Ceiling cassette type

4-way airflow type PLFY-P VFM-E1

			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	Unit		Galvanized steel sheet					
(Munsell No.)	Panel		MUNSELL (1.0Y 9.2/0.2)					
Dimension	Unit	mm(in.)	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)					
H x W x D	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 press.	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 *2 (Lo-Mid-Hi)		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.

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 Remote Controller
Panel	SLP-2FA			
	SLP-2FAL	●		
	SLP-2FAE		●	
	SLP-2FALE	●	●	
	SLP-2FALM2	●		●
	SLP-2FALME2	●	●	●
Corner panel	PAR-SF9FA-E	●		
	PAC-SF1ME-E		●	

PLFY-P VEM-PA

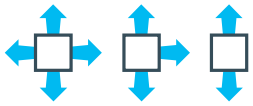
Optimum Airflow

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

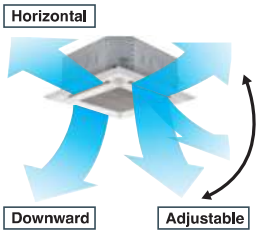
* Optional shuffle placement is required for 2- and 3-way patterns.



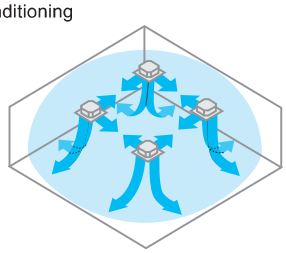
Individual Vane Angle Settings

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



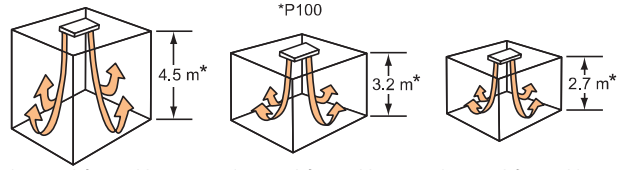
2-, 3-, 4-way Airflow Pattern Selection

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

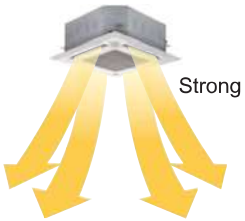
4-way airflow with low-ceiling setting

Airflow Range

Model / Airflow pattern	P32–P80			P100/P125		
	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.



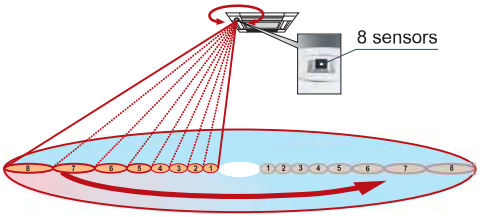
At the start of the heating / cooling operation, the airflow is set to high-speed to quickly heat / cool the room.

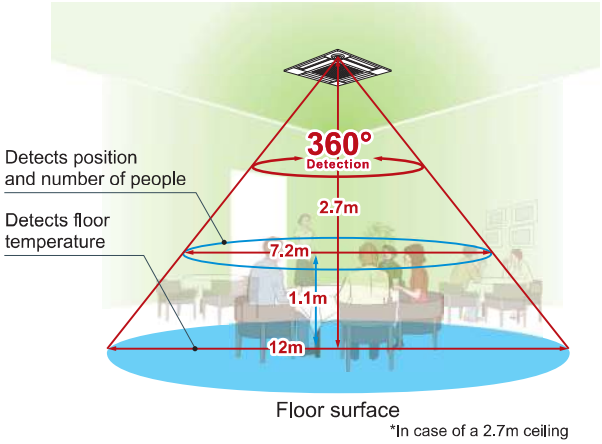
When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.

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.





*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.

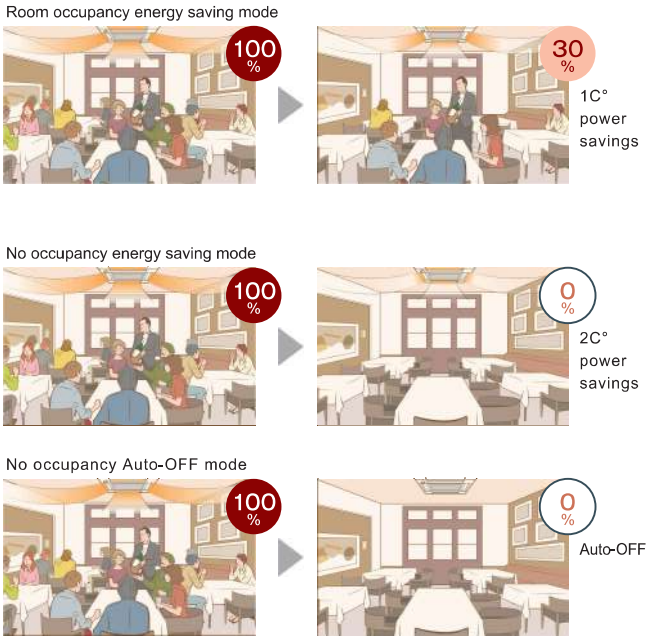
No occupancy energy-saving mode

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.

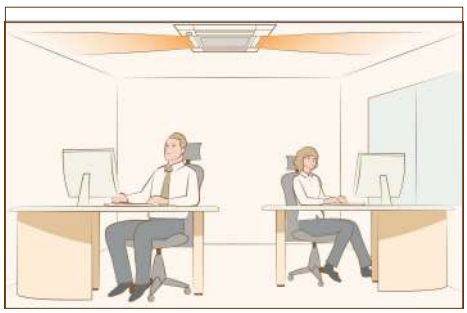


*PAR-40MAA is required for each setting.

• 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.

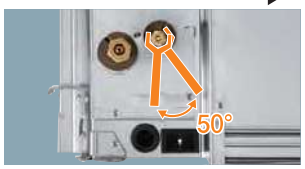
• Corner panel

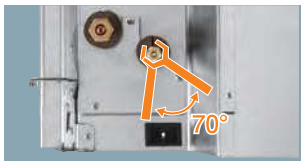
• Control box cover

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.

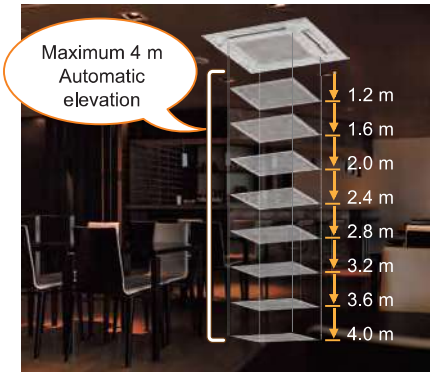
• PLFY-P VBM-E → • PLFY-P VEM-PA





Easy Cleaning

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



Optional Parts

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

Specifications

Model				PLFY-P32VEM-PA	PLFY-P40VEM-PA	PLFY-P50VEM-PA	PLFY-P63VEM-PA	PLFY-P80VEM-PA	PLFY-P100VEM-PA	PLFY-P125VEM-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	9.0	11.2	14.0
	*1		BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800
	Power input		kW	0.03	0.03	0.03	0.03	0.05	0.07	0.11
	Current input		A	0.32	0.32	0.32	0.36	0.50	0.67	1.06
Heating capacity	*2		kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	*2		BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
	Power input		kW	0.03	0.03	0.03	0.03	0.05	0.07	0.11
	Current input		A	0.25	0.25	0.25	0.29	0.43	0.60	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	19			21		24	
	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	15-18-20-23	20-23-26-29	24-26-30-35
			L/s	217-233-267-283	217-233-267-300	217-233-267-317	250-267-283-317	250-300-333-383	333-383-433-483	400-433-500-583
			cfm	459-494-565-600	459-494-565-636	459-494-565-671	530-565-600-671	530-636-706-812	706-812-918-1024	847-918-1060-1236
	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)	26-27-29-31	26-27-29-31	26-27-29-31	28-29-30-32	28-31-34-37	34-37-39-41	35-39-42-45
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)						

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.)