

# R2 (Heat Recovery) series



## Simultaneous Cooling and Heating

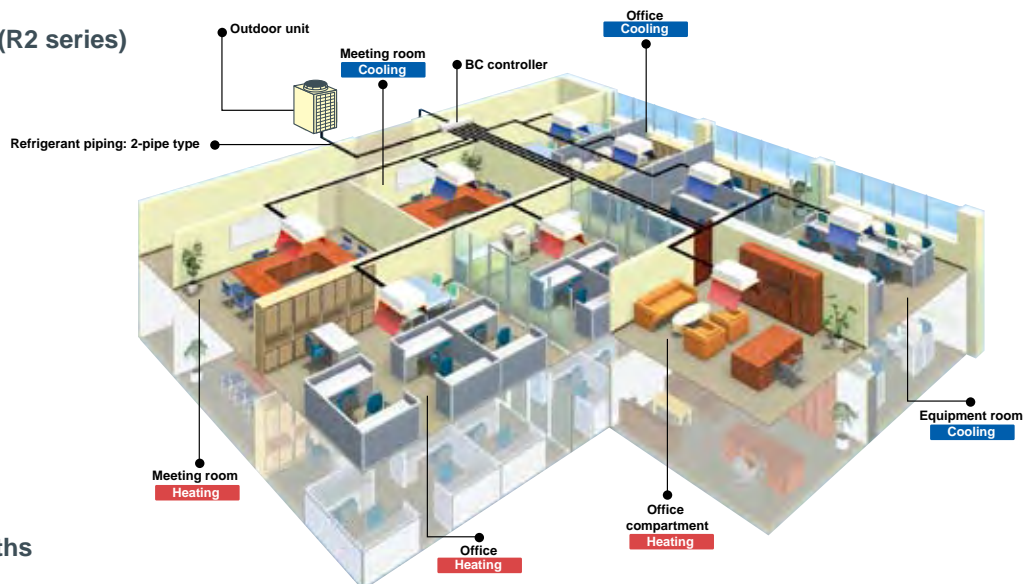
R2 series — **PURY-P YJM-A(-BS)**      **PURY-EP YJM-A(-BS)**  
**PURY-P YSJM-A(1)(-BS)**      **PURY-EP YSJM-A(1)(-BS)**

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

CITY MULTI R2 series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe.

This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity

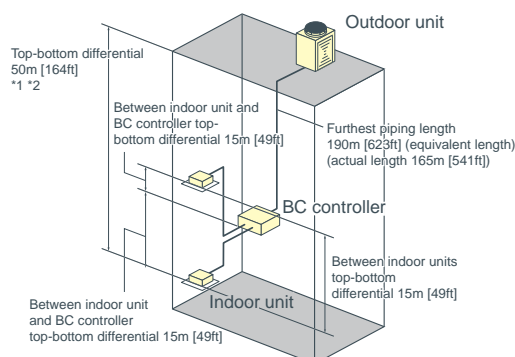
Installation image (R2 series)



### System Pipe Lengths

[8-36HP (R2 series)]  
 [8-28HP (High COP R2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	550-800 [1,804-2,624]
<small>(P600,P650 models only; Refer to the Data book for other models.)</small>	
Maximum allowable length.....	165 (190equivalent) [541(623)]
Maximum length between outdoor and single/main BC controller..... 110 [360]	
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.	
Maximum length between single/main BC controller and indoor..... 40-60 [131-196]	
Vertical differentials between units	
Indoor/outdoor (outdoor higher).....	50 [164]*2
Indoor/outdoor (outdoor lower).....	40 [131]*2
Indoor/BC controller (single/main)...	15 [49]
*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.	
Indoor/indoor.....	15 [49]
Main BC Controller/Sub BC Controller...	15 [49]



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

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

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

## New Lineup Y/R2 series(YJM)



In addition to outdoor unit "S" and "L" module, a new "XL" module is introduced. The three modular form can be combined to create systems up to 50HP in Y series and up to 36HP in R2 series.

### <Y Series-Standard>

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Capacity	Cooling 22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101	108	113	118	124	130	136	140
	Heating 25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113	119.5	127	132	140	145	150	156.5
Module (Pattern 1)	S module	●	●	●			●+●	●+●	●	●	●+●	●+●	●	●		●+●	●+●	●	●+●	●+●	●+●	●+●
	L module			●	●				●	●	●+●	●+●	●	●		●+●	●+●	●	●+●	●+●	●+●	●+●
	XL module					●					●	●	●	●	●+●	●+●	●	●+●	●+●	●+●	●+●	●+●
Module (Pattern 2)	S module					●+●	●+●	●+●	●													
	L module								●		●+●											
	XL module										●	●	●	●								

### <R2 Series-Standard>

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Capacity	Cooling 22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101
	Heating 25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113
Module (Pattern 1)	S module	●	●	●	●	●	●+●	●+●	●+●	●	●	●+●	●+●	●	●
	L module			●	●				●	●	●+●	●+●	●	●	
	XL module					●					●	●	●	●	●+●
Module (Pattern 2)	S module				●+●	●+●	●+●	●							
	L module							●		●+●			●		
	XL module										●	●	●		

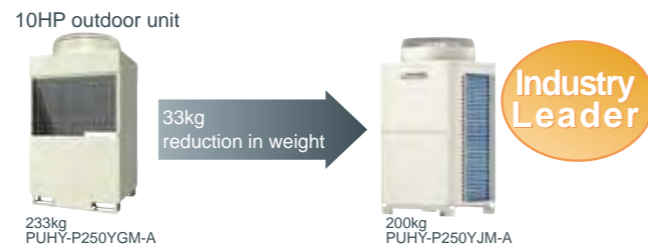
## Improved performance

Improved heating capacity at low ambient temperature ensures 70% capacity at -15°C [5°F].

Cooling operation range is extended up to 46°C [115°F] from 43°C [109°F] with conventional model.

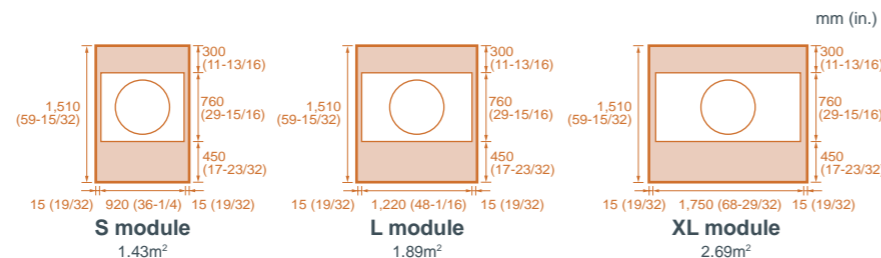
## Compact Design Industry leading weight saving

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

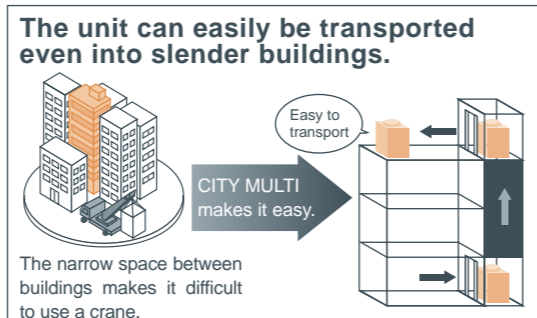
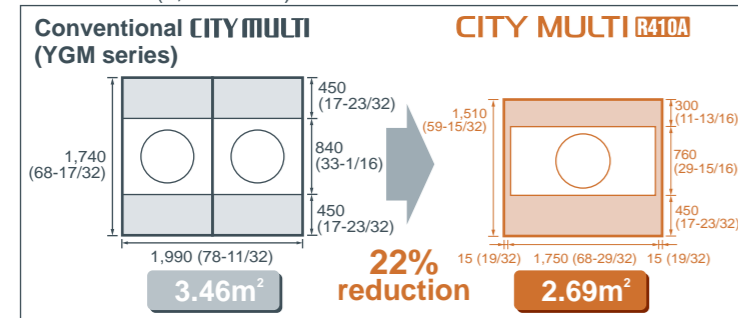


## Effective Use of Space

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



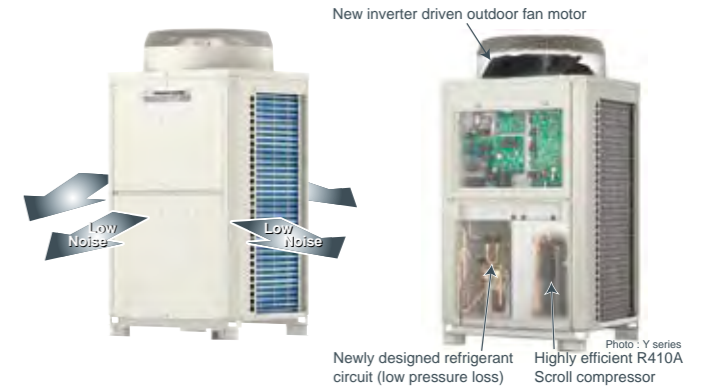
### P450 model (Y,R2 series)



## Low Noise Levels New Fan Design

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

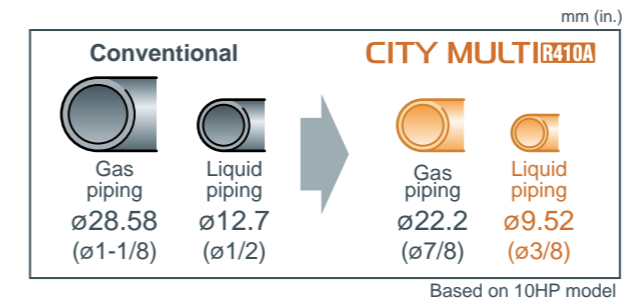
Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include low noise mode. This function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



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

## R410A Pipe Sizing

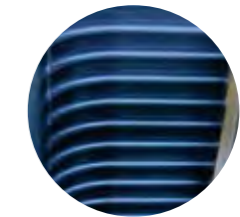
As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and less riser space is required within the building.



## Blue Fin Treatment

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

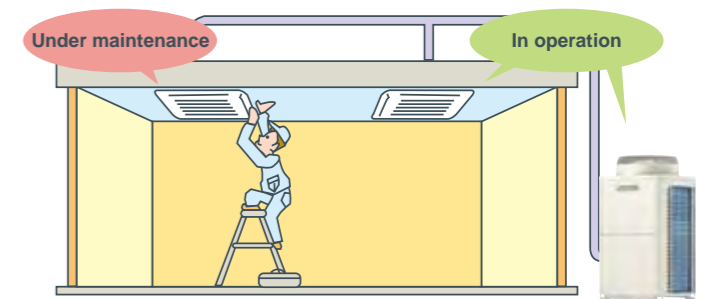
\*Standard:Anti-corrosion Blue Fin treatment & copper tube. BS type (optional):salt-resistant cross fin & copper tube.



## Easy Maintenance

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

\* Not applicable to all situations. \* Be sure to turn off the power to the indoor unit when repairing or servicing the unit.



## System Check

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

## 60Pa High Static Pressure as standard

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

# OUTDOOR UNIT

## R2 Series

### PURY-P YJM-A(-BS)



## ► Specifications

Model		PURY-P200YJM-A(-BS)	PURY-P250YJM-A(-BS)	PURY-P300YJM-A(-BS)	
Power source		3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5	
	*1 BTU / h	76,400	95,500	114,300	
	Power input kW	5.18	7.05	8.67	
	Current input A	8.7-8.3-8.0	11.9-11.3-10.8	14.6-13.9-13.4	
COP		kW / kW	4.32	3.97	3.86
Temp. range of cooling	*3 Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor	D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	25.0	31.5	37.5	
	*2 BTU / h	85,300	107,500	128,000	
	Power input kW	5.69	7.32	8.78	
	Current input A	9.6-9.1-8.7	12.3-11.7-11.3	14.8-14.0-13.5	
COP		kW / kW	4.39	4.30	4.27
Temp. range of heating	*3 Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor	W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 1~20	P15~P250 / 1~25	P15~P250 / 1~30	
Sound pressure level (measured in anechoic room)		dB <A>	56	57	59
Power pressure level (measured in anechoic room)		dB <A>	76	77	79
Refrigerant piping diameter	High pressure	mm (in.)	15.88(5/8) Brazed	19.05(3/4) Brazed	19.05(3/4) Brazed
	Low pressure	mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
FAN	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m <sup>3</sup> /min	185	185	185
		L/s	3,083	3,083	3,083
		cfm	6,532	6,532	6,532
Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
Compressor	*4 Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
	External static press.		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
Case heater	Motor output	kW	5.4	6.8	7.8
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.045(240 V)
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor		Over-heat protection	Over-heat protection	
	Fan motor		Thermal switch	Thermal switch	
Refrigerant	Type x original charge		R410A x 9.5kg (21lbs)	R410A x 9.5kg (21lbs)	
Net weight	kg (lbs)		240(530)	245(541)	
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	
Optional parts			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	

### Notes:

\*1, \*2 Nominal conditions

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

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

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

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

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

# OUTDOOR UNIT R2 Series PURY-P YJM-A(-BS)



## ► Specifications

Model	PURY-P350YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P450YJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	40.0	45.0	50.0
	*1 BTU/h	136,500	153,500	170,600
	Power input kW	11.33	13.55	14.49
	Current input A	19.1-18.1-17.5	22.8-21.7-20.9	24.4-23.2-22.3
	COP kW/kW	3.53	3.32	3.45
Temp. range of cooling *3	Indoor W.B.	15.0-24.0°C(59-75°F)	15.0-24.0°C(59-75°F)	15.0-24.0°C(59-75°F)
	Outdoor D.B.	-5.0-46.0°C(23-115°F)	-5.0-46.0°C(23-115°F)	-5.0-46.0°C(23-115°F)
Heating capacity (Nominal)	*2 kW	45.0	50.0	56.0
	*2 BTU/h	153,500	170,600	191,100
	Power input kW	10.89	12.75	14.58
	Current input A	18.3-17.4-16.8	21.5-20.4-19.7	24.6-23.3-22.5
	COP kW/kW	4.13	3.92	3.84
Temp. range of heating *3	Indoor W.B.	15.0-27.0°C(59-81°F)	15.0-27.0°C(59-81°F)	15.0-27.0°C(59-81°F)
	Outdoor W.B.	-20.0-15.5°C(-4-60°F)	-20.0-15.5°C(-4-60°F)	-20.0-15.5°C(-4-60°F)
Indoor unit connectable	50-150 % of outdoor unit capacity			
Model / Quantity	P15-P250 / 1-35	P15-P250 / 1-40	P15-P250 / 1-45	
Sound pressure level (measured in anechoic room)	dB <A>			
	60	61	62	
Power pressure level (measured in anechoic room)	dB <A>			
	80	81	82	
Refrigerant piping diameter	High pressure mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
	Low pressure mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed
FAN	Type x Quantity	Propeller fan x 1		
	Air flow rate m <sup>3</sup> /min	225	225	360
	L/s	3,750	3,750	6,000
	cfm	7,945	7,945	12,712
	Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 2
	*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)		
	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter		
	Motor output kW	9.9	10.2	11.6
Case heater kW	0.045(240 V)			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		
	Fan motor	Thermal switch		
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	270(596)		
Heat exchanger	Salt-resistant cross fin & copper tube			
Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		
	BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1		
	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		
	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1, \*2 Nominal conditions

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

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

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

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

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

# OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



## ► Specifications

Model	PURY-P400YSJM-A1(-BS)	PURY-P450YSJM-A1(-BS)	PURY-P500YSJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	45.0	50.0	56.0
	*1 BTU/h	153,500	170,600	191,100
	Power input kW	10.73	12.50	14.85
	Current input A	18.1-17.2-16.5	21.1-20.0-19.3	25.0-23.8-22.9
	COP kW/kW	4.19	4.00	3.77
Temp. range of cooling *3	Indoor W.B.	15.0-24.0°C(59-75°F)	15.0-24.0°C(59-75°F)	15.0-24.0°C(59-75°F)
	Outdoor D.B.	-5.0-46.0°C(23-115°F)	-5.0-46.0°C(23-115°F)	-5.0-46.0°C(23-115°F)
Heating capacity (Nominal)	*2 kW	50.0	56.0	63.0
	*2 BTU/h	170,600	191,100	215,000
	Power input kW	11.62	13.30	15.10
	Current input A	19.6-18.6-17.9	22.4-21.3-20.5	25.4-24.2-23.3
	COP kW/kW	4.30	4.21	4.17
Temp. range of heating *3	Indoor W.B.	15.0-27.0°C(59-81°F)	15.0-27.0°C(59-81°F)	15.0-27.0°C(59-81°F)
	Outdoor W.B.	-20.0-15.5°C(-4-60°F)	-20.0-15.5°C(-4-60°F)	-20.0-15.5°C(-4-60°F)
Indoor unit connectable	50-150 % of outdoor unit capacity			
Model / Quantity	P15-P250 / 1-40	P15-P250 / 1-45	P15-P250 / 1-50	
Sound pressure level (measured in anechoic room)	dB <A>			
	59	59.5	60	
Power pressure level (measured in anechoic room)	dB <A>			
	79	79.5	80	
Refrigerant piping diameter	High pressure mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
	Low pressure mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed
<b>Set Model</b>				
FAN	Type x Quantity	Propeller fan x 1		
	Air flow rate m <sup>3</sup> /min	185	185	185
	L/s	3,083	3,083	3,083
	cfm	6,532	6,532	6,532
	Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1
	*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)		
	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter		
	Motor output kW	5.4	5.4	6.8
Case heater kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		
	Fan motor	Thermal switch		
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)		
Net weight	kg (lbs)	240(530)		
Heat exchanger	Salt-resistant cross fin & copper tube			
Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		
	BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1		
	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		
	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

### Notes:

\*1, \*2 Nominal conditions

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

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

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

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

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

# OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



## ► Specifications

Model	PURY-P500YSJM-A1(-BS)	PURY-P550YSJM-A(-BS)	PURY-P600YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW 66.0 *1 BTU/h 191,100	63.0 215,000	69.0 235,400
Power input	kW 14.73	17.30	19.65
Current input	A 24.8-23.6-22.7	29.2-27.7-26.7	33.1-31.5-30.3
COP	kW / kW 3.80	3.64	3.51
Temp. range of cooling	*3 Indoor W.B. 15.0~24.0°C(59~75°F) Outdoor D.B. -5.0~46.0°C(23~115°F)	15.0~24.0°C(59~75°F) -5.0~46.0°C(23~115°F)	15.0~24.0°C(59~75°F) -5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW 63.0 *2 BTU/h 215,000	69.0 235,400	76.5 261,000
Power input	kW 15.07	16.95	19.07
Current input	A 25.4-24.1-23.2	28.6-27.1-26.2	32.1-30.5-29.4
COP	kW / kW 4.18	4.07	4.01
Temp. range of heating	*3 Indoor W.B. 15.0~27.0°C(59~81°F) Outdoor W.B. -20.0~15.5°C(-4~60°F)	15.0~27.0°C(59~81°F) -20.0~15.5°C(-4~60°F)	15.0~27.0°C(59~81°F) -20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity Model / Quantity	50~150 % of outdoor unit capacity P15~P250 / 1~50	50~150 % of outdoor unit capacity P15~P250 / 2~50
Sound pressure level (measured in anechoic room)	dB <A>	61	62
Power pressure level (measured in anechoic room)	dB <A>	81	82
Refrigerant piping diameter	High pressure mm (in.) Low pressure mm (in.)	22.2(7/8) Braze 28.58(1-1/8) Braze	28.58(1-1/8) Braze 28.58(1-1/8) Braze

### Set Model

Model	PURY-P200YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P250YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P300YJM-A(-BS)	
FAN	Type x Quantity Air flow rate Driving mechanism Motor output External static press.	Propeller fan x 1 m³/min 3,083 L/s 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)
Compressor	Type x Quantity Starting method Motor output Case heater	Inverter scroll hermetic compressor Inverter 5.4 0.035(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)	Inverter scroll hermetic compressor Inverter 6.8 0.035(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
External dimension HxWxD	mm in.	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16
Protection devices	High pressure protection Inverter circuit (COMP./FAN) Compressor Fan motor	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs) 240(530)	R410A x 9.5kg (21lbs) 245(541)	R410A x 9.5kg (21lbs) 240(530)	R410A x 9.5kg (21lbs) 245(541)	R410A x 9.5kg (21lbs) 245(541)	R410A x 9.5kg (21lbs) 245(541)
Heat exchanger	Salt-resistant cross fin & copper tube						
Pipe between unit and distributor	High pressure Low pressure	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 22.2(7/8) Braze
Optional parts	Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1						

### Notes:

\*1, \*2 Nominal conditions

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

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

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).

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

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

# OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



## ► Specifications

Model	PURY-P600YSJM-A1(-BS)	PURY-P650YSJM-A(-BS)	PURY-P700YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW 69.0 *1 BTU/h 235,400	73.0 249,100	80.0 273,000
Power input	kW 19.16	21.53	23.95
Current input	A 32.3-30.7-29.6	36.3-34.5-33.2	40.4-38.4-37.0
COP	kW / kW 3.60	3.39	3.34
Temp. range of cooling	*3 Indoor W.B. 15.0~24.0°C(59~75°F) Outdoor D.B. -5.0~46.0°C(23~115°F)	15.0~24.0°C(59~75°F) -5.0~46.0°C(23~115°F)	15.0~24.0°C(59~75°F) -5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW 76.5 *2 BTU/h 261,000	81.5 278,100	88.0 300,300
Power input	kW 18.61	20.47	22.33
Current input	A 31.4-29.8-28.7	34.5-32.8-31.6	37.6-35.8-34.5
COP	kW / kW 4.11	3.98	3.94
Temp. range of heating	*3 Indoor W.B. 15.0~27.0°C(59~81°F) Outdoor W.B. -20.0~15.5°C(-4~60°F)	15.0~27.0°C(59~81°F) -20.0~15.5°C(-4~60°F)	15.0~27.0°C(59~81°F) -20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity Model / Quantity	50~150 % of outdoor unit capacity P15~P250 / 2~50	50~150 % of outdoor unit capacity P15~P250 / 2~50
Sound pressure level (measured in anechoic room)	dB <A>	62	63
Power pressure level (measured in anechoic room)	dB <A>	82	83
Refrigerant piping diameter	High pressure mm (in.) Low pressure mm (in.)	28.58(1-1/8) Braze 28.58(1-1/8) Braze	28.58(1-1/8) Braze 28.58(1-1/8) Braze

### Set Model

Model	PURY-P250YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P400YJM-A(-BS)	
FAN	Type x Quantity Air flow rate Driving mechanism Motor output External static press.	Propeller fan x 1 m³/min 185 L/s 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 225 3,750 7,945 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 225 3,750 7,945 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 185 3,083 6,532 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)	Propeller fan x 1 225 3,750 7,945 Inverter-control, Direct-driven by motor 0.92 x 1 0 Pa (0 mmH₂O)
Compressor	Type x Quantity Starting method Motor output Case heater	Inverter scroll hermetic compressor Inverter 6.8 0.035(240 V)	Inverter scroll hermetic compressor Inverter 9.9 0.045(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)	Inverter scroll hermetic compressor Inverter 9.9 0.045(240 V)	Inverter scroll hermetic compressor Inverter 7.8 0.045(240 V)	Inverter scroll hermetic compressor Inverter 10.2 0.045(240 V)
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
External dimension HxWxD	mm in.	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 1,220 x 760 67-3/8(65 without legs) x 48-1/16 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 1,220 x 760 67-3/8(65 without legs) x 48-1/16 x 29-15/16	1,710(1,650 without legs) x 920 x 760 67-3/8(65 without legs) x 36-1/4 x 29-15/16	1,710(1,650 without legs) x 1,220 x 760 67-3/8(65 without legs) x 48-1/16 x 29-15/16
Protection devices	High pressure protection Inverter circuit (COMP./FAN) Compressor Fan motor	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch	High pressure sensor, High pressure switch at 4.15MPa (601 psi) Over-heat protection, Over-current protection Thermal switch
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs) 240(530)	R410A x 11.8kg (27lbs) 270(596)	R410A x 9.5kg (21lbs) 245(541)	R410A x 11.8kg (27lbs) 270(596)	R410A x 9.5kg (21lbs) 245(541)	R410A x 11.8kg (27lbs) 270(596)
Heat exchanger	Salt-resistant cross fin & copper tube						
Pipe between unit and distributor	High pressure Low pressure	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 19.05(3/4) Braze	mm (in.) 22.2(7/8) Braze	mm (in.) 22.2(7/8) Braze
Optional parts	Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1						

### Notes:

\*1, \*2 Nominal conditions

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

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

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).

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

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

# OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)

## > Specifications



Model	PURY-P700YSJM-A1(-BS)		PURY-P750YSJM-A(-BS)		PURY-P800YSJM-A(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity (Nominal)	*1 kW	80.0		85.0		90.0	
	*1 BTU / h	273,000		290,000		307,100	
	Power input kW	23.39		26.47		28.30	
	Current input A	39.4-37.5-36.1		44.6-42.4-40.9		47.7-45.3-43.7	
COP	kW / kW	3.42		3.21		3.18	
	Indoor W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Outdoor D.B.	-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	88.0		95.0		100.0	
	*2 BTU / h	300,300		324,100		341,200	
	Power input kW	21.78		24.05		26.04	
	Current input A	36.7-34.9-33.6		40.6-38.5-37.1		43.9-41.7-40.2	
COP	kW / kW	4.04		3.95		3.84	
	Indoor W.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50		P15~P250 / 2~50	
Sound pressure level (measured in anechoic room)	dB <A>	63		63.5		64	
Power pressure level (measured in anechoic room)	dB <A>	83		83.5		84	
Refrigerant piping diameter	High pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	
	Low pressure	34.93(1-3/8) Brazed		34.93(1-3/8) Brazed		34.93(1-3/8) Brazed	

### Set Model

Model	PURY-P350YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P400YJM-A(-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 1		
	Air flow rate	m <sup>3</sup> /min	225		225		225	
		L/s	3,750		3,750		3,750	
		cfm	7,945		7,945		7,945	
	Driving mechanism	Inverter-control, Direct-driven by motor						
	Motor output	0.92 x 1		0.92 x 1		0.92 x 1		
	*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
	Compressor	Type x Quantity	Inverter scroll hermetic compressor					
		Starting method	Inverter					
		Motor output	9.9		9.9		10.2	
Case heater	0.045(240 V)		0.045(240 V)		0.045(240 V)			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>							
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection						
	Fan motor	Thermal switch						
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	270(596)		270(596)		270(596)		
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	High pressure	19.05(3/4) Brazed		19.05(3/4) Brazed		22.2(7/8) Brazed		
	Low pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
Optional parts	Outdoor Twinning kit: CMY-R200VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1							

### Notes:

\*1,\*2 Nominal conditions

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

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

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

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

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

# OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)

## > Specifications



Model	PURY-P800YSJM-A1(-BS)		PURY-P850YSJM-A(-BS)		PURY-P900YSJM-A(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity (Nominal)	*1 kW	90.0		96.0		101.0	
	*1 BTU / h	307,100		327,600		344,600	
	Power input kW	26.62		29.26		30.23	
	Current input A	44.9-42.6-41.1		49.3-46.9-45.2		51.0-48.4-46.7	
COP	kW / kW	3.38		3.28		3.34	
	Indoor W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Outdoor D.B.	-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	108.0		113.0		113.0	
	*2 BTU / h	368,500		385,600		385,600	
	Power input kW	25.77		28.42		30.05	
	Current input A	43.5-41.3-39.8		47.9-45.5-43.9		50.7-48.1-46.4	
COP	kW / kW	3.88		3.80		3.76	
	Indoor W.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50		P15~P250 / 2~50	
Sound pressure level (measured in anechoic room)	dB <A>	64		64.5		65	
Power pressure level (measured in anechoic room)	dB <A>	84		84.5		85	
Refrigerant piping diameter	High pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	
	Low pressure	34.93(1-3/8) Brazed		41.28(1-5/8) Brazed		41.28(1-5/8) Brazed	

### Set Model

Model	PURY-P350YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P450YJM-A(-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2		Propeller fan x 2		
	Air flow rate	m <sup>3</sup> /min	225		360		360	
		L/s	3,750		6,000		6,000	
		cfm	7,945		12,712		12,712	
	Driving mechanism	Inverter-control, Direct-driven by motor						
	Motor output	0.92 x 1		0.92 x 2		0.92 x 2		
	*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)		
	Compressor	Type x Quantity	Inverter scroll hermetic compressor					
		Starting method	Inverter					
		Motor output	9.9		11.6		11.6	
Case heater	0.045(240 V)		0.045(240 V)		0.045(240 V)			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>							
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,750 x 760		1,710(1,650 without legs) x 1,750 x 760		
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection						
	Fan motor	Thermal switch						
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	270(596)		320(706)		320(706)		
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	High pressure	19.05(3/4) Brazed		22.2(7/8) Brazed		22.2(7/8) Brazed		
	Low pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
Optional parts	Outdoor Twinning kit: CMY-R100XVBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P1016V-HA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1							

### Notes:

\*1,\*2 Nominal conditions

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

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

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

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

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

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



## ► Specifications

Model	PURY-EP200YJM-A(-BS)	PURY-EP250YJM-A(-BS)	PURY-EP300YJM-A(-BS)	PURY-EP350YJM-A(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5	40.0	
	*1 BTU / h	76,400	95,500	114,300	136,500	
	kW	5.07	6.76	8.25	10.28	
	A	8.5-8.1-7.8	11.4-10.8-10.4	13.9-13.2-12.7	17.3-16.4-15.8	
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)				
	Outdoor D.B.	-5.0~46.0°C(23~115°F)				
	COP	4.1	4.4	4.06	3.89	
Heating capacity (Nominal)	*2 kW	25.0	31.5	37.5	45.0	
	*2 BTU / h	85,300	107,500	128,000	153,500	
	kW	5.56	7.15	8.60	10.58	
	A	9.3-8.9-8.5	12.0-11.4-11.0	14.5-13.7-13.2	17.8-16.9-16.3	
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)				
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)				
	COP	4.49	4.40	4.36	4.25	
Indoor unit connectable	50~150 % of outdoor unit capacity					
Sound pressure level (measured in anechoic room)	dB <A>	57	60	60	61	
Power pressure level (measured in anechoic room)	dB <A>	77	80	80	81	
Refrigerant piping diameter	High pressure	15.88(5/8) Braze				
	Low pressure	19.05(3/4) Braze				
FAN	Type x Quantity	Propeller fan x 1				
	Air flow rate	m³/min	185	225	225	360
	L/s	3,083	3,750	3,750	6,000	
	cfm	6,532	7,945	7,945	12,712	
	Driving mechanism	Inverter-control, Direct-driven by motor				
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
	*4 External static press.	0 Pa (0 mmH₂O)				
	Compressor	Type x Quantity	Inverter scroll hermetic compressor			
Starting method	Inverter					
Motor output	kW	5.4	6.8	7.8	9.9	
Case heater	kW	0.035(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)				
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection				
	Compressor	Over-heat protection				
	Fan motor	Thermal switch				
	Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)
Net weight	kg (lbs)	240(530)	270(596)	270(596)	320(706)	
Heat exchanger	Salt-resistant cross fin & copper tube					
Optional parts	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1				
	BC controller	CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1				
	Main BC controller	CMB-P108, 1010, 1013, 1016V-GA1				
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1				
	Outdoor Twinning kit	CMY-R100VBK				

### Notes:

\*1, \*2 Nominal conditions

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

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

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

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

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

Outdoor unit

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



## ► Specifications

Model	PURY-EP400YSJM-A(-BS)	PURY-EP450YSJM-A(-BS)	PURY-EP500YSJM-A(-BS)			
Power source	3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1 kW	45.0	50.0	56.0		
	*1 BTU / h	153,500	170,600	191,100		
	kW	10.41	11.99	13.62		
	A	17.5-16.6-16.0	20.2-19.2-18.5	22.9-21.8-21.0		
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)				
	Outdoor D.B.	-5.0~46.0°C(23~115°F)				
	COP	4.32	4.17	4.11		
Heating capacity (Nominal)	*2 kW	50.0	56.0	63.0		
	*2 BTU / h	170,600	191,100	215,000		
	kW	11.36	12.87	14.38		
	A	19.1-18.2-17.5	21.7-20.6-19.8	24.2-23.0-22.2		
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)				
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)				
	COP	4.40	4.35	4.38		
Indoor unit connectable	50~150 % of outdoor unit capacity					
Sound pressure level (measured in anechoic room)	dB <A>	60	62	62		
Power pressure level (measured in anechoic room)	dB <A>	80	82	82		
Refrigerant piping diameter	High pressure	22.2(7/8) Braze				
	Low pressure	28.58(1-1/8) Braze				
FAN	Type x Quantity	Propeller fan x 1				
	Air flow rate	m³/min	185	185	185	225
	L/s	3,083	3,083	3,083	3,750	
	cfm	6,532	6,532	6,532	7,945	
	Driving mechanism	Inverter-control, Direct-driven by motor				
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*4 External static press.	0 Pa (0 mmH <sub>2</sub> O)				
	Compressor	Type x Quantity	Inverter scroll hermetic compressor			
Starting method	Inverter					
Motor output	kW	5.4	5.4	5.4	6.8	
Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.045(240 V)	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)				
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection				
	Compressor	Over-heat protection				
	Fan motor	Thermal switch				
	Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)
Net weight	kg (lbs)	240(530)	240(530)	240(530)	270(596)	
Heat exchanger	Salt-resistant cross fin & copper tube					
Optional parts	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1				
	BC controller	CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1				
	Main BC controller	CMB-P108, 1010, 1013, 1016V-GA1				
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1				
	Outdoor Twinning kit	CMY-R100VBK				

### Notes:

\*1, \*2 Nominal conditions

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

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

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

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

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

Outdoor Unit

# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YSJM-A(1)(-BS)

#### > Specifications



Model		PURY-EP500YSJM-A(1)(-BS)		PURY-EP550YSJM-A(1)(-BS)		PURY-EP600YSJM-A(1)(-BS)	
Power source		3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal) *1		56.0		63.0		69.0	
Power input		13.96		15.40		16.87	
Current input		23.5-22.3-21.5		25.9-24.6-23.8		28.4-27.0-26.0	
COP		4.01		4.09		4.09	
Temp. range of cooling *3		Indoor W.B. 15.0-24.0°C(59-75°F)		15.0-24.0°C(59-75°F)		15.0-24.0°C(59-75°F)	
		Outdoor D.B. -5.0-46.0°C(23-115°F)		-5.0-46.0°C(23-115°F)		-5.0-46.0°C(23-115°F)	
Heating capacity (Nominal) *2		63.0		69.0		76.5	
Power input		215,000		235,400		261,000	
Current input		14.78		15.93		17.38	
COP		24.9-23.7-22.8		26.8-25.5-24.6		29.3-27.8-26.8	
Temp. range of heating *3		Indoor W.B. 15.0-27.0°C(59-81°F)		15.0-27.0°C(59-81°F)		15.0-27.0°C(59-81°F)	
		Outdoor W.B. -20.0-15.5°C(-4-60°F)		-20.0-15.5°C(-4-60°F)		-20.0-15.5°C(-4-60°F)	
Indoor unit connectable		Total capacity 50-150 % of outdoor unit capacity		50-150 % of outdoor unit capacity		50-150 % of outdoor unit capacity	
		Model / Quantity P15-P250 / 1-50		P15-P250 / 2-50		P15-P250 / 2-50	
Sound pressure level (measured in anechoic room)		63		63		63	
Power pressure level (measured in anechoic room)		83		83		83	
Refrigerant piping diameter		High pressure 22.2(7/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	
		Low pressure 28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	

Set Model		PURY-EP250YJM-A(-BS)		PURY-EP300YJM-A(-BS)		PURY-EP350YJM-A(-BS)	
FAN		Type x Quantity Propeller fan x 1		Propeller fan x 1		Propeller fan x 1	
Air flow rate		m³/min 225		225		225	
		L/s 3,750		3,750		3,750	
		cfm 7,945		7,945		7,945	
Driving mechanism		Inverter-control, Direct-driven by motor					
Motor output		0.92 x 1		0.92 x 1		0.92 x 1	
External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
Compressor		Type x Quantity Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
Starting method		Inverter		Inverter		Inverter	
Motor output		6.8		6.8		6.8	
Case heater		0.045(240 V)		0.045(240 V)		0.045(240 V)	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm 1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760	
		in. 67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16	
Protection devices		High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
		Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor Over-heat protection		Over-heat protection		Over-heat protection	
		Fan motor Thermal switch		Thermal switch		Thermal switch	
Refrigerant		Type x original charge R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)	
Net weight		270(596)		270(596)		270(596)	
Heat exchanger		Salt-resistant cross fin & copper tube					
Pipe between unit and distributor		High pressure 19.05(3/4) Brazed		19.05(3/4) Brazed		19.05(3/4) Brazed	
		Low pressure 22.2(7/8) Brazed		22.2(7/8) Brazed		22.2(7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1					

#### Notes:

\*1,\*2 Nominal conditions

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

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

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).

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

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

# OUTDOOR UNIT

## R2 Series - High COP

### PURY-EP YSJM-A(1)(-BS)

#### > Specifications



Model		PURY-EP600YSJM-A(1)(-BS)		PURY-EP650YSJM-A(1)(-BS)		PURY-EP700YSJM-A(1)(-BS)	
Power source		3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal) *1		69.0		73.0		80.0	
Power input		17.82		19.01		21.22	
Current input		30.0-28.5-27.5		32.0-30.4-29.3		35.8-34.0-32.8	
COP		3.87		3.84		3.77	
Temp. range of cooling *3		Indoor W.B. 15.0-24.0°C(59-75°F)		15.0-24.0°C(59-75°F)		15.0-24.0°C(59-75°F)	
		Outdoor D.B. -5.0-46.0°C(23-115°F)		-5.0-46.0°C(23-115°F)		-5.0-46.0°C(23-115°F)	
Heating capacity (Nominal) *2		76.5		81.5		88.0	
Power input		261,000		278,100		300,300	
Current input		18.30		19.73		22.05	
COP		30.8-29.3-28.2		33.3-31.6-30.4		37.2-35.3-34.0	
Temp. range of heating *3		Indoor W.B. 15.0-27.0°C(59-81°F)		15.0-27.0°C(59-81°F)		15.0-27.0°C(59-81°F)	
		Outdoor W.B. -20.0-15.5°C(-4-60°F)		-20.0-15.5°C(-4-60°F)		-20.0-15.5°C(-4-60°F)	
Indoor unit connectable		Total capacity 50-150 % of outdoor unit capacity		50-150 % of outdoor unit capacity		50-150 % of outdoor unit capacity	
		Model / Quantity P15-P250 / 2-50		P15-P250 / 2-50		P15-P250 / 2-50	
Sound pressure level (measured in anechoic room)		63.5		63.5		64	
Power pressure level (measured in anechoic room)		83.5		83.5		84	
Refrigerant piping diameter		High pressure 28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	
		Low pressure 28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		34.93(1-3/8) Brazed	

Set Model		PURY-EP350YJM-A(-BS)		PURY-EP350YJM-A(-BS)		PURY-EP350YJM-A(-BS)	
FAN		Type x Quantity Propeller fan x 1		Propeller fan x 2		Propeller fan x 2	
Air flow rate		m³/min 225		360		360	
		L/s 3,750		6,000		6,000	
		cfm 7,945		12,712		12,712	
Driving mechanism		Inverter-control, Direct-driven by motor					
Motor output		0.92 x 1		0.92 x 2		0.92 x 2	
External static press.		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)	
Compressor		Type x Quantity Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
Starting method		Inverter		Inverter		Inverter	
Motor output		6.8		9.9		9.9	
Case heater		0.045(240 V)		0.045(240 V)		0.045(240 V)	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD		mm 1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,750 x 760		1,710(1,650 without legs) x 1,750 x 760	
		in. 67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices		High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
		Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
		Compressor Over-heat protection		Over-heat protection		Over-heat protection	
		Fan motor Thermal switch		Thermal switch		Thermal switch	
Refrigerant		Type x original charge R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)	
Net weight		270(596)		320(706)		320(706)	
Heat exchanger		Salt-resistant cross fin & copper tube					
Pipe between unit and distributor		High pressure 19.05(3/4) Brazed		19.05(3/4) Brazed		19.05(3/4) Brazed	
		Low pressure 22.2(7/8) Brazed		22.2(7/8) Brazed		28.58(1-1/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-R100XVBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1 Main BC controller: CMB-P108,1010,1013,1016V-GA1 Sub BC controller: CMB-P104,108V-GB1,CMB-P1016V-HB1					

#### Notes:

\*1,\*2 Nominal conditions

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

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

\*4 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).

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

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