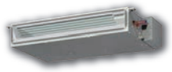
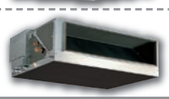
Indoor unit

- Ceiling cassette type 4-way airflow
- Ceiling cassette type 2-way airflow
- Ceiling cassette type 1-way airflow
- Ceiling concealed type
- Fresh Air Intake type
- Ceiling suspended type
- Wall mounted type
- Floor standing exposed
- Floor mounted concealed type
- BC controller
- Air to water unit
- Lossnay
- OA Processing Units

Wide Selection of Indoor Units

Type		Model name	Model	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
Ceiling Cassette	4-way air flow	PLFY-P VBM-E					■	■	■	■		■	■	■			
		PLFY-P VCM-E2		■	■	■	■	■									
	2-way air flow	PLFY-P VLMD-E			■	■	■	■	■	■		■	■	■			
	1-way air flow	PMFY-P VBM-E			■	■	■	■									
Ceiling Concealed		PEFY-P VMR-E-L/R			■	■	■										
		PEFY-P VMS1(L)-E		■	■	■	■	■	■	■							
		PEFY-P VMA(L)-E			■	■	■	■	■	■	■	■	■	■	■	■	
		PEFY-P VMH(S)-E						■	■	■	■	■	■	■	■	■	■
	Fresh Air Intake	PEFY-P VMH-E-F										■		■	■	■	■
Ceiling Suspended		PCFY-P VKM-E						■	■	■		■	■	■			
Wall Mounted		PKFY-P VBM-E		■	■	■											
		PKFY-P VHM-E					■	■	■	■							
		PKFY-P VKM-E								■			■				
Floor Standing/ Floor Mounted Concealed		PFFY-P VKM-E2			■	■	■	■									
		PFFY-P VLEM-E			■	■	■	■	■	■							
		PFFY-P VLRM-E PFFY-P VLRMM-E			■	■	■	■	■	■							

INDOOR UNIT
Ceiling cassette type 4-way airflow

PLFY-P VBM-E i-see Sensor
PLFY-P VCM-E2

PLFY-P VBM

PLFY-P VCM

The new 4-way cassette VBM offers 72 different airflow patterns, making it ideal for applications with ceilings up to 4.2 m (13-13/16ft) in height.

Automatic Air Speed Adjustment

Auto-fan-speed mode enables speedy and comfortable heating during heating startup.

The Auto-fan-speed mode is added to the usual four steps “Low, Mid1, Mid2, High.”
The Auto-fan-speed mode enables speedy and comfortable air conditioning because the air flow speeds up when starting, and air flow slows down when the air conditioning becomes stable. (PLFY-P VBM-E ONLY)

Controls the four fan speed modes automatically

Low ➡ Mid1 ➡ Mid2 ➡ High ➡ Auto

* When using a wireless remote controller, initial settings are required.

Draft-less Air Distribution

The horizontal blow mode* newly employed supplies airflow horizontally not bringing cooled/warmed air directly to occupants thus preventing discomfort sensation due to excessive cooling or direct exposing of occupants to the air blow.
(PLFY-P VBM-E ONLY)

*Default
*The ceiling may be smudged at a spot where the supplied airflow is seriously disturbed.

Wide Air Flow (PLFY-P VBM-E ONLY)

Cooling softly with Wide Air Flow

Discharge air reaches wider area and the fan speed is decreased by 20% thanks to the new wide shape air outlet.

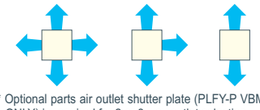
72 patterns of airflow to accommodate any room layout are available.

First in the industry
*On the commercial air conditioners (According to the survey by Mitsubishi Electric)

The number of outlet can be set to 4, 3, or 2. Flexible airflow is available by fixing the up-down airflow direction of the outlet with a wired remote controller (or manually).

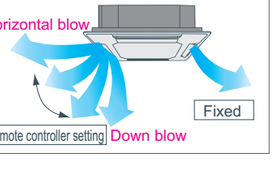
72 airflow patterns

4-, 3-, or 2- way outlet selection*

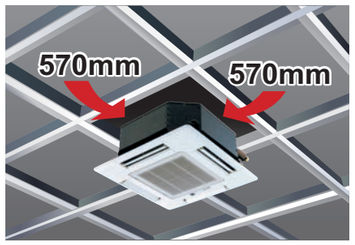


* Optional parts air outlet shutter plate (PLFY-P VBM-E ONLY) is required for 2 or 3 way outlet selection.

Setting the air direction for each outlet with wired remote controller



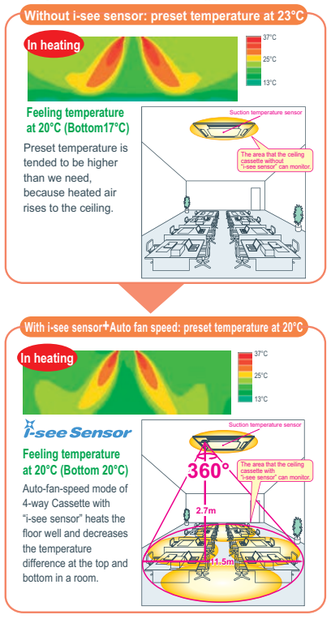
Compact body to match with 2 feets (600mm) x 2 feets (600mm) ceiling design (VCM)



“i-see sensor” can be used with ceiling cassette type 4-way airflow unit. (Option PAC-SA1ME-E, PLFY-VBM-E ONLY)

New 4-way Cassette PLFY-VBM controls the temperature difference at the top and bottom in a room by checking the floor temperature with “i-see sensor”. Comfortable air conditioning can be realized smoothly with “sensible temperature control.” (Option PAC-SA1ME-E, PLFY-VBM-E ONLY)

Prevents overcooling/overheating, and improves comfort/energy-efficiency



▸Specifications

			PLFY-P32VBM-E	PLFY-P40VBM-E	PLFY-P50VBM-E	PLFY-P63VBM-E	PLFY-P80VBM-E	PLFY-P100VBM-E	PLFY-P125VBM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 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
Heating capacity	*1	kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	*1	BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling	kW	0.03	0.04		0.05	0.07	0.15	0.16
	Heating	kW	0.02	0.03		0.04	0.06	0.14	0.15
Current	Cooling	A	0.22	0.29		0.36	0.51	1.00	1.07
	Heating	A	0.14	0.22		0.29	0.43	0.94	1.00
External finish (Munsell No.)	Unit		Galvanized steel sheet						
	Panel		White (6.4Y 8.9/0.4)						
Dimension H x W x D	Unit	mm(in.)	258 x 840 x 840 (10-3/16 x 33-8/1 x 33-8/1)					298 x 840 x 840 (11-3/4 x 33-1/8 x 33-1/8)	
	Panel	mm(in.)	35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)						
Net weight	Unit	kg(lbs.)	22 (49)			23 (51)		27 (60)	
	Panel	kg(lbs.)	6 (13)						
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type x Quantity		Turbo fan x 1						
	Airflow rate (Lo-Mid1-Mid2-Hi) *2	m³/min	11-12-13-14	12-13-14-16		14-15-16-18	16-18-20-22	21-24-27-29	22-25-28-30
		L/s	183-200-217-233	200-217-233-267		233-250-267-300	267-300-333-367	350-400-450-483	367-417-467-500
		cfm	388-424-459-494	424-459-494-565		494-530-565-636	565-636-706-777	742-848-953-1024	777-883-989-1059
	External static pressure	Pa	0						
Motor	Type		DC motor						
	Output	kW	0.050					0.120	
Air filter			PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)		ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)	ø15.88(ø5/8)		ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)		ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)	ø9.52 (ø3/8)			
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid1-Mid2-Hi) *2 *3		dB(A)	27-28-29-31	27-28-30-31		28-29-30-32	30-32-35-37	34-37-39-41	35-38-41-43

			PLFY-P15VCM-E2	PLFY-P20VCM-E2	PLFY-P25VCM-E2	PLFY-P32VCM-E2	PLFY-P40VCM-E2
Power source			1-phase 220-240V 50Hz				
Cooling capacity	*1	kW	1.7	2.2	2.8	3.6	4.5
	*1	BTU/h	5,800	7,500	9,600	12,300	15,400
Heating capacity	*1	kW	1.9	2.5	3,2	4.0	5.0
	*1	BTU/h	6,500	8,500	10,900	13,600	17,100
Power consumption	Cooling	kW	0.04	0.05	0.05	0.06	0.06
	Heating	kW	0.04	0.05	0.05	0.06	0.06
Current	Cooling	A	0.19	0.23	0.23	0.28	0.28
	Heating	A	0.19	0.23	0.23	0.28	0.28
External finish (Munsell No.)	Unit		Galvanized steel sheet with gray heat insulation				
	Panel		White (6.4Y 8.9/0.4)				
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.)	20 x 650 x 650 (13/16 x 25-5/8 x 25-5/8)				
Net weight	Unit	kg(lbs.)	15.5 (35)			17 (38)	
	Panel	kg(lbs.)	3 (7)			3 (7)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Turbo fan x 1				
	Airflow rate (Lo-Mid-Hi) *2	m³/min	8-8.5-9	8-9-10	8-9-10	8-9-11	8-9-11
		L/s	133-142-150	133-150-167	133-150-167	133-150-183	133-150-183
		cfm	283-300-353	283-318-353	283-318-353	283-318-388	283-318-388
	External static pressure	Pa	0				
Motor	Type		1-phase induction motor				
	Output	kW	0.008	0.011	0.015	0.02	0.02
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 *3		dB(A)	28-30-31	28-31-35	29-31-37	29-33-38	30-34-39

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-middle-high) or (low-middle1-middle2-high).

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

INDOOR UNIT
Ceiling cassette type 2-way airflow
PLFY-P VLMD-E

Slim body of 290mm(11-7/16in.) height

Equipped with drain pump mechanism as standard

The drain can be positioned anywhere up to 583mm(22-15/16in.) from the ceiling's surface, providing greater freedom with long cross-piping and allowing more versatility with piping layouts.

Compact unit and low noise level attained!

Sound pressure level table (Standard static pressure) at 0Pa

dB(A)

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

<220V,240V>

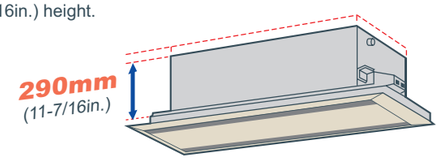
dB(A)

	Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Sound pressure Level	Fan Speed	High	34			37	38	40	40	43	46
		Mid	31			34	35	38	37	41	42/44
		Low	28			30	32	33	34	37	40

<230V>

Slim body - only 290mm(11-7/16in.) height

The slimline body is highly suitable for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The main unit is only 290mm(11-7/16in.) height.



Terminal block on outside of main unit makes wiring easier

Fresh air directly taken in

Fresh air can be taken in to the main unit directly (optional accessories needed.)

Long life filter equipped as standard

The antibacterial long life filter does not require maintenance for approximately a year.

Easy installation

Lighter panel and placing the electric board near the panel make installation and maintenance easier. Also, the heat exchanger is washable by displacing the center panel, filter, and fan.

▸Specifications

				PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 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	0.072 / 0.075	0.072 / 0.075	0.072 / 0.075	0.081 / 0.085
		Heating	kW	0.065 / 0.069	0.065 / 0.069	0.065 / 0.069	0.074 / 0.079
Current		Cooling	A	0.36 / 0.37	0.36 / 0.37	0.36 / 0.37	0.40 / 0.42
		Heating	A	0.30 / 0.32	0.30 / 0.32	0.30 / 0.32	0.34 / 0.37
External finish (Munsell No.)		Unit		Galvanized steel plate			
		Panel		Pure white (6.4Y 8.9/0.4)			
Dimension H x W x D		Unit	mm (in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)			
		Panel	mm (in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)			
Net weight		Unit	kg(lbs.)	23 (51)		24 (53)	
		Panel	kg(lbs.)	6.5 (15)			
Heat exchanger				Cross fin			
Fan	Type x Quantity			Turbo fan x 1			
	Airflow rate *2 (Lo-Mid-Hi)		m^3/min	6.5-8.0-9.5			7.0-8.5-10.5
			L/s	108-133-158			117-142-175
			cfm	230-283-335			247-300-371
	External static pressure		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.015 (at 240V)			
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)			
Sound pressure level (Lo-Mid-Hi)	220V,240V		dB(A)	27-30-33			29-33-36
	*2 *3	230V	dB(A)	28-31-34			30-34-37

				PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E	PLFY-P125VLMD-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz				
Cooling capacity	*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
Heating capacity	*1		kW	6.3	8.0	10.0	12.5	16.0
	*1		BTU/h	21,500	27,300	34,100	42,700	54,600
Power consumption		Cooling	kW	0.082 / 0.086	0.101 / 0.105	0.147 / 0.156	0.157 / 0.186	0.28 / 0.28
		Heating	kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180	0.27 / 0.27
Current		Cooling	A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88	1.35 / 1.35
		Heating	A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83	1.33 / 1.33
External finish (Munsell No.)		Unit		Galvanized steel plate				
		Panel		Pure white (6.4Y 8.9 / 0.4)				
Dimension H x W x D		Unit	mm (in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)		290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)		290 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)
		Panel	mm (in.)	20 x 1250 x 710 (13/16 x 49-1/4 x 28)		20 x 1750 x 710 (13/16 x 68-15/16 x 28)		20 x 2010 x 710 (13/16 x 79-3/16 x 28)
Net weight		Unit	kg(lbs.)	27 (60)	28 (62)	44 (98)	47 (104)	56 (124)
		Panel	kg(lbs.)	7.5 (17)		12.5 (28)		13.0 (29)
Heat exchanger				Cross fin				
Fan	Type x Quantity			Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4
	Airflow rate *2 (P50~P100:Lo-Mid-Hi)		m^3/min	9.0-11.0-12.5	11.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
			L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
	(P125:Lo-Mid2-Mid1-Hi)		cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static pressure		Pa	0				
Motor	Type			1-phase induction motor				
	Output		kW	0.020 (at 240V)		0.020 (at 240V)	0.030 (at 240V)	0.078 x 2 (at 240V)
Air filter				PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)
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.)	O.D.32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi)	220V,240V		dB(A)	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46 (Lo-Mid2-Mid1-Hi)
	*2 *3	230V	dB(A)	32-35-38	33-38-40	34-37-40	37-41-43	

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 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).

*3 It is measured in anechoic room.

INDOOR UNIT
Ceiling cassette type 1-way airflow
PMFY-P VBM-E

Compact and lightweight body perfect for limited ceiling space applications.

Compact size for smooth installation and maintenance

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

Quiet operation

Newly developed airflow control technology reduces noise level to only 27dB (P20VBM) for industry-leading quiet performance.

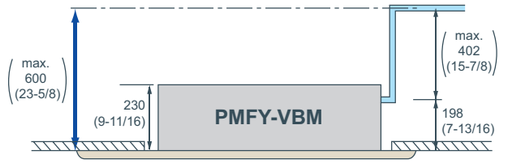
Sound pressure level table

	Capacity		P20	P25	P32	P40
Sound pressure level	Fan Speed	High	35	37		39
		Mid 1	33	36		37
		Mid 2	30	34		35
		Low	27	32		33

<220V,240V>

Drain pump

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



mm (in.)

▸Specifications

			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 (0.98Y 8.99/0.63)			
Dimension H × W × 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		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 staticpressure	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).

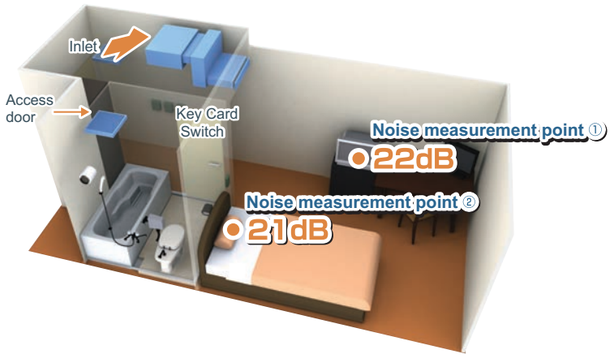
*3 It is measured in anechoic room.

INDOOR UNIT
Ceiling concealed type

PEFY-P VMR-E-L/R

Static Pressure 5Pa | Width 640mm (25-6/32in.) | Ultra Low Noise | Piping connection L model R model

Problem solver for residential hotels, museums, libraries, or hospitals where low noise is especially a must!



Operable by key card switch

It is possible to operate / stop by taking a key card in and out.

Ultra low noise

Quiet indoor environment can be achieved with 21dB around the bed and 22dB around the desk.
*The noise level may differ by the room size or the setting of the unit.

Enables to install for symmetric design room

Left or right piping and control boxes are available depending on the layout of each room. Plus, as in the above figure, easy maintenance is possible from the access door in the bathroom.
*Seen from the front, the pipe and control box are on the right side for -R models.

Energy saving

Energy saving can be realized by preventing us from failing to switch off of the air conditioners with a centralized system when no one is in the room.
Note: Compact and simple controllers, designed specifically to control only start/stop, fan speed and temperature can be set in each room for the occupants' enhanced individual comfort.

Easy Maintenance

Drain pan and heat exchangers are washable from the access door in the bathroom, making maintenance easy and cost saving.

▸Specifications

				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)		m³/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		dB(A)	20-25-30		20-25-33
	230V			21-26-32		21-26-35
	240V	*3		22-27-30		22-27-33

				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)		m³/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		dB(A)	20-25-30		20-25-33
	230V			21-26-32		21-26-35
	240V	*3		22-27-30		22-27-33

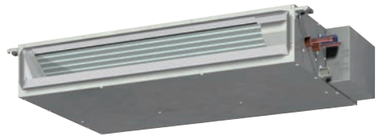
Notes:

*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.)

INDOOR UNIT
Ceiling concealed type



PEFY-P VMS1(L)-E

Static Pressure	Height	Low Noise	Width	Width	Width
5~50Pa	200mm (7-28/32in.)		790mm (31-1/8in.)	990mm (39in.)	1,190mm (46-7/8in.)

The ultra thin unit of 200mm offers increased flexibility, and is particularly suitable for places where low noise operation is desired from a slim line body.

Changeable static pressure

The unit is made suitable for a variety of applications with its four static pressure settings of 5, 15, 35, 50Pa.

Changeable airflow rate

Low, middle, and high fan speed settings deliver precise comfort.

Choice for drain pump

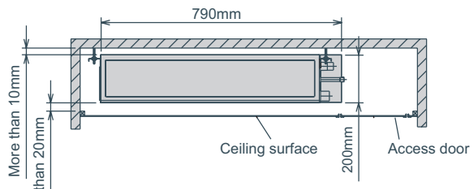
Drain pump is an optional part for the VMS1L, and a standard for VMS1.
*For places where low noise operation is especially required (i.e. Hotels), VMS1L (without drain pump) is recommended.

PP Honeycomb fabric

Washable PP Honeycomb fabric filter as standard

Ultra low height unit with 200mm (7-28/32in.) high Ultra-narrow width of 790mm (P15-P32 models) [990mm for P40,50 models / 1190mm for P63 models]

Can be installed easily in tight spaces, such as ceiling cavities or drop-ceilings.



Make the access door at the appointed position properly for service maintenance.

Reduced noise thanks to the use of newly designed centrifugal fan and coil

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

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

▸Specifications

			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)	m³/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
		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 press	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) (mesured 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

★PEFY-P15VMS1(L)-E can only be connected to YHM and YJM outdoor units.

	PEFY-P15VMS1(L)-E
PURY-P YHM, YJM	○
PUHY-P YHM, YJM	○
PUMY-P VHMA / VHMB	○
PUMY-P YHMA / YHMB	○
PQRY-P YGM	×
PQHY-P YGM	×
PQRY-P YHM	○
PQHY-P YHM	○

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

INDOOR UNIT
Ceiling Concealed Type

PEFY-P VMA(L)-E

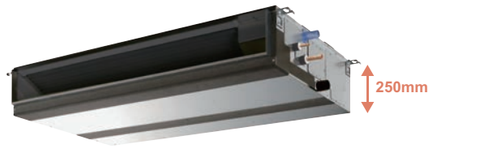
Middle Static Pressure 35~150Pa

Slim Body Height 250mm

With precise control of indoor temperature while operating with optimum energy usage, it offers a high-energy saving efficiency.

Compact Indoor Units

For all models, unit height are unified to 250mm. Compared to the previous model, the height size is reduced, allowing installation in tight spaces, such as ceiling cavities or drop-ceilings.



PEFY-P VMA(L)		20	25	32	40	50	63	71	80	100	125	140
Height	mm	250										
Width	mm	700			900		1,100			1,400		1,600
Depth	mm	732										

External static pressure

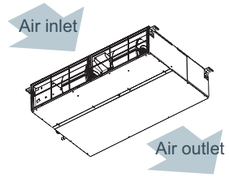
Five-stage external static pressure settings provide flexibility for duct extension, branching and air outlet configuration and are adjustable to meet different application conditions.
Setting ranges to a maximum of 150Pa.

External static pressure setting

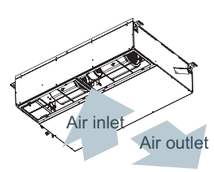
Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-P VMA(L)	35/50/70/100/150Pa										

Air Inlet

(1) Rear inlet



(2) Bottom inlet



Drain Pump Option

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

PEFY-P VMA-E Drain pump built-in

PEFY-P VMAL-E No Drain pump

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

Analogue input

Analogue input allows unit to control the fan speed setting in conjunction with damper condition.

IT terminal

IT terminal is available. For details, contact your local distributor.

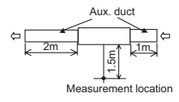
▸Specifications

			PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E	PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz				
Cooling capacity *1		kW	2.2	2.8	3.6	4.5	5.6
(Nominal) *1		BTU/h	7,500	9,600	12,300	15,400	19,100
Heating capacity *2		kW	2.5	3.2	4.0	5.0	6.3
(Nominal) *2		BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling *3	kW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]	0.09 [0.07]	0.11 [0.09]
	Heating *3	kW	0.04	0.04	0.05	0.07	0.09
Current	Cooling *3	A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]	0.64 [0.53]	0.74 [0.63]
	Heating *3	A	0.42	0.42	0.44	0.53	0.63
External finish			Galvanized steel plate				
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
		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
Net weight		kg(lbs)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]	26 (58) [25 (56)]	26 (58) [25 (56)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 1				
	Airflow rate (Low-Mid-High)	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
		L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283
		cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600
	External static pressure *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>
Motor	Type		DC motor				
	Output	kW	0.085	0.085	0.085	0.085	0.085
Air filter			PP honeycomb fabric.				
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C)	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 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) (R22,R407C)	mm(in.)	12.7 (1/2) Brazed 12.7 (1/2) Brazed	12.7 (1/20) Brazed 12.7 (1/20) Brazed	12.7 (1/20) Brazed 12.7 (1/20) Brazed	12.7 (1/20) Brazed 12.7 (1/2) Brazed	12.7 (1/2) 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)							
(Low-Mid-High) *3 *5		dB(A)	26-28-29	26-28-29	28-30-34	28-30-34	28-32-35
*3 *6		dB(A)	23-25-26	23-25-26	23-26-29	23-27-30	25-29-32

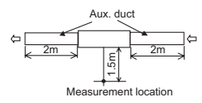
			PEFY-P63VMA(L)-E	PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E	PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E
Power source			1-phase 220-230-240V 50 / 60Hz					
Cooling capacity *1		kW	7.1	8.0	9.0	11.2	14.0	16.0
(Nominal) *1		BTU/h	24,200	27,300	30,700	38,200	47,800	54,600
Heating capacity *2		kW	8.0	9.0	10.0	12.5	16.0	18.0
(Nominal) *2		BTU/h	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption	Cooling *3	kW	0.12 [0.10]	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]	0.34 [0.32]	0.36 [0.34]
	Heating *3	kW	0.10	0.12	0.12	0.22	0.32	0.34
Current	Cooling *3	A	1.01 [0.90]	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]	2.05 [1.94]	2.21 [2.10]
	Heating *3	A	0.90	1.04	1.04	1.36	1.94	2.10
External finish			Galvanized steel plate					
Dimension H x W x D		mm	250 x 1,100 x 732	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 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)	32 (71) [31(69)]	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]	42 (93) [41 (91)]	46 (102) [45 (10)]
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 2					
	Airflow rate (Low-Mid-High)	m^3/min	13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	28.0 - 34.0 - 40.0	29.5 - 35.5 - 42.0
		L/s	225 - 267 - 317	242 - 300 - 350	242 - 300 - 350	383 - 467 - 550	467 - 567 - 667	492 - 592 - 700
		cfm	477 - 565 - 671	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483
	External static pressure *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					
	Output	kW	0.121	0.121	0.121	0.244	0.244	0.244
Air filter			PP honeycomb fabric.					
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C)	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	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 (R410A) (R22,R407C)	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	15.88 (5/8) Brazed 19.05 (3/4) Brazed	15.88 (5/8) Brazed 19.05 (3/4) Brazed	15.88 (5/8) Brazed 19.05 (3/4) 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)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Low-Mid-High) *3 *5		dB(A)	29-32-36	30-34-38	30-34-38	32-37-41	35-40-44	36-41-45
*3 *6		dB(A)	25-29-33	26-29-34	26-29-34	28-33-37	32-36-40	33-37-42

Notes:

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



INDOOR UNIT
Ceiling concealed type
PEFY-P VMH(S)-E

High Static Pressure

Increased design flexibility from sufficient external static pressure allows authentic duct air- conditioning with an elegant interior layout.

High static pressure of 200 Pa or higher

The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

PEFY-P VMH-E		P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
External static pressure (Pa)	220V	50/100/200								——	
	230/240V	100/150/200								——	
	380V	——								110/220	
	400/415V	——								130/260	

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.

Reduced noise thanks to the use of newly designed centrifugal fan

Sound pressure level table (Standard static pressure 220V)

dB(A)

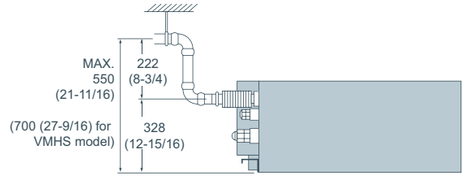
Sound pressure Level	Capacity		P40	P50	P63	P71	P80	P100	P125	P140
	Fan Speed	High	34	34	38	39	41	42	42	42
		Low	27	27	32	32	35	34	34	34

One-side maintenance

All maintenance to the unit, including fan inspection and fan motor removal, can be conducted from the inspection opening on one side.
(VMH model only)

Drain pump (option) ensures up to 550mm (21-11/16in.) for VMH model / 700mm (27-9/16in.) for VMHS model of lift

The introduction of an upper drain pump allows the drain connection to be raised as high as 550mm(21-11/16in.) for VMH model/700mm (27-9/16in.) for VMHS model, allowing more freedom in piping layout design and reducing horizontal piping requirements.



mm (in.)

▸Specifications

				PEFY-P40VMH-E	PEFY-P50VMH-E	PEFY-P63VMH-E	PEFY-P71VMH-E	PEFY-P80VMH-E	PEFY-P100VMH-E	PEFY-P125VMH-E	PEFY-P140VMH-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz							
Cooling capacity		*1	kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
		*1	BTU/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600
Heating capacity		*1	kW	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
		*1	BTU/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400
Power consumption		Cooling	kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59
		Heating	kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59
Current		Cooling	A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70
		Heating	A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70
External finish				Galvanized							
Dimension H x W x D			mm	380 x 750 x 900			380 x 1,000 x 900		380 x 1,200 x 900		
			in.	15 x 29-9/16 x 35-7/16			15 x 39-3/8 x 35-7/16		15 x 47-1/4 x 35-7/16		
Net weight			kg(lbs.)	44 (98)	45 (100)		50 (111)		70 (155)		
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)		m³/min	10.0-14.0		13.5-19.0	15.5-22.0	18.0-25.0	26.5-38.0		28.0-40.0
			L/s	167-233		225-317	258-367	300-417	442-633		467-667
			cfm	353-494		477-671	547-777	636-883	936-1342		989-1413
	External static pressure *2	220V	Pa	50 · 100 · 200							
		230,240V	Pa	100 · 150 · 200							
Motor	Type			1-phase induction motor							
	Output	*3	kW	0.08		0.12	0.14	0.18	0.26		
Air filter (option)				Synthethic fiber unwoven cloth filter (long life)							
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.)	O.D. 32 (1-1/4)							
Sound pressure level (Lo-Hi) *6		220V	dB(A)	27-34		32-38	32-39	35-41	34-42		
		230,240V	dB(A)	31-37		36-41	35-41	38-43	38-44		

				PEFY-P200VMH-E	PEFY-P250VMH-E	PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power source				3-phase 380-415V 50Hz / 3N ~ 380-415V 60Hz		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz	
Cooling capacity		*1	kW	22.4	28.0	22.4	28.0
		*1	BTU/h	76,400	95,500	76,400	95,500
Heating capacity		*1	kW	25.0	31.5	25.0	31.5
		*1	BTU/h	85,300	107,500	85,300	107,500
Power consumption		Cooling	kW	0.99 / 1.14	1.23 / 1.41	0.63 *7	0.82 *7
		Heating	kW	0.99 / 1.14	1.23 / 1.41	0.63 *7	0.82 *7
Current	Cooling	380-415V	A	1.62 / 1.86	2.00 / 2.30	–	–
		220-230-240V	A	–	–	3.47-3.32-3.18 *7	4.72-4.43-4.14 *7
	Heating	380-415V	A	1.62 / 1.86	2.00 / 2.30	–	–
		220-230-240V	A	–	–	3.47-3.32-3.18 *7	4.72-4.43-4.14 *7
External finish				Galvanized		Galvanized steel plate	
Dimension H x W x D			mm	470 x 1,250 x 1,120		470 x 1,250 x 1,120	
			in.	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.)	100 (221)		97 (214)	100 (221)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)		Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quantity			Sirocco fan x 2		Sirocco fan x 2	
	Airflow rate		m³/min	58.0	72.0	–	–
			L/s	967	1200	–	–
			cfm	2048	2543	–	–
		Lo-Mid-Hi	m³/min	–	–	50.0-61.0-72.0	58.0-71.0-84.0
			L/s	–	–	833-1017-1200	967-1183-1400
			cfm	–	–	1766-2154-2542	2048-2507-2966
	External static pressure	380V	Pa	110 · 220 *4		–	
		400,415V	Pa	130 · 260 *4		–	
			Pa	–		<50>-<100>-150-<200>-<250> *8	
			mmH_2O	–		<5.1>-<10.2>-15.3-<20.4>-<25.5> *8	
Motor	Type			3-phase induction motor		DC motor	
	Output		kW	0.76 *5	1.08 *5	0.87	0.87
Air filter(option)				Synthethic fiber unwoven cloth filter (long life)		Synthethic fiber unwoven cloth filter (long life filter) and filter box are recommended.	
Refrigerant pipe diameter		Gas (Brazed)	mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
		Liquid (Brazed)	mm(in.)	ø9.52 (ø3/8)		ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D. 32 (1-1/4)		O.D. 32 (1-1/4)	
Sound pressure level		380V	dB(A)	42 (110Pa) / 45 (220Pa) *6	50 (110Pa) / 52 (220Pa) *6	–	–
		400,415V	dB(A)	44 (130Pa) / 47 (260Pa) *6	52 (130Pa) / 54 (260Pa) *6	–	–
		Lo-Mid-Hi	dB(A)	–	–	36-39-43 *9	39-42-46 *9

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, Outdoo r: 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 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.

*3 The value are that at 240V.

*4 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.

*5 The value are that at 415V.

*6 It is measured in anechoic room.

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

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

*9 It is measured at the rated external static pressure in anechoic room.

INDOOR UNIT
Fresh Air Intake Type

PEFY-P VMH-E-F

Fresh Air Intake

Fresh Air can be taken in with temperature control.
Ideal for Offices, Stores and Restaurants.

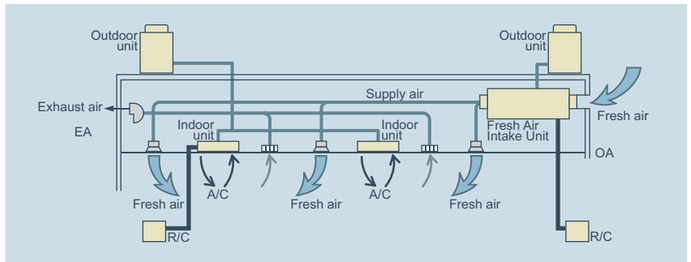
*** Limits of capacity connectable to outdoor unit**
Max. 110% of outdoor unit capacity, excepting heating at outdoor temperature of less than -5°C(23°F) (100%).

The Fresh Air intake indoor unit can be installed in any place.

The Fresh Air intake indoor unit can take fresh outdoor air into any building in any place at any time.

Office, Lobby, Workshop, Rest room, Nursing home, Smoking corner, Kitchen in restaurant

Example



< Note>
Fan remains in operation during Thermo-OFF. Using this model with other type of indoor unit is recommended to prevent cold draft which is caused due to intaken fresh air.

▸Specifications

				PEFY-P80VMH-E-F	PEFY-P140VMH-E-F
Power source				1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz	
Cooling capacity		*1	kW	9.0	16.0
		*1	BTU/h	30,700	54,600
Heating capacity		*1	kW	8.5	15.1
		*1	BTU/h	29,000	51,500
Power consumption		Cooling	kW	0.16 / 0.21	0.29 / 0.33
		Heating	kW	0.16 / 0.21	0.29 / 0.33
Current		Cooling	A	0.67 / 0.91	1.24 / 1.48
		Heating	A	0.67 / 0.91	1.24 / 1.48
External finish				Galvanized	
Dimension H x W x D			mm(in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)
Net weight			kg(lbs.)	50 (111)	70 (155)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quautity			Sirocco fan x 1	Sirocco fan x 2
	Airflow rate		m^3/min	9.0	18.0
			L/s	150	300
			cfm	318	636
	External static pressure (Lo-Mid-Hi)	208V	Pa	35 - 85 - 170	35 - 85 - 170
		220V	Pa	40 - 115 - 190	50 - 115 - 190
		230V	Pa	50 - 130 - 210	60 - 130 - 220
		240V	Pa	80 - 170 - 220	100 - 170 - 240
Motor	Type			1-phase induction motor	
	Output		kW	0.09 (at 220V)	0.14 (at 220V)
Air filter (option)				Synthetic fiber unwoven cloth filter (long life)	
Refrigerant pipe diameter		Gas (Flare)	mm(in.)	ø15.88 (ø5/8)	
		Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)	
Sound pressure level (Lo-Mid-Hi) *2		208, 220V	dB(A)	27 - 38 - 43	28 - 38 - 43
		230, 240V	dB(A)	33 - 43 - 45	34 - 43 - 45

				PEFY-P200VMH-E-F	PEFY-P250 VMH-E-F
Power source				3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz	
Cooling capacity			kW	22.4	28.0
			BTU/h	76,400	95,500
Heating capacity			kW	21.2	26.5
			BTU/h	72,300	90,400
Power consumption		Cooling	kW	0.34 / 0.42	0.39 / 0.50
		Heating	kW	0.34 / 0.42	0.39 / 0.50
Current		Cooling	A	0.58 / 0.74	0.68 / 0.86
		Heating	A	0.58 / 0.74	0.68 / 0.86
External finish				Galvanized	
Dimension H x W x D			mm(in.)	470 x 1250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)	
Net weight			kg(lbs.)	100 (221)	
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type x Quautity			Sirocco fan x 2	
	Airflow rate		m^3/min	28	35
			L/s	467	583
			cfm	989	1236
	External static pressure	380V	Pa	140 / 200	110 / 190
		400V	Pa	150 / 210	120 / 200
		415V	Pa	160 / 220	130 / 210
Motor	Type			3-phase induction motor	
	Output		kW	0.20	0.23
Air filter (option)				Synthetic fiber unmoven cloth filter (long life type)	
Refrigerant pipe diameter		Gas (Flare)	mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
		Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	O.D.32 (1-1/4)	
Sound pressure level *2		380V	dB(A)	39 / 42	40 / 44
		400V	dB(A)	40 / 43	40 / 45
		415V	dB(A)	40 / 44	41 / 46

Notes:

1. The cooling and heating capacites are the maximum capacites that were obitained by operating in the above air conditions and with a refrigerant pipe of about 7.5m.
2. The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical infomation.
3. The operating noise is the data that was obitained by measuring it 1.5m from the the bottom of the unit in an anechoic room. (Noise meter A-scale value)
4. The figure of Electrical characteristic indicates at 240V 50Hz/230V60Hz (PEFY-P80, 140VHM-E-F type), at 220Pa setting at 415V (PEFY-P200, 250VMH-E-F type).
5. When the 100% fresh air indoor units are connected, the maximum connectable indoor units to 1 outdoor unit are as follows

Heat pump models	Cooling only
110%(100% in case of heating below-5°C(23°F))	110%

6. Operational temp range is (Cooling : from 21°C(70°F)DB/15.5°C(60°F)WB to 43°C(109°F)DB/35°C(95°F)WB
   Heating : from -10°C(14°F)DB to 20°C(68°F)DB)
   * Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(70°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.
7. As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
8. Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
9. In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
10. When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
11. 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.
12. Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of fild supply filters.
13. Long life cannot be used with Hi-efficiency filter together (PEFY-P80 · 140VMH-E-F type).

INDOOR UNIT
Ceiling suspended type

PCFY-P VKM-E

Designed for ultra-quiet operation and easy maintenance, provides exceptionally comfortable air-conditioning.

Extra slim, extra stylish

Sleek and slim with stylishly curved lines, the PCFY series blends right into any interior. It also features a single air outlet which allows the auto vane to act as a shutter when the unit is turned off.

Auto vane distributes air evenly

The auto vane swings up and down automatically to distribute air more evenly to every corner of the room.

Long life filter as standard

Long life filter is equipped as standard enabling up to 2,500 hours of operation (office use) without maintenance.

Keeps airflow at optimum level according to ceiling height

The most suitable airflow can be selected for ceilings up to 4.2m high, enhancing air-conditioning efficiency and comfort. (P100/P125)

	Standard	High ceiling
Ceiling height	3.0(9-13/16)	4.2(13-3/4)

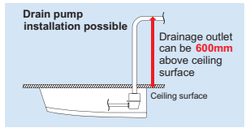
m (ft)

Greatly simplified installation

The direct suspension system eliminates the task of removing the attachment fixture from the main unit, greatly shortening installation time.

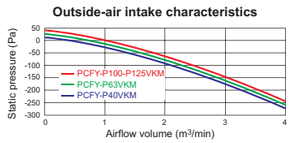
Drain pump option available with all models

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



Outside-air intake

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



Equipped with automatic air-speed adjustment

In addition to the conventional 4-speed setting, units are now equipped with and 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.

▸Specifications

			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 *2 (Lo-Mid2-Mid1-Hi)	m³/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
		L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
		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.

INDOOR UNIT
Wall mounted type


PKFY-P VBM


PKFY-P VHM


PKFY-P VKM

PKFY-P VBM-E
PKFY-P VHM-E
PKFY-P VKM-E

Elegant Design and Compact Dimensions Ideal for Offices, Stores and Residential Uses.

Capacity range

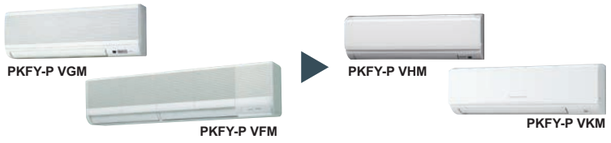
Capacity	P15	P20	P25	P32	P40	P50	P63	P100
VBM	●	●	●					
VHM				●	●	●		
VKM							●	●

4-way piping provides more flexibility in selecting installation sites

All piping including drainage can be connected from the rear, right, base, and left of the unit, providing much greater flexibility in piping and selecting installation site.

Flat panel & Pure white finish

All models have changed from the grill design, adopting the flat panel layout.
Pursuing a design that harmonizes with virtually any interior, the unit color has been changed from white to pure white.



Built-in signal receiver

PKFY-P VBM features

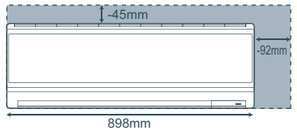
Compact profile

Quiet operation

PKFY-P VHM features

Compact size of 898mm

Width size reduced to match small size buildings and offices.



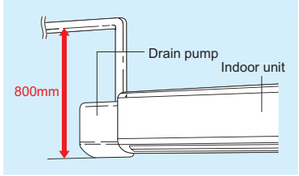
Comparison with PKFY-P VGM-E

Light unit

Approx. 3kg reduced from conventional model (P32-50). Easier installation.

Drain pump (option)

The optional drain pump allows the drain connection to be raised as high as 800mm, allowing more freedom in piping layout design.



▸Specifications

				PKFY-P15VBM-E	PKFY-P20VBM-E	PKFY-P25VBM-E	PKFY-P32VHM-E	PKFY-P40VHM-E	PKFY-P50VHM-E
Power source				1-phase 220-240V 50Hz / 1-phase 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	*4	kW	0.04			0.04		
	Heating		kW	0.04			0.03		
Current	Cooling	*4	A	0.20			0.40		
	Heating		A	0.20			0.30		
External finish(Munsell No.)				Plastic (1.0Y 9.2/0.2)			Plastic (1.0Y 9.2/0.2)		
Dimension H x W x D			mm(in.)	295 x 815 x 225 (11-5/8 x 32-1/8 x 8-7/8)			295 x 898 x 249(11-5/8 x 35-3/8 x 9-13/16)		
Net weight			kg(lbs.)	10 (23)			13(29)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Line flow fan x 1					
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m³/min	4.9-5.0-5.2-5.3	4.9-5.2-5.6-5.9		9-10-11	9-10.5-11.5	9-10.5-12
			L/s	82-83-87-88	82-87-93-98		150-167-183	150-175-192	150-175-200
			cfm	173-177-184-187	173-184-198-208		318-353-388	318-371-406	318-371-424
	External static pressure		Pa	0					
Motor	Type			1-phase induction motor			DC motor		
	Output		kW	0.017			0.030		
Air filter				PP Honeycomb					
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø12.7 (ø1/2)					ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)
	Liquid (Flare)		mm(in.)	ø6.35 (ø1/4)					ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)
Field drain pipe diameter			mm(in.)	I.D.16 (5/8)					
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB(A)	29-31-32-33	29-31-34-36		34-37-41	34-38-41	34-39-43

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 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

*3 It is measured in anechoic room.

*4 Electrical characteristic of cooling are included optional drain-pump.

				PKFY-P63VKM-E	PKFY-P100VKM-E
Power source				1-phase 220-230-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity		*1	kW	7.1	11.2
		*1	BTU/h	24,200	38,200
Heating capacity		*1	kW	8.0	12.5
		*1	BTU/h	27,300	42,600
Power consumption	Cooling	*4	kW	0.05	0.08
	Heating		kW	0.04	0.07
Current	Cooling	*4	A	0.37	0.58
	Heating		A	0.30	0.51
External finish(Munsell No.)				Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D			mm(in.)	365 x 1,170 x 295 (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	
	Airflow rate (Lo-Hi)	*2	m³/min	16-20	20-26
			L/s	267-333	333-433
			cfm	565-706	706-918
	External static pressure		Pa	0	
Motor	Type			DC motor	
	Output		kW	0.056	
Air filter				PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)		mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)		mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm(in.)	I.D. 16(5/8)	
Sound pressure level (Lo-Hi)		*2 *3	dB(A)	39-45	41-49

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-high).

*3 It is measured in anechoic room.

*4 Electrical characteristic of cooling are included optional drain-pump.

INDOOR UNIT
Floor standing exposed

PFFY-P VKM-E2

For living rooms, bed rooms, or offices where a sophisticated design is required. The latest Mitsubishi innovation – floor-standing air-conditioner sophisticated in design, rich in function.

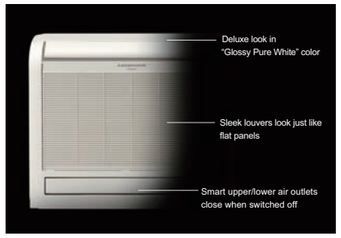
Quiet operation

Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. Our new floorstanding models are no exception.
It can create a silent and comfortable space where the occupants would not even recognize the existence of air conditioner operation.

ONLY 27dB

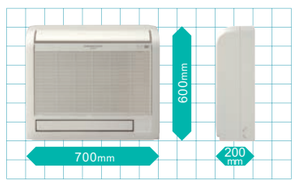
*2.5kw class

Sophisticated Design



From Mitsubishi Electric, an innovative new floor-standing air-conditioner.
Our pleasing mix of streamlined form and diversified function.
Engineered to keep room walls free, furnish comfy cooling in summer, toasty heating in winter.
The “Glossy Pure White” colour ensures a deluxe look, the perfect match for any room. Both upper and lower air outlets remain closed when switched OFF, in a smart and striking image.
A superb new air-conditioner from Mitsubishi, providing a handsome fit for your own distinctive interior.

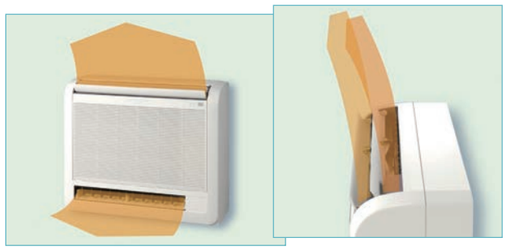
Slim but Mighty



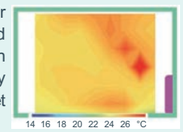
The unit body is slim and trim, the essence in compact. An ideal size for living rooms, bedrooms, and more. The removable and washable front panel makes cleaning a snap.
Easy and regular cleaning allows your air-conditioner stay beautiful while keeping its energy-efficient operation always possible.

Optimum Air Distribution

Comfy room temperatures are realized by the optimum, powerful and efficient air distribution through 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, annoying direct wind can be avoided for your better comfort.



The air from both 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: Your feet do not feel chilled any more!



▸Specifications

			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		mm	600 x 700 x 200			
H x W x D		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)	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
	Eaternal 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			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.

INDOOR UNIT
Floor standing exposed

PFFY-P VLEM-E

Floor mounted lowboy type effective in perimeter zone.

Standardized design with mild lines.
Supports various types of spaces from office buildings and shop buildings to hospitals.
Water vapor permeable film humidifier can be installed.
Remote controller can be installed onto the main unit.

Compact unit for easy air conditioning in perimeter zone.

The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone for effective air conditioning in the perimeter zone.

Electronics dry function dehumidify refreshingly.

Optimum dehumidification depending on indoor temperature to prevent over-cooling. Refreshing dehumidification can be attained.

▸Specifications

				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.)	23 (51)		25 (56)	26 (58)	30 (67)	32 (71)
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)

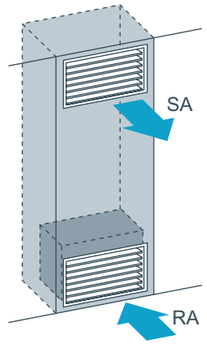
*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point

*4 It is measured in anechoic room.

INDOOR UNIT
Floor mounted concealed type

PFFY-P VLRM-E
PFFY-P VLRMM-E

Neatly installed with pericover concealed.
Easy installation in perimeter zone.



installation image
(PFFY-P VLRMM-E)

Compact unit for easy air conditioning in perimeter zone.

The body is concealed in the pericover to pursue harmony with the interior.
The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone.

Electronics dry function dehumidify refreshingly to prevent over-cooling.

Optimum dehumidification depending on indoor temperature to prevent over-cooling. Refreshing dehumidification can be attained.

Maximum external static pressure 60Pa (VLRMM model)

The additional external static pressure capacity provides flexibility for duct extension, branching, and air outlet configuration.

▸Specifications

				PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-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.)				Galvanized steel plate					
Dimension H x W x D			mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
			in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight			kg(lbs.)	18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quautity			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-P20VLRMM-E	PFFY-P25VLRMM-E	PFFY-P32VLRMM-E	PFFY-P40VLRMM-E	PFFY-P50VLRMM-E	PFFY-P63VLRMM-E
Power source				1-phase 220-240V 50Hz / 1-phase 220-240V 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		0.04	0.05	0.05	0.07
		Heating	kW	0.04		0.04	0.05	0.05	0.07
Current		Cooling	A	0.34		0.38	0.43	0.48	0.59
		Heating	A	0.34		0.38	0.43	0.48	0.59
External finish(Munsell No.)				Galvanized steel plate					
Dimension H x W x D			mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
			in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight			kg(lbs.)	18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quautity			Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.5-5.5-6.5		6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
			L/s	75-92-108		108-125-150	133-158-183	167-200-233	183-217-258
			cfm	159-194-230		230-265-318	282-335-388	353-424-494	388-459-547
	External static pressure *2		Pa	20/40/60					
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.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Mid-Hi) *3		20Pa	dB(A)	31-36-40		27-32-37	30-36-40	32-37-41	35-40-44
		40Pa	dB(A)	34-39-42		30-35-41	32-38-42	35-40-44	36-42-47
		60Pa	dB(A)	35-40-43		32-37-42	3.5-39-44	36-41-45	38-43-48

Notes:

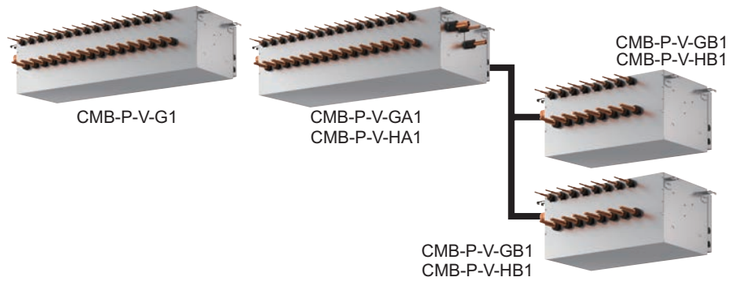
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)

*2 The external static pressure is set to 20Pa at factory shipment.

*3 The sound pressure level in operation is measured at 1m apart from the front side and the bottom side of the unit in anechoic room.
(Noise meter A-scale value) Connect the duct of 1m in length to the air outlet.

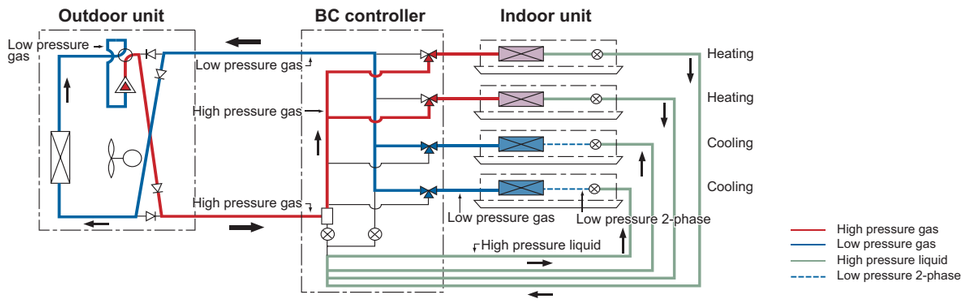
BC CONTROLLER

CMB-P-V-G1
CMB-P-V-GA1
CMB-P-V-HA1
CMB-P-V-GB1
CMB-P-V-HB1



BC CONTROLLER

In many ways, the BC Controller is the technological heart of the CITY MULTI R2/WR2. It works in unison with the outdoor unit to provide simultaneous cooling and heating, something no other two-pipe system can do. The BC Controller is connected to the outdoor unit by two pipes and to each indoor unit by a series of two refrigerant pipes, depending on the indoor unit count. The BC Controller is required for all CITY MULTI R2-Series installations. It comes in 4, 5, 6, 8, 10, 13, and 16-branch options. The BC Controller you select depends on how many indoor units will be operated from each outdoor unit and your total capacity requirements.



▸Specifications

Model name				CMB-P104V-G1	CMB-P105V-G1	CMB-P106V-G1	CMB-P108V-G1	CMB-P1010V-G1	CMB-P1013V-G1	CMB-P1016V-G1
Number of branch				4	5	6	8	10	13	16
Power source				1-phase 220/230/240V 50Hz/60Hz						
Power input	kW	50Hz	Cooling	0.067/0.076/0.085	0.082/0.093/0.104	0.097/0.110/0.123	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312
			heating	0.030/0.034/0.038	0.038/0.043/0.048	0.045/0.051/0.057	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151
		60Hz	Cooling	0.054/0.061/0.067	0.066/0.074/0.082	0.078/0.088/0.097	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246
			heating	0.024/0.027/0.030	0.030/0.034/0.038	0.036/0.041/0.045	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119
Current	A	50Hz	Cooling	0.31/0.34/0.36	0.38/0.41/0.44	0.45/0.48/0.52	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30
			heating	0.14/0.15/0.16	0.18/0.19/0.20	0.21/0.23/0.24	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63
		60Hz	Cooling	0.25/0.27/0.28	0.30/0.33/0.35	0.36/0.39/0.41	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03
			heating	0.11/0.12/0.13	0.14/0.15/0.16	0.17/0.18/0.19	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50
External finish				Galvanized steel plate (Lower part drain pan painting N1.5)						
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)						
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series						
Height		mm		284						
Width		mm		648					1098	
Depth		mm		432						
Refrigerant piping diameter	To outdoor unit			Connectable outdoor unit capacity						
				P200		P250, P300			P350	
		High pressure pipe		ø15.88 (ø5/8) Brazed		ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed	
		Low pressure pipe		ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed			ø28.58 (ø1-1/8) Brazed	
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)						
		Gas pipe		Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)						
Drain pipe				O.D. 32mm						
Net weight		kg		24	27	28	33	38	45	52
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer						

▸Specifications

Model name			CMB-P108V-GA1	CMB-P1010V-GA1	CMB-P1013V-GA1	CMB-P1016V-GA1	CMB-P1016V-HA1
Number of branch			8	10	13	16	
Power source			1-phase 220/230/240V 50Hz/60Hz				
Power input	kW	50Hz Cooling	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312	
		50Hz heating	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151	
		60Hz Cooling	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246	
		60Hz heating	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119	
Current	A	50Hz Cooling	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30	
		50Hz heating	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63	
		60Hz Cooling	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03	
		60Hz heating	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)				
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)				
Connectable Outdoor unit ★			Refer to the combination chart of BC controller R2/WR2 series				
Height	mm		289				
Width	mm		1,110				
Depth	mm		520				
Refrigerant piping diameter	To outdoor unit		Connectable outdoor unit capacity				
			P200	P250,300	P350	P400~P500	P550~P650	P700~P800/P850~P900 *4
		High pressure pipe	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed/ ø28.58 (ø1-1/8) Brazed
		Low pressure pipe	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed			ø34.93 (ø1-3/8) Brazed/ ø41.28 (ø1-5/8) Brazed
	To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)					
		Gas pipe	Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)					
	To another BC controller		Total indoor unit capacity connected to this Sub BC controller					
			~P200	P201~P300	P301~P350	P351~P400	P401~P450	
		High press gas pipe	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed		
		Low press gas pipe	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed			
		Liquid pipe	ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed	
Drain pipe			O.D. 32mm					
Net weight	kg		43	48	55	62	69	
Accessories			•Drain connection pipe (with flexible hose and insulation) •Reducer					

Model name			CMB-P104V-GB1	CMB-P108V-GB1	CMB-P1016V-HB1
Number of branch			4	8	16
Power source			1-phase 220/230/240V 50Hz/60Hz		
Power input	kW	50Hz Cooling	0.060/0.068/0.076	0.119/0.135/0.151	0.237/0.269/0.301
		50Hz heating	0.030/0.034/0.038	0.060/0.068/0.076	0.119/0.135/0.151
		60Hz Cooling	0.048/0.054/0.060	0.096/0.108/0.119	0.192/0.216/0.237
		60Hz heating	0.024/0.027/0.030	0.048/0.054/0.060	0.096/0.108/0.120
Current	A	50Hz Cooling	0.28/0.30/0.32	0.55/0.59/0.63	1.08/1.17/1.26
		50Hz heating	0.14/0.15/0.16	0.28/0.30/0.32	0.55/0.59/0.63
		60Hz Cooling	0.22/0.24/0.25	0.44/0.47/0.50	0.88/0.94/0.99
		60Hz heating	0.11/0.12/0.13	0.22/0.24/0.25	0.44/0.47/0.50
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)		
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (•Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)		
Connectable Outdoor unit ★			Refer to the combination chart of BC controller R2/WR2 series		
Height	mm		284		284
Width	mm		648		1,098
Depth	mm		432		432
Refrigerant piping diameter	To Main BC controller		Total indoor unit capacity connected this Sub BC controller		
			~P200, P201~P350		~P200, P201~P450
			~P200	P201~P300	P301~P350	P351~P400	P401~P450
		High pressure pipe	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed	
		Low pressure pipe	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		
		Liquid pipe	ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed
	To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller:ø6.35 brazed, Over 50:ø9.52 brazed (ø12.7 with optional joint pipe used.)				
		Gas pipe	Indoor unit Model 50 or smaller:ø12.7 brazed, Over 50:ø15.88 brazed (ø19.05 with optional joint pipe used.)				
Drain pipe			O.D. 32mm				
Net weight	kg		22	32	55		
Accessories			•Drain connection pipe (with flexible hose and insulation) •Reducer				

★Combination chart of BC Controller for R2 series

	P200,250,300,350	P400-650	P700-900
CMB-P V-G1	○	X	X
CMB-P V-GA1	○	○	X
CMB-P V-HA1	X	X	○
CMB-P V-GB1	○	○	○
CMB-P V-HB1	○	○	○

★Combination chart of BC Controller for WR2 series

	P200,250,300	P400,450,500,550,600
CMB-P V-G1	○	X
CMB-P V-GA1	○	○
CMB-P V-HA1	X	X
CMB-P V-GB1	○	○
CMB-P V-HB1	○	○

Notes:

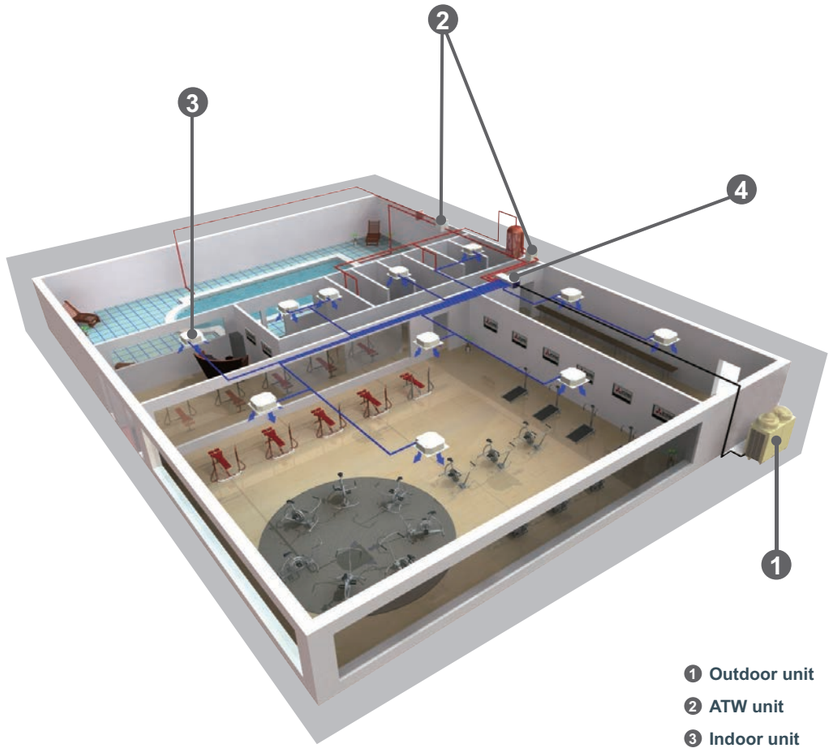
1. The equipment is for R410A refrigerant.
2. Install this product is a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5 m away from any indoor units.)
3. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
4. When using an outdoor unit – 28HP (P700) or more, use CMB-P1016V-HA1.
5. For sub BC controller CMB-P-B-GB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P350 unit. For sub BC controller CMB-P-1016V-HB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P450 unit.

PWFY-P100VM-E-BU
PWFY-P100VM-E1-AU
PWFY-P200VM-E1-AU

Air to Water advanced system explained

Air To Water (ATW) series offers the choice between two types of units; a Booster unit and a HEX (Heat Exchanger) unit. A Booster unit offers hot water to a maximum of 70°C and HEX unit offers 45°C in heating and down to 8°C in cooling. Applying heat pump and heat recovery technology to provide hot water, the units are suitable for residences, office buildings, restaurants or hotels, providing an optimal environment while benefiting from reduced running costs and less impact on environment.

ATW system consists of an outdoor unit, a BC controller when connected with R2 series, ATW unit, indoor unit and a controller.



1. Outdoor unit
2. ATW unit
3. Indoor unit
4. BC controller

Line Up

1 ATW UNIT

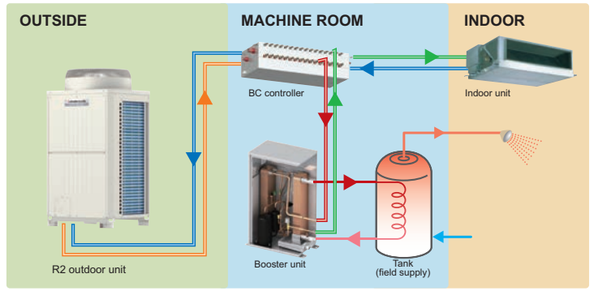
BOOSTER UNIT

PWFY-P100VM-E-BU

Benefiting from the heat recovery operation of the CITY MULTI R2 system, Booster unit converts energy from the air to higher temperatures suitable for supplying hot water and results in virtually no energy waste.

Connectable to	Applications	Operation
CITY MULTI R2/WR2 series REPLACE MULTI R2 series	best for sanitary water, shower, etc.	up to 70°C

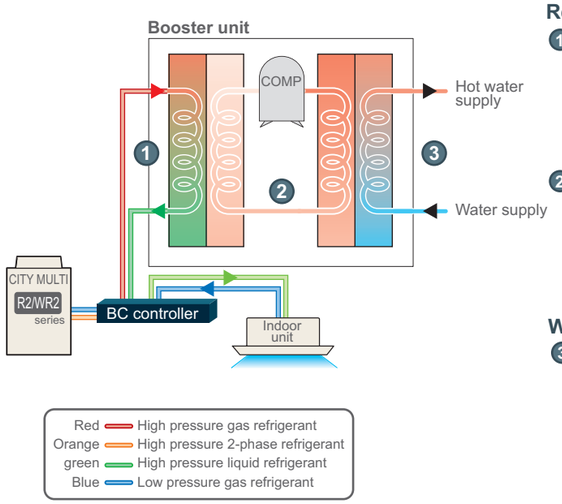
SYSTEM OUTLINE



The Booster unit is connected to a BC controller with refrigerant pipes, and to the water tank with water pipes. The waste heat from cooling operation is utilized for heating operation which provides hot water.

Red — High pressure gas refrigerant
Orange — High pressure 2-phase refrigerant
green — High pressure liquid refrigerant
Blue — Low pressure gas refrigerant

What makes Booster unit unique?



Refrigerant flow

1. From the BC controller, high pressure R410A gas refrigerant is delivered to the Booster unit to exchange heat with the low pressure R134a liquid refrigerant circulating through ② and returns to the BC controller as a high pressure liquid refrigerant.

2. Refrigerant R134a circulates inside the two plate heat exchangers inside the unit.
Temperature rises as low-pressure R134a gas refrigerant is compressed by the compressor and becomes high-pressure gas refrigerant.

Water supply

3. Water entering the Booster unit exchanges heat with high-pressure R134a gas refrigerant. The hot water circulates to heat the water inside the tank which will be used for showers, sanitary water, etc.

HEX UNIT

By utilizing waste heat from the R2 outdoor unit for heating operation in HEX unit, it is possible to supply hot water with high efficiency. Also, even when connected with the Y series, it provides efficient operation compared to a conventional system.

PWFY-P100VM-E1-AU
PWFY-P200VM-E1-AU

Connectable to

CITY MULTI R2/WR2/ Y/WY/ZUBADAN series
S series
REPLACE MULTI R2/Y series

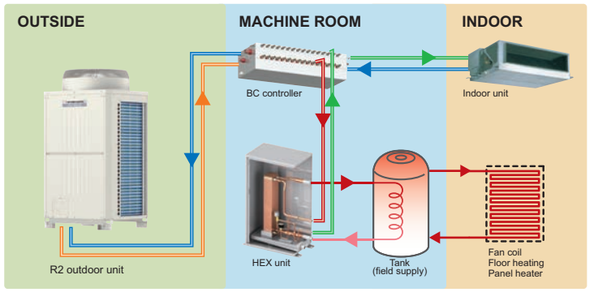
Applications

best for floor heating, panel heater, fan-coil unit(AHU), etc.

Operation

hot water up to 45°C cold water down to 8°C

SYSTEM OUTLINE HEX unit with R2 series



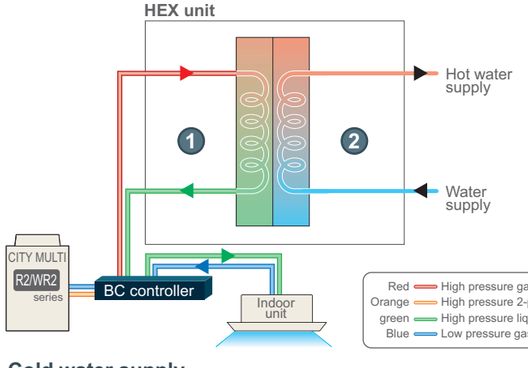
HEX unit is connected to BC controller with refrigerant pipes, and to the water tank with water pipes. HEX unit is not equipped with a compressor.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

*The image is a system example in case of heating mode.
*The necessity of the tank depends on the system configuration.

What makes HEX unit unique with R2/WR2 series?

Hot water supply



Refrigerant flow

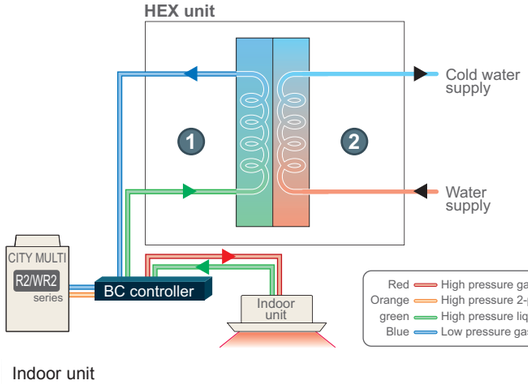
1 From the BC controller, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as high pressure liquid refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to heat the water inside the tank.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

Cold water supply



Refrigerant flow

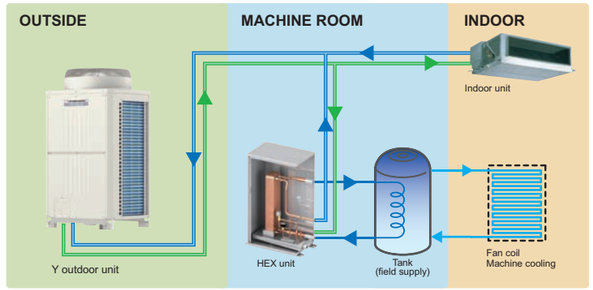
1 From the BC controller, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to cool the water inside the tank.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

SYSTEM OUTLINE HEX unit with Y series

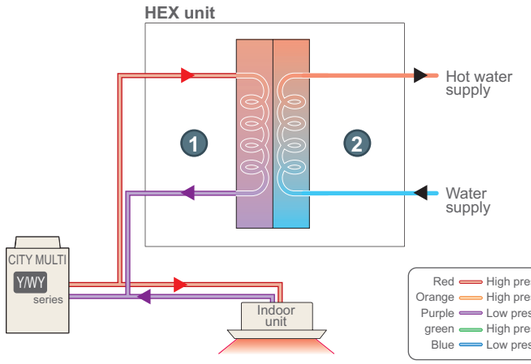


HEX unit is connected to Y outdoor unit with refrigerant pipes, and to the water tank with water pipes. HEX unit is not equipped with a compressor.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

What makes HEX unit unique with Y/WY series?

Hot water supply



Refrigerant flow

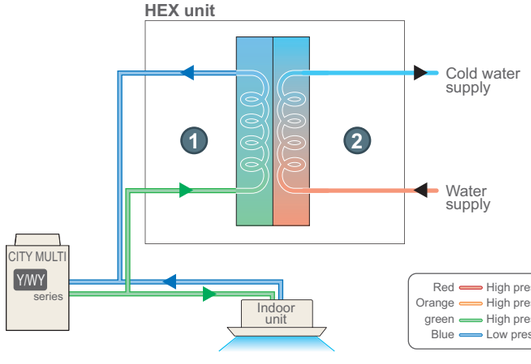
1 From the outdoor unit, high pressure R410A gas refrigerant is delivered to the HEX unit and returns to the unit as low pressure 2-phase refrigerant.

Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to heat the water inside the tank.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
Purple	Low pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

Cold water supply



Refrigerant flow

1 From the outdoor unit, high pressure R410A liquid refrigerant is delivered to the HEX unit and returns to the unit as low pressure gas refrigerant.

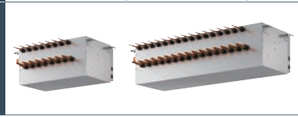
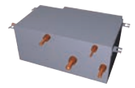
Water supply

2 Water entering the HEX unit exchanges heat with the R410A refrigerant and water circulates to cool the water inside the tank.

Red	High pressure gas refrigerant
Orange	High pressure 2-phase refrigerant
green	High pressure liquid refrigerant
Blue	Low pressure gas refrigerant

❷BC CONTROLLER

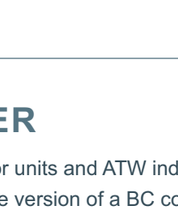
To connect R2/WR2 series outdoor units and ATW indoor units, a BC controller or WCB (Water system Connection Box), which is a simple version of a BC controller can be used.

		BC controller	WCB
Connectable ATW system		Booster/HEX	
Outdoor unit	Connectable series	R2*/WR2	
	Connectable capacity	P200-P900	P200-P350
ATW/ Indoor unit	Connectable qty	1-50	1-30
	Connection method	With BC's port	By branch pipe
	Operation mode	Cooling AND heating	Cooling OR heating
Product image			

*WCB cannot be connected to XL module outdoor unit.

CASE STUDY

Application : Restaurant
Country : Italy



Unit information

Outdoor unit : Air-cooled R2 series ×5, BC controller ×5
ATW unit : Booster unit ×3 Indoor unit : Floor mounted conealed type ×18
Control : AG-150A ×1, ATW controller ×3, ME remote controller ×27, Power supply unit ×1
Other : OA processing unit ×9

●Background

The restaurant required air conditioning, fresh air, and sanitary water. As a perfect solution that can provide all three, the consultant proposed the Air to Water system+CITY MULTI+OA processing unit.
With the combination of Mitsubishi Electric's product lineup, the system can provide hot water without a boiler and air conditioning with a high COP. Whats more, with the OA processing unit in a system, suitable ventilation with top quality air and energy saving environment is created.

ATW UNIT
Booster Unit
PWFY-P VM-E-BU

▸Specifications

Model			PWFY-P100VM-E-BU
Power source			1-phase 220-230-240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5
	*1	kcal/h	10,800
	*1	BTU/h	42,700
	Power input	kW	2.48
	Current input	A	11.63-11.12-10.66
Temp. range of heating	Outdoor unit/Heat source unit condition	W.B.	-20~32°C (-4~90°F) R2-series
		-	10~45°C (50~113°F) WR2-series
	Booster unit inlet water temp.	-	10~70°C (50~158°F)
Connectable outdoor unit/heat source unit	Total capacity		50~100% of outdoor unit/heat source unit capacity
	Model / Quantity		R2 (Standard, Hi-COP), Replace R2, WR2 series only
Sound pressure level (measured in anechoic room)		dB<A>	44
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8") Brazed
	Gas	mm(in.)	ø15.88 (ø5/8") Brazed
Diameter of water pipe	Inlet	mm(in.)	PT3/4 Screw
	Outlet	mm(in.)	PT3/4 Screw
Field drain pipe size		mm(in.)	ø32 (1-1/4")
External finish			NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg(lbs)	60 (133)
Compressor	Type		Inverter rotary hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Starting method		Inverter
	Motor output	kW	1.0
	Lubricant		NEO22
Circulating water	Operation volume Range	m^3/h	0.6~2.15
Protection on internal circuit (R134a)	High pressure protection		High pressure sensor, High pressure switch at 3.60 MPa (601 psi)
	Inverter circuit (COMP)		Over - heat protection, Over - current protection
	Compressor		Discharge thermo protection, Over - current protection
Refrigerant	Type × original charge *2		R134a × 1.1kg (0.50lb)
	Control		LEV
Design pressure	R410A	MPa	4.15
	R134a	MPa	3.60
	Water	MPa	1.00
Drawing	External		WKB94L762
	Wiring		WKE94C229
Standard attachment	Document		Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, 2 × Connector sets
Optional parts			NONE
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.

Notes:

*1 Nominal heating conditions
<R2-series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 65°C Water flow rate 2.15m^3/h

<WR2-series>
Circulating water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 65°C Water flow rate 2.15m^3/h

*2 Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the unit in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

ATW UNIT
HEX Unit
PWFY-P VM-E1-AU

▸ Specifications

Model			PWFY-P100VM-E1-AU	PWFY-P200VM-E1-AU
Power source			1-phase 220-230-240V 50 / 60Hz	1-phase 220-230-240V 50 / 60Hz
Heating capacity (Nominal)	*1	kW	12.5	25.0
	*1	kcal/h	10,800	21,500
	*1	BTU/h	42,700	85,300
	Power input	kW	0.015	0.015
	Current input	A	0.068-0.065-0.063	0.068-0.065-0.063
Temp. range of heating	Outdoor unit/ Heat source unit condition	W.B.	-15~15°C (5~60°F) S - series	-
		W.B.	-20~15.5°C (-4~60°F) Y - series	-20~15.5°C (-4~60°F) Y - series
		W.B.	-25~15.5°C (-13~60°F) HP(ZUBADAN) - series	-25~15.5°C (-13~60°F) HP(ZUBADAN) - series
		W.B.	-20~32°C (-4~90°F) R2 - series	-20~32°C (-4~90°F) R2 - series
		-	10~45°C (50~113°F) WY - series	10~45°C (50~113°F) WY - series
		-	10~45°C (50~113°F) WR2 - series	10~45°C (50~113°F) WR2 - series
	HEX unit inlet water temp.	-	10~45°C (50~113°F) S - series, 10~40°C (50~104°F) Y, HP(ZUBADAN), R2, WY, WR2 - series	10~40°C (50~104°F)
Cooling capacity (Nominal)	*2	kW	11.2	22.4
	*2	kcal/h	9,600	19,300
	*2	BTU/h	38,200	76,400
	Power input	kW	0.015	0.015
	Current input	A	0.068-0.065-0.063	0.068-0.065-0.063
Temp. range of cooling	Outdoor unit/ Heat source unit condition	D.B.	-5~46°C (23~115°F) Y - series	-5~46°C (23~115°F) Y - series
		D.B.	-5~43°C (23~110°F) HP(ZUBADAN) - series	-5~43°C (23~110°F) HP(ZUBADAN) - series
		D.B.	-5~46°C (23~115°F) R2 - series	-5~46°C (23~115°F) R2 - series
		-	10~45°C (50~113°F) WY - series	10~45°C (50~113°F) WY - series
		-	10~45°C (50~113°F) WR2 - series	10~45°C (50~113°F) WR2 - series
	HEX unit inlet water temp.	-	10~35°C (50~95°F)	10~35°C (50~95°F)
Connectable outdoor unit/heat source unit	Total capacity		50~100% of outdoor unit/heat source unit capacity	50~100% of outdoor unit/heat source unit capacity
	Model / Quantity		Y (Standard, Hi-COP), Replace Y, S, HP(ZUBADAN) series, R2 (Standard, Hi-COP), Replace R2, WY series, WR2 series	Y (Standard, Hi-COP), Replace Y, HP(ZUBADAN) series, R2 (Standard, Hi-COP), Replace R2, WY series, WR2 series
Sound pressure level (measured in anechoic room)		dB<A>	29	29
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8") Brazed	ø9.52 (ø3/8") Brazed
	Gas	mm(in.)	ø15.88 (ø5/8") Brazed	ø19.05 (ø3/4") Brazed
Diameter of water pipe	Inlet	mm(in.)	PT3/4 Screw	PT 1 Screw
	Outlet	mm(in.)	PT3/4 Screw	PT 1 Screw
Field drain pipe size		mm(in.)	ø32 (1-1/4")	ø32 (1-1/4")
External finish			NO	NO
External dimension H × W × D		mm	800 (785 without legs) × 450 × 300	800 (785 without legs) × 450 × 300
		in.	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"	31-1/2" (30-15/16" without legs) × 17-3/4" × 11-13/16"
Net weight		kg(lbs)	35 (78)	38 (84)
Circulating water	Operation Volume Range	m^3/h	1.1~2.15	1.8~4.30
Design pressure	R410A	MPa	4.15	4.15
	Water	MPa	1.00	1.00
Drawing	External		KD94R274	KD94R274
	Wiring		WKE94C626	WKE94C626
Standard attachment	Document		Installation Manual, Instruction Book	Installation Manual, Instruction Book
	Accessory		Strainer, Heat insulation material, 2 × Connector sets, Flow switch × 1 set, wire	Strainer, Connecter, Heat insulation material, 2 × Connector sets, Expansion joint, Flow switch × 1 set, wire
Optional parts			Solenoid valve kit: PAC-SV01PW-E	Solenoid valve kit: PAC-SV01PW-E
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:

*1 Nominal heating conditions
<S/Y/HP(ZUBADAN)/R2-series>
Outdoor Temp. : 7°CDB/6°CWB (45°FDB / 43°FWB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 30°C
Water flow rate 2.15m^3/h(P100), 4.30m^3/h(P200)

<WY/WR2-series>
Circulating water Temp. : 20°C (68°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 30°C
Water flow rate 2.15m^3/h(P100), 4.30m^3/h(P200)

*2 Nominal cooling conditions
<Y/HP(ZUBADAN)/R2-series>
Outdoor Temp. : 35°CB (95°FDB)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 23°C
Water flow rate 1.93m^3/h(P100), 3.86m^3/h(P200)

<WY/WR2-series>
Circulating water Temp. : 30°C (86°F)
Pipe length : 7.5 m (24-9/16 ft)
Level difference : 0m (0ft)
Inlet water Temp 23°C
Water flow rate 1.93m^3/h(P100), 3.86m^3/h(P200)

* Due to continuing improvement, the above specifications may be subject to change without notice.
* The unit is not designed for outside installations.
* Please don't use the steel material for the water piping material.
* Please always make water circulate or add the brine to the circulation water when the ambient temperature becomes 0°C (32°F) or less.
* Please always make water circulate or pull out the circulation water completely when not using it.
* Please do not use groundwater and well water.
* Install the unit in an environment where the wet bulb Temp. will not exceed 32°C (90°F).
* The water circuit must use the closed circuit.
* Please do not use it as a drinking water.

Controller
Remote Controller
PAR-W21MAA

▸ Specifications

○ : Each group ✕ : Not available

Item	Description	Operations	Display
ON / OFF	Runs and stops the operation of a group of units	○	○
Operation mode switching	Switches between Hot Water / Heating / Heating ECO / Anti - freeze / Cooling * Available operation modes vary depending on the unit to be connected. * Switching limit setting can be made via a remote controller.	○	○
Water temperature setting	Temperature can be set within the ranges below. (in increments of 1°C or 1°F) Heating 30°C ~ 50°C Heating ECO 30°C ~ 45°C Hot Water 30°C ~ 70°C Anti-freeze 10°C ~ 45°C Cooling 10°C ~ 30°C * The settable range varies depending on the unit to be connected.	○	○
Preset temperature range limit	Preset temperature range setting can be limited via a remote controller.	○	○
Water temperature display	10°C ~ 90°C (in increments of 1°C or 1°F) * The settable range varies depending on the unit to be connected.	✕	○
Permit / Prohibit local operation	Individually prohibits operations of each local remote control function : ON / OFF, Operation modes, water temperature setting, Circulating water replacement warning reset. * Upper level controller may not be connected depending on the unit to be connected.	✕	○
Schedule operation	ON / OFF / Water temperature setting can be done up to 6 times one day in the week. (in increments of a minute)	○	○
Error display	When an error is currently occurring on a unit, the afflicted unit and the error code are displayed.	✕	○
Self check (Error history)	Searches the latest error history by pressing the CHECK button twice.	○	○
Test run	Enables the Test run mode by pressing the TEST button twice. * Test run mode is not available depending on the unit to be connected.	○	○
Circulating water replacement warning	Displays the circulating water replacement warning via the unit message. Clears the display by pressing the CIR.WATER button twice. * Circulating water replacement warning is not available depending on the unit to be connected.	○	○
Operation locking function	Remote controller operation can be locked or unlocked. · All-switch locking · Locking except ON / OFF switch	○	○

Optional Parts
Solenoid Valve kit

Note:
When you intend to adopt PWFY-AU with below system configuration, you may need to use optional part (PAC-SV01PW-E).
Please contact your Mitsubishi Electric sales office for details.

Applicable System

System Configuration
Y, HP(ZUBADAN), Replace Y, or WY* + PWFY-AU + Indoor Unit

*Solenoid valve kit will be used only when operating the WY at the water temperature below 10°C.

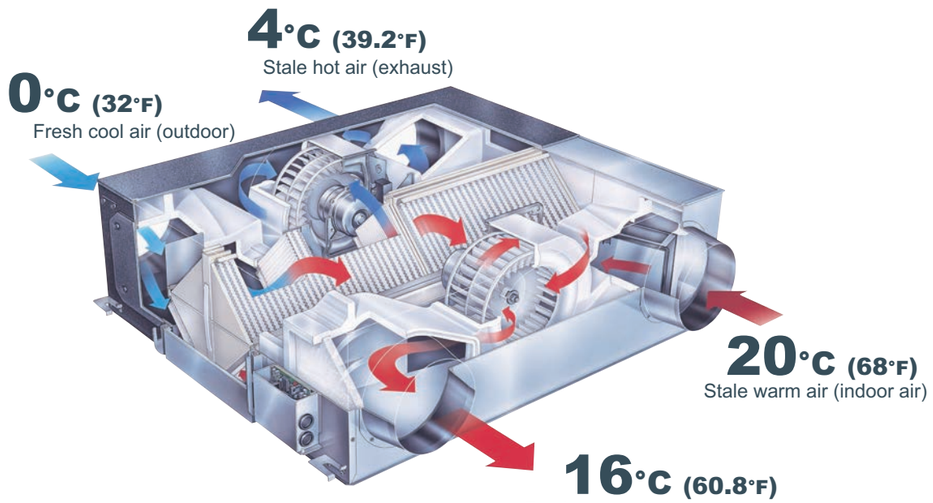
PAC-SV01PW-E

Item			Description	
Power source			1-phase 220-230-240V 50 / 60Hz	
Diameter of refrigerant pipe	Applicable models		PWFY-P100VM-E1-AU	PWFY-P200VM-E1-AU
	Liquid	mm (in.)	ø15.88	ø19.05
	Gas	mm (in.)	ø9.52	ø9.52
External dimension H × W × D		mm	462 × 320 × 207	
		in.	18-1/4" × 12-5/8" × 8-3/16"	
Net weight		kg (lbs)	8.5 (19)	
Drawing	External		WKD94T532	
Standard attachment	Document		Installation Manual	
	Accessory		Specification label, Refrigerant conn.pipe	

RX5 SERIES

The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System Enhanced Air Quality.
Unified Control System Allows Greater Design Freedom.



LGH-15RX5 [150m³/h Single phase 220-240V 50Hz]
LGH-25RX5 [250m³/h Single phase 220-240V 50Hz]
LGH-35RX5 [350m³/h Single phase 220-240V 50Hz]
LGH-50RX5 [500m³/h Single phase 220-240V 50Hz]
LGH-65RX5 [650m³/h Single phase 220-240V 50Hz]

LGH-80RX5 [800m³/h Single phase 220-240V 50Hz]
LGH-100RX5 [1000m³/h Single phase 220-240V 50Hz]
LGH-150RX5 [1500m³/h Single phase 220-240V 50Hz]
LGH-200RX5 [2000m³/h Single phase 220-240V 50Hz]

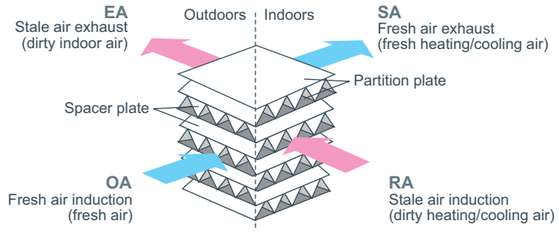
Heat-Exchange Efficiency Obtainable Only with Lossnay.

The secret to the unmatched comfort provided by Lossnay core is the cross-flow, plate-fin structure off the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.
The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted and exhausted air supplies cross in the Lossnay core.

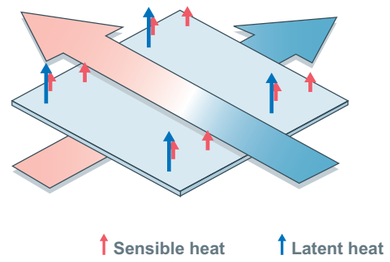
LOSSNAY Technology

- **Two paths ventilation**
  LOSSNAY simultaneously intakes Fresh Air and exhausts Dirty Air.
- **Total energy recover**
  LOSSNAY returns BOTH sensible heat and latent heat.

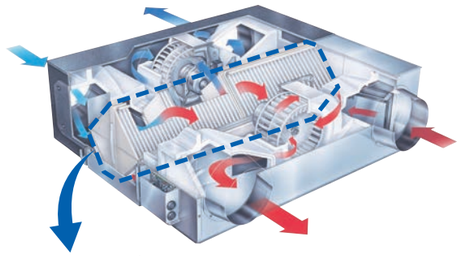
A. Two paths ventilation



B. Total Energy transfer

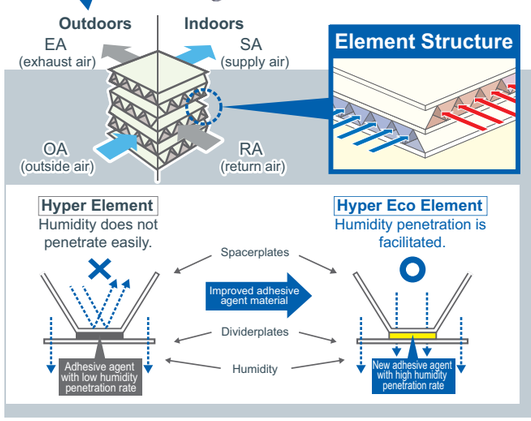


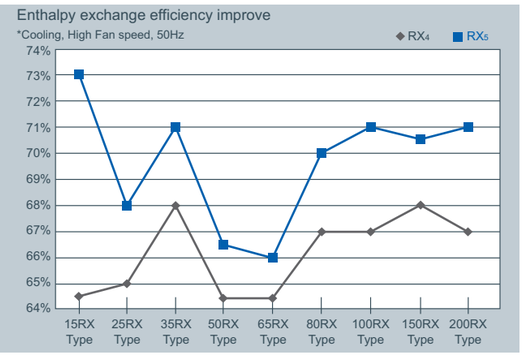
- **Hyper Eco Core**
  Better energy conservation by improved total heat exchange efficiency.



Introducing the new Hyper Eco Element

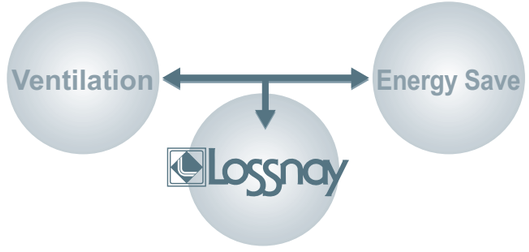
Mitsubishi's newly developed Hyper Eco Element is on board, offering the industry's best total heat exchange efficiency. Energy conservation performance has been improved not only by reducing the air conditioning load associated with ventilation, but also by facilitating humidity penetration.





Why LOSSNAY is necessary.

- **Without ventilation...**
  Lack of Ventilation makes people sick by dirty indoor air including CO_2, Dust, Bacteria.
- **If just opening windows...**
  Opening windows eliminates dirty air BUT wastes much air-con energy.
- **So we recommend LOSSNAY**
  LOSSNAY is simultaneous pursuit of Ventilation and Energy Saving.

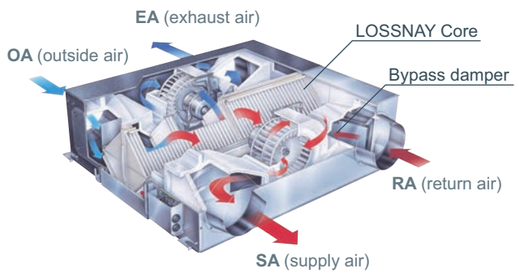


- **This is LOSSNAY !**

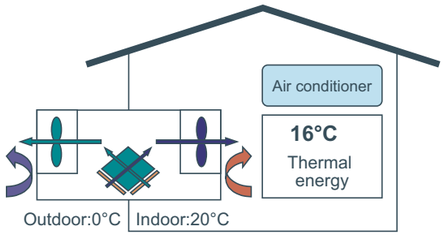
ADVANTAGES

Clean air supply, dirty air exhaust by Two air paths (OA→ SA and RA→ EA)
Energy recovery by LOSSNAY Core
Free cooling by bypass damper
MULTI VENTILATION MODE for multi ventilation request (Power supply, Power supply/exhaust, Power exhaust)

UNIT STRUCTURE



Energy Recovery Image

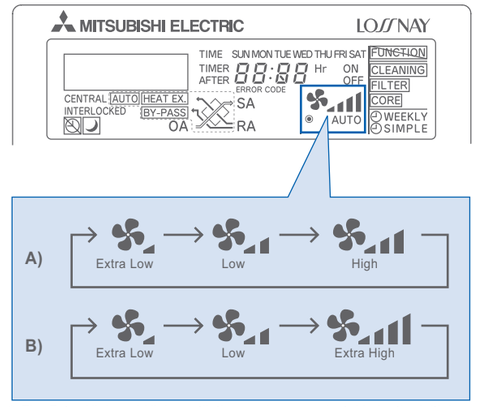


How much recovery?
OA temp. : 0°C → SA temp. : 16°C (Indoor 20°C)

Extra Low Mode

■Additional energy conservation by using a four-level air volume system that allows more precise control.

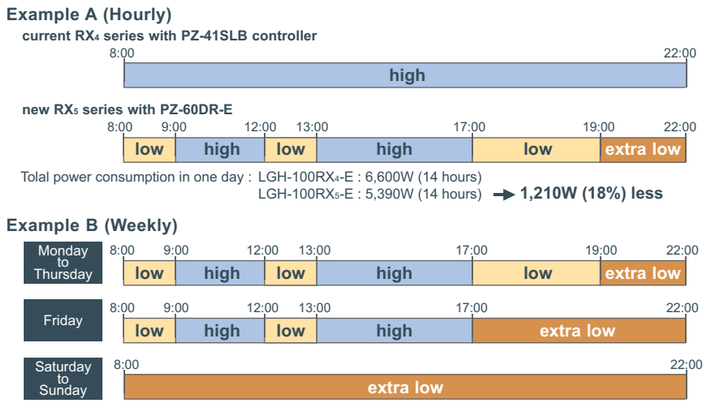
In addition to the conventional Extra High, High, and Low modes, an Extra Low mode is added to provide a more dynamic range of air volume settings and versatility in a variety of installation environments, yielding much better energy conservation. Using a simplified timer function, it switches to Extra Low operation when the operation stop button is activated and it is accordingly possible to implement 24-hour energy conservation ventilation.



* The Extra High and High ventilation modes are selectable by the initial setting.
* Extra-Low not equipped LGH-150RX5 and 200RX5.
* The ventilation mode is actually selected in three levels, and the remote controller also displays these three levels.

Energy Saving by WEEKLY timer

Air volume level can be set hourly (max 8 times) and weekly. You can pre-set air volume according to the predictable requirement so that LOSSNAY can automatically operate at only necessary air-speed at the specified time period, which saves power consumption while maintaining the indoor air quality. Besides, once the weekly timer has been set, no switching on-off is required.



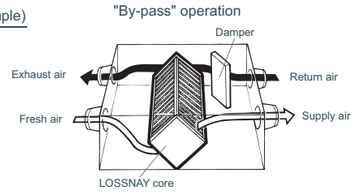
New function: "By-pass" Ventilation External Control Setting

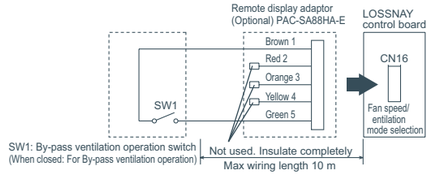
In addition to the automatic damper open/close function, open/close control via external devices is now possible, delivering a “By-pass” ventilation system that is suitable to the installed environment.

Establish the wire connection by inserting the optional remote display adaptor (PAC-SA88HA-E) in the connector CN16 (Ventilation mode selector).

With SW1 is “ON”, the ventilation mode of LOSSNAY is changed to the By-pass ventilation regardless of the setting on the remote controller.

Control devices (example)
· Temperature sensor
· Humidity sensor
· Timers





•Automatic ventilation setting
The automatic damper mode automatically provides the correct ventilation for the conditions in the room. The following shows the effect “By-pass” ventilation will have under various conditions.

1. Reduces cooling load
If the air outside is cooler than the air inside the building during the cooling season (such as early morning or at night), “By-pass” ventilation will draw in the cooler outside air and reduce the cooling load on the system.

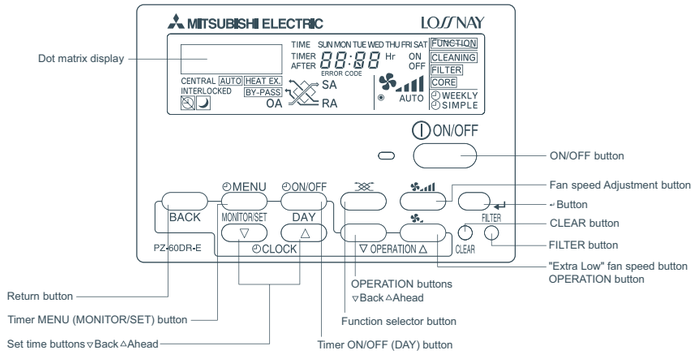
2. Night purge
“By-pass” ventilation can be used to release hot air from inside the building that has accumulated in buildings a business district during the hot summer season.

3. Office equipment room cooling
During cold season, fresh air can be drawn in and used as is to cool rooms where the temperature has risen due to the use of office equipment.

* When the outdoor air tempereture drops lower than 8°C it changes to the heat exchange ventilation. (Display of the remote controller does not change.)
* In the case of “By-pass” ventilation, the supply air temperature slightly rises more than the outside air temperature because of the heat effect around the ducts or the unit motors.

New Remote Controller PZ-60DR-E

A new remote controller for the RX5 series is now available. In addition to boosting the energy conservation performance of the main unit, the remote controller features a variety of new functions which also pursue additional energy conservation.
The appearance of the remote controller conforms to Mitsubishi air conditioner interface design standards.
Functions that were set using Dip-Switch on the LOSSNAY main unit can now be configured as needed using the new remote controller.
This eliminates the need to crawl under the eaves to change operation settings.
Also, a newly adopted dot matrix display provides much more information, making it easy to check maintenance indications, operation status display, and explanations required when configuring settings.



Model line up

LGH-15~100RX5-E

■ Specification

LGH-15RX5-E

Model		LGH-15RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.44-0.46	0.37-0.38	0.25-0.25	0.14-0.15	0.45-0.46	0.37-0.38	0.25-0.26	0.14-0.15
Power consumption (W)		96-110	80-90	53-59	30-35	97-110	81-91	54-61	30-35
Air volume	(m^3/h)	150	150	110	70	150	150	110	70
	(L/s)	42	42	31	19	42	42	31	19
External static pressure	(mmH_2O)	10.2-10.7	6.6-7.1	3.6-4.1	1.4	10.2-10.7	6.6-7.1	3.6-4.1	1.4
	(Pa)	100-105	65-70	35-40	14	100-105	65-70	35-40	14
Temperature exchange efficiency (%)		82.0	82.0	84.0	85.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	75.0	75.0	77.5	81.0	—	—	—	—
	Cooling	73.0	73.0	76.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		27.5-28	26.5-27	22-23.5	18	28.5-29	27-28	23-24	18-19
Weight (kg)		20							
Starting current		Under 0.8 A Less							

*The Air outlets noise (45˚ angle, 1.5 meters in front of the unit) is about 6 dB greater than the indicated value. (at High Fan speed)

LGH-25RX5-E

Model		LGH-25RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.52-0.55	0.47-0.48	0.26-0.27	0.17-0.18	0.53-0.55	0.47-0.48	0.26-0.27	0.17-0.18
Power consumption (W)		113-129	102-114	56-62	36-42	115-131	103-115	56-63	36-42
Air volume	(m^3/h)	250	250	155	105	250	250	155	105
	(L/s)	69	69	43	29	69	69	43	29
External static pressure	(mmH_2O)	8.2-8.7	5.1-6.1	2-2.5	0.9	8.2-8.7	5.1-6.1	2-2.5	0.9
	(Pa)	80-85	50-60	20-25	9	80-85	50-60	20-25	9
Temperature exchange efficiency (%)		79.0	79.0	81.5	83.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.5	69.5	74.0	77.5	—	—	—	—
	Cooling	68.0	68.0	72.5	76.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		26-27	25-26	20-21.5	18-19	26.5-27.5	25.5-26.5	20.5-22	18-19
Weight (kg)		20							
Starting current		Under 0.9 A Less							

*The Air outlets noise (45˚ angle,1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-35RX5-E

Model		LGH-35RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.92-0.92	0.74-0.74	0.5-0.51	0.28-0.3	0.93-0.94	0.77-0.77	0.51-0.52	0.28-0.3
Power consumption (W)		195-212	160-169	105-116	58-69	197-217	164-173	105-116	58-69
Air volume	(m^3/h)	350	350	210	115	350	350	210	115
	(L/s)	97	97	58	32	97	97	58	32
External static pressure	(mmH_2O)	15.8-16.3	7.6-8.2	2.5-3.1	0.9	15.8-16.3	7.6-8.2	2.5-3.1	0.9
	(Pa)	155-160	75-80	25-30	9	155-160	75-80	25-30	9
Temperature exchange efficiency (%)		80.0	80.0	85.0	88.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.5	71.5	76.5	81.5	—	—	—	—
	Cooling	71.0	71.0	75.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		32-32	28.5-29.5	21.5-23	18	32.5-32.5	29.5-30.5	21.5-24	18
Weight (kg)		29							
Starting current		Under 2.4 A Less							

*The Air outlets noise (45˚ angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-15~100RX5-E

LGH-50RX5-E

Model		LGH-50RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.2-1.25	1.0-1.0	0.85-0.85	0.4-0.4	1.25-1.25	1.0-1.0	0.85-0.85	0.4-0.4
Power consumption (W)		255-286	207-228	175-190	80-95	260-290	210-230	180-195	80-95
Air volume	(m^3/h)	500	500	390	180	500	500	390	180
	(L/s)	139	139	108	50	139	139	108	50
External static pressure	(mmH_2O)	15.3-15.8	6.6-9.2	4.1-6.1	1.0	15.3-15.8	6.6-9.2	4.1-6.1	1.0
	(Pa)	150-155	65-90	40-60	10	150-155	65-90	40-60	10
Temperature exchange efficiency (%)		78.0	78.0	81.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.0	69.0	71.0	78.0	—	—	—	—
	Cooling	66.5	66.5	68.0	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33-34	30.5-32	26.5-28	19	34-35	31-32.5	27-29	19
Weight (kg)		32							
Starting current		Under 3.0 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-65RX5-E

Model		LGH-65RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6	1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6
Power consumption (W)		350-380	308-322	248-265	120-140	350-385	310-335	250-265	120-140
Air volume	(m^3/h)	650	650	520	265	650	650	520	265
	(L/s)	181	181	144	74	181	181	144	74
External static pressure	(mmH_2O)	11.2-12.2	6.1-8.2	4.1-5.1	0.8	11.2-12.2	6.1-8.2	4.1-5.1	0.8
	(Pa)	110-120	60-80	40-50	8	110-120	60-80	40-50	8
Temperature exchange efficiency (%)		77.0	77.0	80.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	68.5	68.5	70.5	78.0	—	—	—	—
	Cooling	66.0	66.0	68.5	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		34-34.5	32-33	28.5-31.5	22	34.5-35	32.5-33.5	28.5-30.5	22-22.5
Weight (kg)		40							
Starting current		Under 4.4 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-80RX5-E

Model		LGH-80RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65	1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65
Power consumption (W)		380-415	345-370	315-340	125-145	380-415	345-370	315-340	120-145
Air volume	(m^3/h)	800	800	700	355	800	800	700	355
	(L/s)	222	222	194	99	222	222	194	99
External static pressure	(mmH_2O)	14.8-15.3	10.7-12.2	8.2-9.7	2	14.8-15.3	10.7-12.2	8.2-9.7	2
	(Pa)	145-150	105-120	80-95	20	145-150	105-120	80-95	20
Temperature exchange efficiency (%)		79.0	79.0	80.5	87.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.0	71.0	72.5	79.5	—	—	—	—
	Cooling	70.0	70.0	71.5	79.5	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33.5-34.5	32-33	30-31	22	34.5-35.5	33-34	31-32	22
Weight (kg)		53							
Starting current		Under 3.8 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-15~100RX5-E

LGH-150/200RX5-E

LGH-100RX5-E

Model		LGH-100RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9	2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9
Power consumption (W)		500-535	445-475	350-380	175-200	510-550	460-485	365-395	175-200
Air volume	(m^3/h)	1000	1000	755	415	1000	1000	755	415
	(L/s)	278	278	210	115	278	278	210	115
External static pressure	(mmH_2O)	16.3-17.3	10.2-11.2	5.6-6.1	1.8	16.3-17.3	10.2-11.2	5.6-6.1	1.8
	(Pa)	160-170	100-110	55-60	18	160-170	100-110	55-60	18
Temperature exchange efficiency (%)		80.0	80.0	83.0	87.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	74.0	80.0	—	—	—	—
	Cooling	71.0	71.0	73.0	79.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		36-37	34-35	31-32.5	21-22	37-38	35-36	32-33	21-22
Weight (kg)		59							
Starting current		Under 4.6 A Less							

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 17 dB greater than the indicated value. (at High Fan speed)

LGH-150RX5-E

Model		LGH-150RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		3.5-3.5	3.2-3.2	2.9-2.9	3.5-3.5	3.2-3.2	2.9-2.9
Power consumption (W)		760-830	690-740	630-680	765-835	695-745	635-685
Air volume	(m^3/h)	1500	1500	1300	1500	1500	1300
	(L/s)	417	417	361	417	417	361
External static pressure	(mmH_2O)	16.3-17.8	13.3-13.8	9.7-10.2	16.3-17.8	13.3-13.8	9.7-10.2
	(Pa)	160-175	130-135	95-100	160-175	130-135	95-100
Temperature exchange efficiency (%)		80.0	80.0	81.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.0	72.0	72.5	—	—	—
	Cooling	70.5	70.5	71.5	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		38-39	36-37.5	33.5-35	39-40.5	37.5-39	35.5-37
Weight (kg)		105					
Starting current		Under 7.3 A Less					

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 19 dB greater than the indicated value. (at High Fan speed)

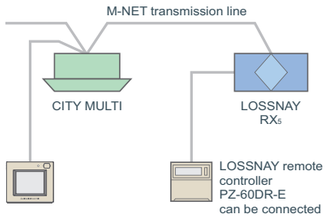
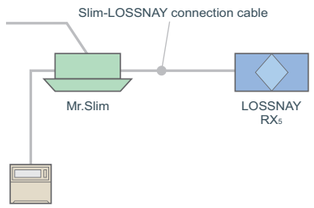
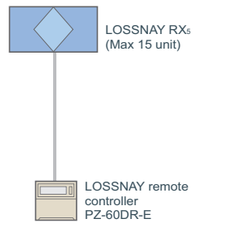
LGH-200RX5-E

Model		LGH-200RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		4.8-4.8	4.2-4.2	3.4-3.4	4.8-4.8	4.2-4.2	3.4-3.4
Power consumption (W)		1035-1100	910-980	715-785	1040-1110	915-980	720-785
Air volume	(m^3/h)	2000	2000	1580	2000	2000	1580
	(L/s)	556	556	439	556	556	439
External static pressure	(mmH_2O)	16.3-16.8	10.2-10.7	6.1-6.6	16.3-16.8	10.2-10.7	6.1-6.6
	(Pa)	160-165	100-105	60-65	160-165	100-105	60-65
Temperature exchange efficiency (%)		80.0	80.0	83.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	73.5	—	—	—
	Cooling	71.0	71.0	72.0	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		39.5-40	37-38	32.5-34	40.5-41	38-39	33.5-35
Weight (kg)		118					
Starting current		Under 11.9A Less					

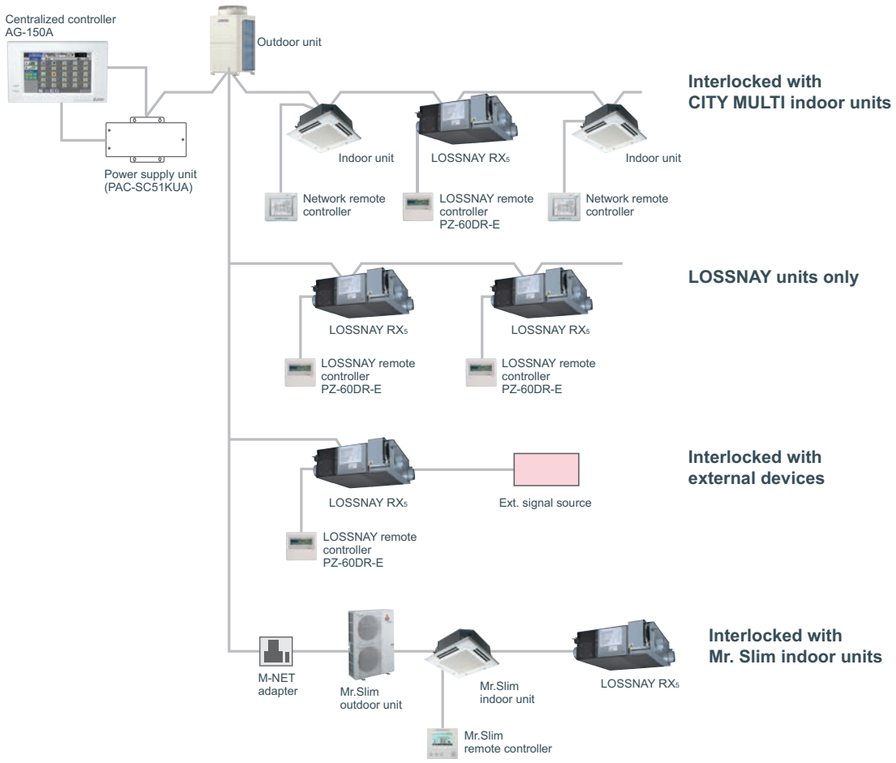
*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 20 dB greater than the indicated value. (at High Fan speed)

Control

■The New Remote Controller PZ-60DR-E enable simple control setting

Interlocked with Air conditioners		LOSSNAY independent
Interlocked with CITY MULTI	**Interlocked with Mr.Slim**	
		
(PZ-52SF-E can be used insted of PZ-60DR-E, However, function is limited and connecting position is different.)	(The LOSSNAY remote controller (PZ-60DR-E, PZ-41SLB-E) can not be used with this system.)	(PZ-41SLB-E can be connected however function is limited.)

■Centralized Controller System



Lossnay

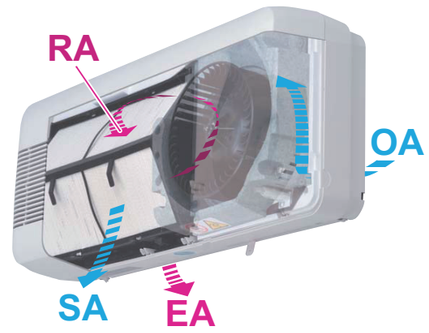
VL-100U-E

Heat Recovery Ventilators for Residential Use

Time Spent in Comfort with a Breath of Fresh Air

Energy Saving
Reduced heat loss contributes to lower air conditioning costs.

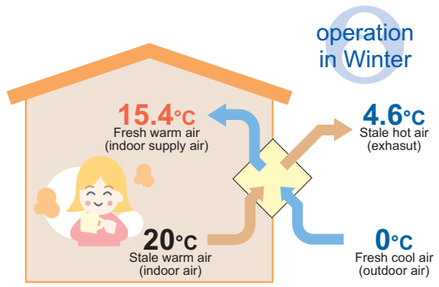
Fresh Air
Simultaneous air supply/exhaust function ensures that air stays fresh with efficient ventilation.

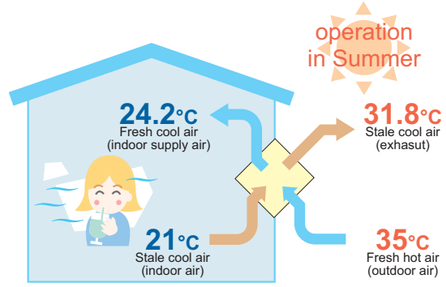


Quiet Operation
Super sound insulation and quiet operation.

Simple Installation
Easy Installation through boring of 2 installation holes.

Total-Heat-Exchange Concept





•Heat-exchange calculating equation

Indoor supply-air temperature (°C) = Outdoor temperature (°C) + { Indoor temperature (°C) − Outdoor temperature (°C) } × temp exchange efficiency (%)

Calculation example : 15.4°C = 0°C + (20°C - 0°C) x 77% (Low notch)

•Heat-exchange calculating equation

Indoor supply-air temperature (°C) = Outdoor temperature (°C) − {Outdoor temperature (°C) − Indoor temperature (°C)} × temp exchange efficiency (%)

Calculation example : 24.2°C = 35°C - (35°C - 21°C) x 77% (Low notch)

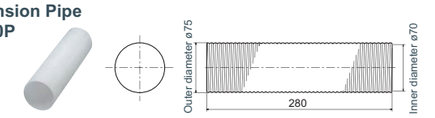
Specification

- •Simple installation through boring of 2 installation holes.
- •Low-noise(Less than 30dB at low notch).
- •1-motor 2-fan system. •Air-volume:low/high 2-notch.
- •Air-supply/exhaust pipes and plastic weather cover are supplied as accessories.
- •Equipped with an outdoor-air shutter. •Pull-string switch

Supply Voltage (V)	Power line frequency (Hz)	Notch	Air volume (m³/h)	Power Consumption (W)	Temp.exchange efficiency (%)	Noise (dB)	Weight (kg)
220-240	50	HI	105	26	70	39	6.5
		LO	65	23	77	29.5	
220	60	HI	90	26	73	37	
		LO	50	21	80	26	

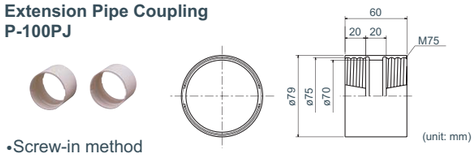
Optional parts

Extension Pipe P-100P



•Total length when connected to the pipe extension coupling is 300mm.

Extension Pipe Coupling P-100PJ



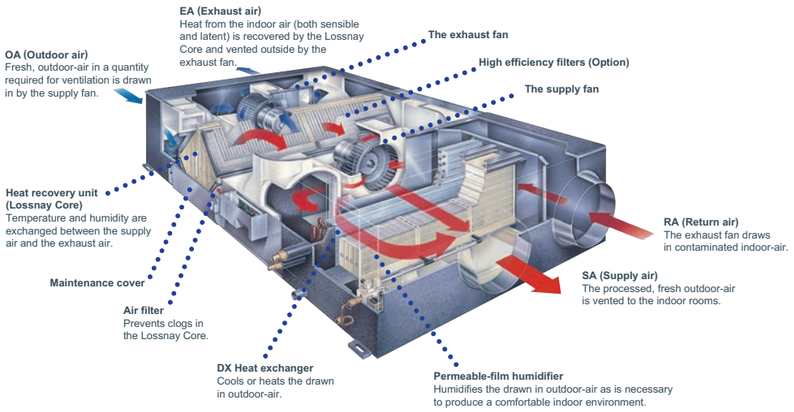
•Screw-in method

OA Processing Units

RDH3 Series

Ideal Indoor-Air Quality — For Your Comfort and Health

The OA (outdoor-air) Processing Unit creates an optimum indoor-air environment at an unparalleled rate of cost efficiency providing substantial energy savings. Forced air ventilating and humidifying functions unique to this system keep indoor-air fresh and free of contaminants preventing “sick building syndrome” and the spread of airborne viruses such as the flu. Another novel feature of the OA Processing Unit is the “Lossnay core,” a heat-exchange unit that functions to transfer heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance designed to ensure users ample comfort and year-round health which cannot be found anywhere else on the market.



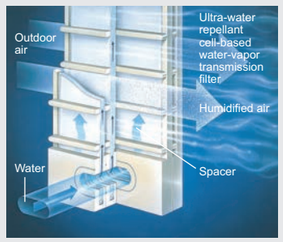
New Permeable Film Humidifier (RDH3 model)

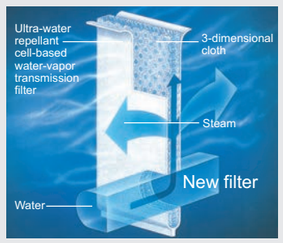
Comfortable Level of Humidity for Exceptionable Air Quality

The OA Processing Unit is equipped with a new permeable film humidifier developed and patented by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. The use of a 3-layer film that allows only the transfer of steam prevents the production of white powder, so there is no need for the use of a water purifier.

Highly Efficient Humidification

Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume.



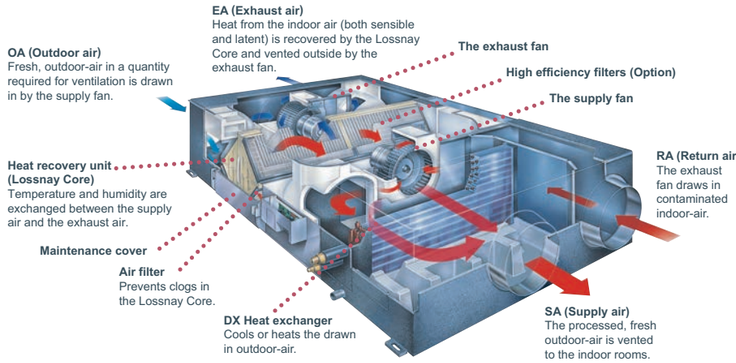


RD3 Series

A Total Air Conditioning Package Manifesting Remarkable Power

Lossnay Ventilation and Air Conditioning
1. When the load is light ⇒ Main air conditioning
2. When the load is heavy ⇒ Supplemental 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%. A remarkable product found nowhere else, this special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.

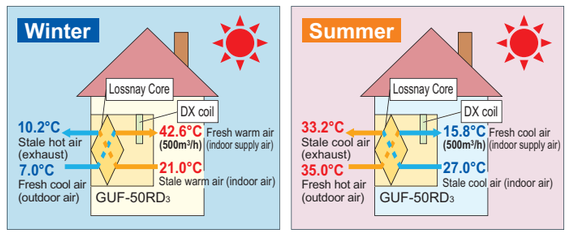


The Air Conditioning Function

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. Wha'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-50RD3)



Specification

Model			GUF-50RDH3 *3		GUF-100RDH3 *3		GUF-50RD3		GUF-100RD3	
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz							
Cooling capacity *1		kW	5.46	<1.83>	11.17	<3.85>	5.46	<1.83>	11.17	<3.85>
Figure in < > is the recovery *1		kcal / h	4,700	<1,600>	9,600	<3,300>	4,700	<1,600>	9,600	<3,300>
capacity by LOSSNAY core. *1		BTU / h	18,600	<6,200>	38,100	<13,100>	18,600	<6,200>	38,100	<13,100>
	Power input	kW	235-265		480-505		235-265		480-505	
	Current input	A	1.15		2.20		1.15		2.20	
Heating capacity *2		kW	6.18	<2.01>	12.50	<4.20>	6.18	<2.01>	12.50	<4.20>
Figure in < > is the recovery *2		kcal / h	5,300	<1,700>	10,800	<3,600>	5,300	<1,700>	10,800	<3,600>
capacity by LOSSNAY core. *2		BTU / h	21,100	<6,900>	42,700	<14,300>	21,100	<6,900>	42,700	<14,300>
	Power input	kW	235-265		480-505		235-265		480-505	
	Current input	A	1.15		2.20		1.15		2.20	
Capacity equivalent to indoor unit			P32		P63		P32		P63	
Humidifying capacity		kg / h	2.7		5.4		-		-	
		lbs / h	6.0		12.0		-		-	
	Humidifier		Permeable film humidifier				-			
External finish			Galvanized, with grey insulation sheet							
External dimension H x W x D		mm	317 x 1,016 x 1,288		398 x 1,231 x 1,580		317 x 1,016 x 1,288		398 x 1,231 x 1,580	
		in.	12-1/2 x 40 x 50-3/4		15-11/16 x 48-1/2 x 62-1/4		12-1/2 x 40 x 50-3/4		15-11/16 x 48-1/2 x 62-1/4	
Net weight		kg (lbs)	57 (126)		98 (217)		54 (120)		92 (203)	
Heat exchanger	LOSSNAY core		Partition, Cross-flow structure, Special preserved paper-plate.							
	Refrigerant coil		Cross fin (Aluminum fin and copper tube)							
FAN	Type x Quantity		SA: Centrifugal fan (Sirocco fan) x 1							
			EA: Centrifugal fan (Sirocco fan) x 1							
	External static press.	Pa	125		135		140		140	
		mmH_2O	12.7		13.8		14.3		14.3	
	Motor type		Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units							
	Motor output	kW	-		-		-		-	
	Driving mechanism		Direct-driven by motor							
	Airflow rate (High value)	m^3 / h	500		1,000		500		1,000	
		L / s	139		139		139		139	
		cfm	294		589		294		589	
Sound pressure level (Low-High) (measured in anechoic room)		dB <A>	33.5-34.5		38-39		33.5-34.5		38-39	
Insulation material			Polyester sheet							
Air filter	Supplying air		Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)							
	Exhausting air		Non-woven fabrics filter (Gravitational method 82%)							
Protection device			Fuse							
Refrigerant control device			LEV							
Diameter of refrigerant pipe	Liquid	mm (in.)	ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare	
	Gas	mm (in.)	ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare		ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare	
Diameter of drain pipe		mm (in.)	VP25							

Notes:

*1 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB/24°CWB

*2 Heating : Indoor 20°CDB/13.8°CWB, Outdoor 7°CDB/16°CWB

*3 Available for limited countries. Please contact your local distributor for further information.