48					
Dimensions	Height	230															
	Width	960		1,280				1,600									
	Depth	680															
Weight	(kg)	25		32				36		38		39					

* MEPS compliant at part load

PKA SERIES



PKA-RP71/100KAL



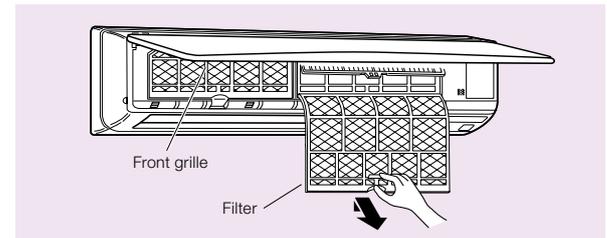
Elegant design and compact dimensions are ideal for offices, stores and residential-use

Auto-flap Shutter Enhances Good Looks

The Intake Grille Filter Can be Completely Removed Allowing Easy Cleaning

(Can be washed in water)

Filter slides out



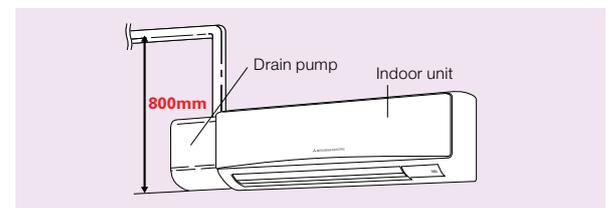
4-way Piping Provides More Flexibility in Selecting Installation Sites

Wired Remote Controller Available (Option)

A separately sold wired remote controller and a terminal block are available to suit various installation sites.

Drain Pump Option Available with All Models

Installation of the drain pump enables a drain outlet as high as 800mm above the base of the indoor unit. Drain water can be discharged easily even if the surface where the wall-mounted unit does not have direct access outside, increasing the degree of freedom for installation.



Specifications: Wall-mounted (PKA)					
Indoor unit		PKA-RP71KAL		PKA-RP100KAL	
Outdoor unit		PUHZ-RP71VHA5		PUHZ-RP100V/YKA2	
Function		Cooling	Heating	Cooling	Heating
Capacity (min.-max.) (kW)		7.1 (3.3-8.1)	8.0 (3.5-10.2)	10.0 (4.9-11.4)	11.2 (4.5-14.0)
Input (kW)		1.96	2.13	2.90	3.10
Rated EER/COP		3.62	3.76	3.45	3.61
Rated AEEER/ACOP		3.42	3.56	3.20/3.17	3.34/3.31
Indoor unit		PKA-RP71KAL		PKA-RP100KAL	
Power supply		V: Single-phase, 50Hz, 230V		Y: Three-phase, 50Hz, 400V	
Airflow (Lo-Mid-Hi)		CMM		20-23-26	
		L/S		333-383-433	
Sound pressure level (dB)		39-42-45		41-45-49	
Dimensions		Height (mm)		365	
		Width (mm)		1,170	
		Depth (mm)		295	
Weight (kg)		21			

SLZ SEZ SERIES

Compact, quiet concealed indoor units equipped with cutting-edge control technologies for enhanced comfort

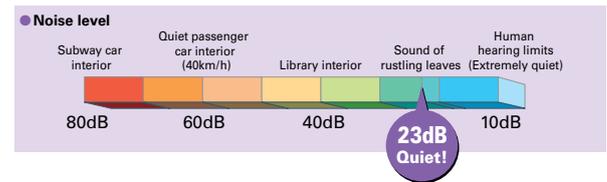
Compact Designs

Models with capacity ranges for any room size. The dimensions of the SLZ are perfect for 2-metre-square installations, and the SEZ unit is a slim 200mm in height, making it ideal for tight installation spaces.



Impressively Quiet

S series units offer quiet operation at a hushed noise level of 23dB (SEZ-KD25/35), ensuring a calm and comfortable environment. They're so quiet that you'll find yourself checking to see if they're on.



Energy-saving Operation

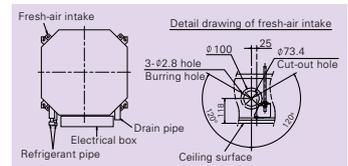
Boasting low electricity consumption, SLZ/SEZ series air conditioners are the key to fresh, cost-effective room comfort.

Air Cleaning Filter

This built-in filter removes dust and other particles, keeping the air clean all the time. Maintenance is as simple as vacuuming. The long-life filter in SLZ series air conditioners can be used for approximately 2,500 hours before requiring replacement.

Fresh-air Intake

A duct hole is provided in the main body, making it possible to intake fresh air from outside.



SEZ-KD25/35/50/60/71VAQ(L)

SLZ-KA25/50VAQ(L)

optional for SLZ/SEZ-VAQ

optional for SLZ/SEZ-VAQ

standard for SLZ-VAL standard for SEZ-VAL

Specifications: 4-way cassette / Compact ceiling-concealed (SLZ, SEZ)																
Indoor unit	SLZ-KA25VAQ(L)		SLZ-KA50VAQ(L)		SEZ-KD25VAQ(L)		SEZ-KD35VAQ(L)		SEZ-KD50VAQ(L)		SEZ-KD60VAQ(L)		SEZ-KD71VAQ(L)			
Outdoor unit	SUZ-KA25VA3				SUZ-KA50VA3				SUZ-KA25VA3				SUZ-KA35VA2			
Function	Cooling		Heating		Cooling		Heating		Cooling		Heating		Cooling		Heating	
Capacity (min.-max.) (kW)	2.3 (0.9-3.2)	3.1 (0.9-4.5)	4.2 (1.1-5.2)	4.5 (0.9-6.5)	2.5 (0.9-3.2)	3.0 (0.9-4.5)	3.7 (1.0-3.9)	4.2 (0.9-5.0)	5.1 (1.1-5.6)	6.4 (1.1-7.2)	5.6 (1.1-6.3)	7.4 (0.9-8.0)	6.5 (0.9-8.3)	8.1 (0.9-10.4)		
Input (kW)	0.6	0.82	1.27	1.37	0.75	0.83	1.09	1.13	1.64	1.81	1.77	2.05	2.06	2.18		
Rated EER/COP	3.83	3.78	3.31	3.28	3.33	3.61	3.39	3.72	3.11	3.54	3.16	3.61	3.16	3.72		
Rated AEER/ACOP	3.65	3.66	3.23	3.22	3.21	3.49	3.31	3.62	3.05	3.48	3.11	3.55	3.10	3.66		
AEER/ACOP (part-load %)*	4.32								3.72							
Indoor unit	SLZ-KA25VAQ(L)		SLZ-KA50VAQ(L)		SEZ-KD25VAQ(L)		SEZ-KD35VAQ(L)		SEZ-KD50VAQ(L)		SEZ-KD60VAQ(L)		SEZ-KD71VAQ(L)			
Power supply	V: Single-phase, 50Hz, 230V															
Airflow (Lo-Mid-Hi)	CMM	8-9-10		8-9-11		5.5-7.9		7-9-11		10-12.5-15		12-15-18		12-16-20		
	L/S	133-150-167		133-150-183		92-117-150		117-150-183		167-208-250		200-250-300		200-267-333		
External static pressure Pa	-															
Sound pressure level (dB)	28-31-37		30-34-39		23-26-30		23-28-33		30-34-37		30-34-38		30-35-40			
Supply air spigot size (mm)	-															
Dimensions	Height (mm)	Unit: 208, Panel: 20		200		200		200		200		200		200		
	Width (mm)	Unit: 570, Panel: 650		790		790		990		990		1,190		1,190		
	Depth (mm)	Unit: 570, Panel: 650		700		700		700		700		700		700		
	Weight (kg)	Unit: 16.5, Panel: 3		18		18		21		23		23		27		

* MEPS compliant at part load

Main features of Mr. Slim Inverter Units

Combination	Indoor unit	SLZ-VA	SLZ-VAL	SEZ-VA	SEZ-VAL	PLA		PEAD		PEA	PKA	PCA-KA	
	Outdoor unit	SUZ	SUZ	SUZ	SUZ	PUHZ	SUZ	PUHZ	SUZ	PUHZ	PUHZ	PUHZ	SUZ
Energy Saving	Felt Temperature Control (i-see Sensor)	—	—	—	—	Opt	Opt	—	—	—	—	—	—
Attractive	Pure White	●	●	—	—	●	●	—	—	—	●	●	●
	Auto Vane	●	●	—	—	●	●	—	—	—	●	●	●
Air Quality	Fresh-air Intake	●	●	—	—	●	●	—	—	—	—	●	●
	High-efficiency Filter	—	—	—	—	Opt	Opt	—	—	—	—	Opt	Opt
	Oil Mist Filter	—	—	—	—	—	—	—	—	—	—	—	—
	Long-life filter	●	●	—	—	●	●	●	●	—	—	●	●
	Filter Check Signal	●	—	—	—	●	●	●	●	—	Opt	●	●
Air Distribution	Horizontal Vane (Auto Swing)	●	●	—	—	●	●	—	—	—	●	●	●
	High Ceiling Mode	—	—	—	—	●	●	—	—	—	—	●	●
	Auto Fan Speed Mode	—	—	●	●	●	●	●	●	—	●	●	●
Convenience	On/Off Operation Timer	●	●	●	●	●	●	●	●	●	●	●	●
	Auto Change Over *1	●	●	●	●	●	●	●	●	●	●	●	●
	Auto Restart	●	●	●	●	●	●	●	●	●	●	●	●
	Low-temperature Cooling	●	●	●	●	●	●	●	●	●	●	●	●
	Low-noise Operation (Outdoor Unit)	—	—	—	—	●	—	●	—	●	●	●	—
	Rotation, Back-up and 2nd Stage Cut-in Function	—	—	—	—	●	—	●	—	—	Opt	●	—
System Control	PAR-21MAA Control *2	●	Opt	●	Opt	●	●	Opt	Opt	Opt	Opt	●	●
	Centralised On/Off Control *2	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	System Group Control *2	Opt	Opt	Opt	Opt	●	Opt	●	Opt	●	Opt	●	Opt
	M-NET Connection *2	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Installation	Reuse of Existing Wiring	—	—	—	—	Opt	—	Opt	—	—	Opt	Opt	—
	Drain Pump	●	●	Opt	Opt	●	●	—	—	—	Opt	Opt	Opt
	Pump Down Switch	—	—	—	—	●	—	●	—	●	●	●	—
	Flare Connection	●	●	●	●	●	●	●	●	●*3	●	●	●
Maintenance	Self-Diagnosis Function (Check Code Display)	●	●	●	●	●	●	●	●	●	●	●	●
	Failure Recall Function	●	●	●	●	●	●	●	●	●	●	●	●

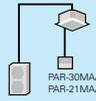
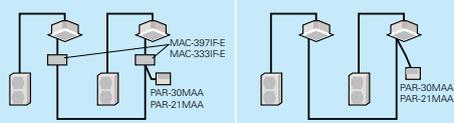
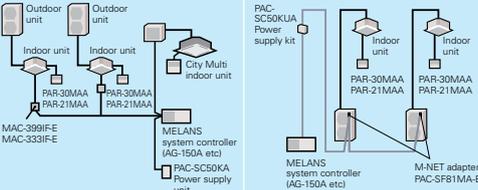
*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.

*2 Please refer "System Control" on page 21 for details.

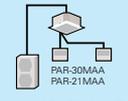
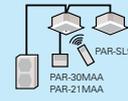
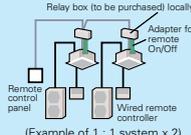
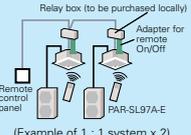
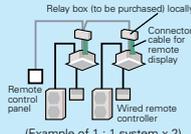
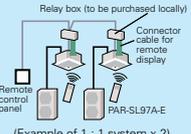
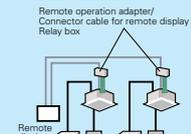
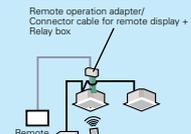
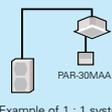
*3 Not available with PEA-RP140/170/200WJA models.

System Controls (SUZ and Mr. Slim Power Inverter only) Versatile system controls can be realised by using optional parts, relay circuits, control panels, etc.

MAJOR SYSTEM CONTROL

	System Examples		Details	Major Optional Parts Required
	Indoor Unit	Outdoor Unit		
	S Series & P Series Indoor Unit	P Series Indoor Unit		
	S Series Outdoor	P Series Outdoor		
A PAR-30MAA Control PAR-21MAA Control			Standard equipment (for indoor units compatible with wired remote controllers)	<ul style="list-style-type: none"> • PAR-30MAA (Wired remote controller) • PAR-21MAA (Wired remote controller)
B System Group Control			<ul style="list-style-type: none"> • One remote controller can control multiple air conditioners with the same settings simultaneously. • One remote controller can control up to 16 refrigerant systems. • Up to two remote controller can be connected. 	<p><S Series Outdoor Unit></p> <ul style="list-style-type: none"> • MAC-397IF-E/MAC-333IF-E (Interface) • PAR-30MAA (Wired remote controller) • PAR-21MAA (Wired remote controller) <p><P Series Outdoor Unit></p> <ul style="list-style-type: none"> • PAR-30MAA (Wired remote controller) • PAR-21MAA (Wired remote controller)
C M-NET Connections			<ul style="list-style-type: none"> • Group of air conditioners can be controlled by MELANS system controller (M-NET). 	<p><S Series Outdoor Unit></p> <ul style="list-style-type: none"> • MAC-399IF-E/MAC-333IF-E • MELANS System controller • PAC-SC50KUA (power supply unit) <p><P Series Outdoor Unit></p> <ul style="list-style-type: none"> • PAC-SF81MA-E (M-NET converter) • MELANS System controller • PAC-SC50KUA (power supply unit)

FOR P SERIES AND S SERIES INDOOR UNITS

	System Examples		Details	Major Optional Parts Required
	Wired remote controller	Wireless remote controller		
A 2-remote Controller Control With two remote controllers, control can be performed locally and remotely from two locations.	 <p>* Set "Main" and "Sub" remote controllers.</p> <p>(Example of 1 : 1 system)</p>	 <p>* When using wired and wireless remote controllers</p> <p>(Example of Simultaneous Twin)</p>	<ul style="list-style-type: none"> • Up to two remote controllers can be connected to one group. • Both wired and wireless remote controllers can be used in combination. 	<ul style="list-style-type: none"> • Wired Remote Controller PAR-30MAA PAR-21MAA (for PKA, PAC-SH29TC-E is required) • Wireless Remote Controller PAR-SL97A-E (for SEZ and PEAD) • Wireless Remote Controller Kit for PCA PAR-SL94B-E
B Operation Control by Level Signal Air conditioner can be started/stopped remotely. In addition, On/Off operation by local remote controller can be prohibited/permitted.	 <p>(Example of 1 : 1 system x 2)</p>	 <p>(Example of 1 : 1 system x 2)</p>	<ul style="list-style-type: none"> • Operation other than On/Off (e.g., adjustment of temperature, fan speed, and airflow) can be performed even when remote controller operation is prohibited. • Timer control is possible with an external timer. 	<ul style="list-style-type: none"> • Adapter for remote On/Off PAC-SE55RA-E • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
C Operation Control by Pulse Signal	 <p>(Example of 1 : 1 system x 2)</p>	 <p>(Example of 1 : 1 system x 2)</p>	<ul style="list-style-type: none"> • The pulse signal can be turned On/Off. • Operation/emergency signal can be received at a remote location. 	<ul style="list-style-type: none"> • Connector cable for remote display PAC-SA88HA-E / PAC-725AD (10 pcs. x PAC-SA88HA-E) • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
D Remote Display of Operating Status Operating status can be displayed at a remote location.	 <p>(Example of 1 : 1 system)</p>	 <p>(Example of Simultaneous Twin)</p>	<ul style="list-style-type: none"> • Operation/emergency signal can be received at a remote location (when channeled through the PAC-SF40RM → no-voltage signal, when channeled through the PAC-SA88HA-E → DC 12V signal). 	<ul style="list-style-type: none"> • Remote display panel (to be purchased locally) • Connector cable for remote display PAC-SA88HA-E / PAC-725AD (10 pcs. x PAC-SA88HA-E) • Relay box (to be purchased locally) • Remote operation adapter PAC-SF40RM <p>*Unable to use with wireless remote controller</p>
E Timer Operation Allows On/Off operation with timer * For control by an external timer, refer to [B] Operation Control by Level Signal.	 <p>(Example of 1 : 1 system)</p>		<ul style="list-style-type: none"> • Weekly Timer: On/Off and up to 8 pattern temperatures can be set for each calendar day. (Initial setting) • On/Off Timer: On/Off can be set once each within 72 hr in intervals of 5-minute units. • Auto-off Timer: Operation will be switched off after a certain time elapse. Set time can be changed from 30 min. to 4 hr. at 10 min. intervals. <p>*Simple Timer and Auto-off Timer cannot be used at the same time.</p>	Standard functions of PAR-30MAA

Specification: Outdoor Unit

Outdoor unit						
	SUZ-KA25VA3	SUZ-KA35VA2	SUZ-KA50VA3	SUZ-KA60VA3	SUZ-KA71VA3	
External finish	Munsell 3.0Y 7.8/1.1					
Power supply	Single-phase, 50Hz, 230V					
Compressor output (kW)	0.55	0.65	0.85	0.9	1.2	
Airflow (cooling/heating) CMM (L/S)	34 (568)/32 (534)	33 (551)	49 (818)	51 (850)/49 (816)	50 (835)/48 (800)	
Sound pressure level (dB)	Cooling mode	46	47	53	55	
	Heating mode	46	48	55	55	
Sound level (dB)	59	61	68	69		
Dimensions	Height (mm)	550		850	880	
	Width (mm)	800		840	840	
	Depth (mm)	285		330	330	
Weight (kg)	30	33	53	50	53	
Chargeless piping length (m)	7					
Max. piping length (m)	20			30		
Breaker size (A)	10			20		

*Above specifications are for outdoor units only.

Outdoor unit					
	PUHZ-RP71VHA5	PUHZ-RP100V/YKA2	PUHZ-RP125V/YKA2	PUHZ-RP140V/YKA2	
External finish	Munsell 3.0Y 7.8/1.1				
Power supply	V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V				
Compressor output (kW)	1.6	1.9	2.4	2.9	
Airflow (cooling/heating) CMM (L/S)	60 (1,000)	110 (1,830)	120 (2,000)		
Sound pressure level (dB)	Cooling mode	47	49	50	50
	Silent mode	44	46	47	47
	Heating mode	48	51	52	52
Sound level (dB)	66	69	70	70	
Dimensions	Height (mm)	943	1,338		
	Width (mm)	950	1,050		
	Depth (mm)	330	330		
Weight (kg)	67	V: 118 Y: 119		V: 120 Y: 121	
Chargeless piping length (m)	30	30			
Max. piping length (m)	50	75			
Protection device	Discharge thermo, HP switch				
Rated running current (cooling/heating) (A)	9.05/9.64	V: 12.64/13.58 Y: 4.42/4.75	V: 16.36/16.90 Y: 5.73/5.91	V: 17.17/19.23 Y: 6.01/6.73	
Breaker size (A)	25	V: 32 Y: 16		V: 40 Y: 16	

*Above specifications are for outdoor units only.

Specifications: Outdoor Unit

Outdoor unit				PUHZ-RP170V/YKA2	PUHZ-RP200YKA2
				Munsell 3.0Y 7.8/1.1	
External finish		Munsell 3.0Y 7.8/1.1			
Power supply		V: Single-phase, 50Hz, 230V Y: Three-phase, 50Hz, 400V			
Compressor output (kW)		3.0		3.6	
Airflow (cooling/heating) CMM (L/S)		140 (2,330)			
Sound pressure level (dB)	Cooling mode	58			
	Silent mode	56			
	Heating mode	59			
Sound level (dB)		76			
Dimensions	Height (mm)	1,338			
	Width (mm)	1,050			
	Depth (mm)	330			
Weight (kg)		V: 127 Y: 131		136	
Chargeless piping length (m)		30			
Max. piping length (m)		75			
Protection device		Discharge thermo, HP switch			
Rated running current (cooling/heating) (A)		V: 19.4/23.9 Y: 6.8/8.3		8.2/9.7	
Breaker size (A)		V: 40 Y: 32		32	

*Above specifications are for outdoor units only.

Notes for All Specifications

Rating conditions (AS/NZS 3823)
 Cooling - Indoor: 27°C (80°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
 Refrigerant piping length (one-way): 5m (16ft.)

Total input based on the indicated voltage (indoor/outdoor)

	Indoor	Outdoor
50Hz	Single-phase, 230V	Single-phase, 230V/Three-phase, 400V

Guaranteed Operating Range

		SUZ-KA		PUHZ
		25/35	50/60/71	71/100/125/140/170/200
Cooling	Upper limit (DB)	46°C	43°C	46°C
	Lower limit (DB)	-10°C	-15°C	-5°C (-15°C*)
Heating	Upper limit (DB)	24°C	24°C	21°C
	Lower limit (DB)	-15°C	-15°C	-20°C

* With the optional air protection guide, the operation at -15°C outdoor temperature is possible.

Sound Pressure Level

- Sound pressure measurements were conducted in an anechoic chamber.
- The actual noise level depends on the distance from the unit and the acoustic environment.

Optional Parts

Part name	Model name	Application name
Air discharge guide	PAC-SG59SG-E	PUHZ-RP71
	PAC-SH96SG-E	PUHZ-RP100/125/140/170/200
Air outlet shutter plate	PAC-SH51SP-E	PLA-RP
Air protection guide	PAC-SH63AG-E	PUHZ-RP71
	PAC-SH95AG-E	PUHZ-RP100/125/140/170/200
Control/service tool	PAC-SK52ST	PUHZ-RP71/100/125/140/170/200
Centralized drain pan	PAC-SG64DP-E	PUHZ-RP71
	PAC-SH97DP-E	PUHZ-RP100/125/140/170/200
Drain pump	PAC-SH94DM-E	PKA-RP
	PAC-SH83DM-E	PCA-RP50KAQ
	PAC-SH84DM-E	PCA-RP71/100/125/140KAQ
	PAC-SH85DM-E	PCA-RP60KAQ
	PAC-KE07DM-E	SEZ-KD
Drain socket	PAC-SG61DS-E	PUHZ-RP71/100/125/140/170/200
Flange for fresh-air intake	PAC-SH65OF-E	PLA-RP
Liquid refrigerant dryer for pipe ø9.52	PAC-SG82DR-E	PUHZ-RP
MA & Contact terminal interface	MAC-397IF-E	SLZ-KA, SEZ-KD, PLA-RP60/71 ^{*1} PEAD-RP71 ^{*1} , PCA-RP50/60/71 ^{*1}
M-NET interface	MAC-399IF-E	SLZ-KA, SEZ-KD, PLA-RP60/71 ^{*1} PEAD-RP71 ^{*1} , PCA-RP50/60/71 ^{*1}
M-NET & Terminal interface	MAC-333IF-E	SLZ-KA, SEZ-KD, PLA-RP60/71 ^{*1} PEAD-RP71 ^{*1} , PCA-RP50/60/71 ^{*1}
Wireless remote controller	PAR-FL32MA-E	PEAD-RP
Wireless remote controller signal sender	PAR-SL97A-E	SEZ-KD, PLA-RP
Wireless remote controller signal receiver	PAR-SA9CA-E	SEZ-KD, PEAD-RP
	PAR-SA9FA-E	PLA-RP
High efficiency filter	PAC-SH88KF-E	PCA-RP50KAQ
	PAC-SH89KF-E	PCA-RP60/71KAQ
	PAC-SH90KF-E	PCA-RP100/125/140KAQ

Part name	Model name	Application name
High efficiency filter element	PAC-SH59KF-E	PLA-RP
Filter box	PAC-KE93TB-E	PEAD-RP71
	PAC-KE94TB-E	PEAD-RP100/125
	PAC-KE95TB-E	PEAD-RP140
i-see sensor corner panel	PAC-SA1ME-E	PLA-RP
Shutter plate	PAC-SH51SP-E	PLA-RP
Joint pipe 9.52→12.7 15.88→19.05	PAC-SG73RJ-E	PUHZ-RP71/100/125/140/170/200
	PAC-SG75RJ-E	PUHZ-RP71/100/125/140
M-NET converter	PAC-SF81MA-E	PUHZ-RP71/100/125/140/170/200
Multi-function casement	PAC-SH53TM-E	PLA-RP
Power supply terminal kit	PAC-SG94HR-E	PKA-RP
	PAC-SG96HR-E	PCA-RP50/60/71/100/125/140KAQ
	PAC-SG97HR-E	PEAD-RP
	PAC-SH52HR-E	PLA-RP
Remote On/Off adaptor	PAC-SE55RA-E	All indoor units
Remote operation adaptor	PAC-SF40RM-E	All indoor units ^{*2} (excluding PKA-RP)
Remote sensor	PAC-SE41TS-E	All indoor units
Space panel	PAC-SH48AS-E	PLA-RP
Terminal block	PAC-SH29TC-E	PKA-RP for wired remote controller
Connector cable for remote display	PAC-SA88HA-E	All indoor units
Wired remote controller	PAR-30MAA	All indoor units (excluding SLZ-VAL and SEZ-VAL)
	PAR-21MAA	All indoor units (excluding SLZ-VAL and SEZ-VAL)
Wireless remote controller kit (Sender & Receiver)	PAR-SL94B-E	PCA-RP
Power supply unit	PAC-SC50KUA	All outdoor units
Multiple remote controller adaptor	PAC-725AD	All indoor units

*1 P series indoor units can be used in combination with SUZ outdoor units.

*2 Unable to use with wireless remote controller

Refrigerant Piping

Capacity	Between indoor & outdoor units		Pipe size OD (mm)	Thickness (mm)
	Max. height difference (m)	Max. piping length (m)		
SUZ-KA25	12	20	Liquid: ø6.35	t 0.8
			Gas: ø9.52	t 0.8
SUZ-KA35	12	20	Liquid: ø6.35	t 0.8
			Gas: ø9.52	t 0.8
SUZ-KA50	30	30	Liquid: ø6.35	t 0.8
			Gas: ø12.7	t 0.8
SUZ-KA60	30	30	Liquid: ø6.35	t 0.8
			Gas: ø15.88	t 1.0
SUZ-KA71	30	30	Liquid: ø9.52	t 0.8
			Gas: ø15.88	t 1.0
PUHZ-RP71	30	50	Liquid: ø9.52	t 0.8
			Gas: ø15.88	t 1.0
PUHZ-RP100/125/140	30	75	Liquid: ø9.52	t 0.8
			Gas: ø15.88	t 1.0
PUHZ-RP170/200	30	75	Liquid: ø9.52	t 0.8
			Gas: ø25.4	t 1.0

Amount of Necessary Refrigerant (R410A: kg)

Piping length	Factory charged	Additional charged					Calculation
	7m	10m	15m	20m	25m	30m	
SUZ-KA25	0.8	0.15	0.3	0.45	—	—	Xg=30g/m×(length-5)m
SUZ-KA35	1.05	0.15	0.3	0.45	—	—	
SUZ-KA50	1.6	0.06	0.16	0.26	0.36	0.46	Xg=20g/m×(length-7)m
SUZ-KA60	1.8	0.06	0.16	0.26	0.36	0.46	
SUZ-KA71	1.8	0.165	0.44	0.715	0.99	1.265	Xg=55g/m×(length-7)m

Piping length	Factory charged	Additional charged			
	10 - 30m	31 - 40m	41 - 50m	51 - 60m	61 - 75m
PUHZ-RP71	3.5	0.6	1.2	—	—
PUHZ-RP100/125/140	5.5	0.6	1.2	1.8	2.4

Piping length	Factory charged	Additional charged			
	10 - 30m	31 - 40m	41 - 50m	51 - 60m	61 - 70m
PUHZ-RP170/200	7.7	0.9	1.8	2.7	3.6

⚠ NOTICE

- Air conditioners in this brochure contain and operate with refrigerant R410A and synthetic oils.

Before attempting any installation work you must read the installation instructions.

New tools, materials and procedures are required to install these products.

Under Australian Law, only persons suitably licensed are permitted to install and service air conditioning units.

Refer to Country, Commonwealth, State or Territory legislation, regulations and industry codes of practice, before installation of these products.

Recovery and disposal of waste material must comply with Country, Commonwealth, State or Territory guidelines.

- Do not install indoor units in areas (e.g., mobile phone base stations) where the emission of VOCs such as phthalate compounds and formaldehyde is known to be high as this may result in a chemical reaction.
- When installing or relocating or servicing the air conditioners, use only the specified refrigerant (R410A) to charge the refrigerant lines.

Do not mix it with any other refrigerant and do not allow air to remain in the lines.

If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant lines, and may result in an explosion and other hazards.

The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

Warm, even heat in winter and cool comfort in summer is only a phone call or click away.

Simply contact your nearest Mitsubishi Electric Specialist today and you can find out all there is to know about how to enhance your living environment. Our specialists are fully qualified to give you all the right advice on which Mitsubishi Electric Air Conditioning System is right for you.

To locate your nearest Mitsubishi Electric Specialist go to our website

<http://www.MitsubishiElectric.com.au>

They will determine whether a Compact Inverter System or a Power Inverter System best suits your needs, both in comfort and efficiency. You can either visit one of our Specialist's Showrooms, or they will happily arrange for one of their Consultants to come to your home.

All Mitsubishi Electric Compact and Power Inverter Systems are MEPS (Minimum Efficiency Performance Standard) Compliant, so you can be sure that they will give you the performance and efficiency that they were designed to deliver.



Products in this brochure contain R410A refrigerant. Please refer to installation instructions before installation or servicing of these products. Only licensed persons and companies qualified and experienced in the installation, service and repair of products containing refrigerants should be permitted to do so. The buyer must ensure that the person and/or company who is to install, service or repair the air conditioner has the necessary licences, qualifications and experience to perform the work. Suitable access for warranty and service is required. Refer to conditions of warranty on the Mitsubishi Electric website. For future improvement, specifications, designs of product and availability are subject to change without notice. Please check with your dealer.



Mitsubishi Electric Shizuoka Works acquired ISO9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality warranties for the production of air conditioning equipment. The plant also acquired environmental management system standard ISO 14001 certification.



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