

Cooling or Heating

WY series — PQHY-P YHM-A, PQHY-P YSHM-A

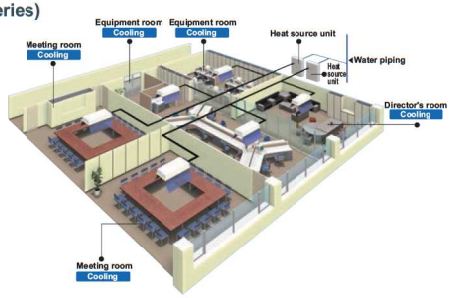
WR2 series — PQRY-P YHM-A, PQRY-P YSHM-A

[WY(Heat Pump) series]

Water energy source system allows switching between cooling and heating.

The WY-Series has all the benefits of the Y-Series using water source condensing units.
Condensing units can be situated indoors allowing greater design flexibility and no limitation on building size. Depending on capacity, up to 17 to 50 indoor units can be connected to a single condensing unit with individualized and/or centralized control. The two-pipe system allows all CITY MULTI solutions to switch between cooling and heating while maintaining a constant indoor temperature.

Installation image (WY series)

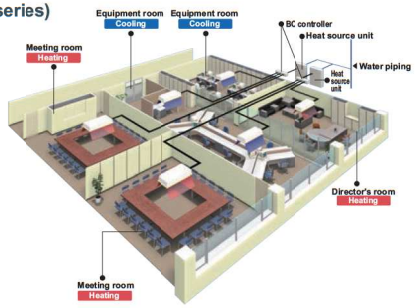


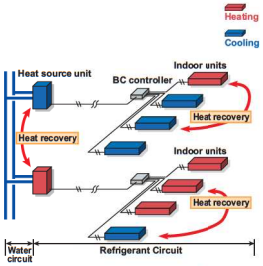
[WR2(Heat Recovery) series]

Advanced water heat source unit enjoying the benefits of R2 series

The CITY MULTI WR2 series provides all of the advantages of the R2 series with the added advantages of a water heat source system, making it suitable for wider range of applications in high rises, frigid climates, coastal areas, etc.
Not only does it produce heat recovery from the indoor units on the same 2-pipe refrigerant circuit, it also produces heat recovery via the water circuit between heat source units, making it a very economical system.

Installation image (WR2 series)



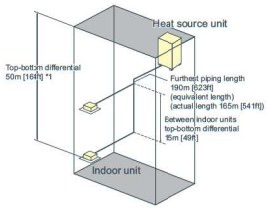


Double heat recovery (WR2)

System Pipe Lengths

[8-36HP (WY series)]

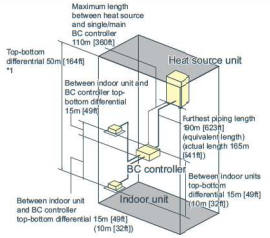
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300 [984]
Total length (16-36HP)	500 [1,640]
Maximum allowable length	165 (190equivalent) [541 (623)]
Farthest indoor from first branch	40 [131]
Vertical differentials between units	**Maximum meters [Feet]**
Indoor/heat source (heat source higher)	50 [164]
Indoor/heat source (heat source lower)	40 [131]
Indoor/indoor	15 [49]



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

[8-24HP (WR2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300-550 [984-1,804]
Total length (16-24HP)	500-750 [1,640-2,460]
Maximum allowable length	165 (190equivalen) [541 (623)]
Maximum length between heat source 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	**Maximum meters [Feet]**
Indoor/ heat source (heat source higher)	50 [164]
Indoor/ heat source (heat source lower)	40 [131]
Indoor/BC controller (single/main)	15 [49]
Indoor/indoor	15 (10) [49 (32)]
Main BC Controller/Sub BC Controller	15 (10) [49 (32)]



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

COP comparison (energy efficiency)

The new water cooled outoor unit offers a greater efficiency with a higher COP compared to our YGM conventional model.

COP comparison

		HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
		Heating	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
	YHM	Cooling	5.71	5.13	4.55	5.45	5.08	4.89	4.68	4.45	5.22	5.13	4.94	4.69	4.52	4.34
		Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	5.52	5.33	5.19	4.82	4.65	4.40
PQRY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
		Heating	5.33	5.43	-	4.54	-	4.63	-	-	-	-	-	-	-	-
	YHM	Cooling	5.65	5.08	4.50	5.40	5.03	4.84	4.63	4.41	-	-	-	-	-	-
		Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	-	-	-	-	-	-

Compact design

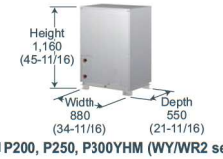
Downsized by approximately 57%*, the new models enable an effective use of space.

*8/10/12HP

mm (in.)



■ P200, P250YGM (WY/WR2 series)



■ P200, P250, P300YHM (WY/WR2 series)

Weight saving

The reduction in weight leads to easy transportaion and installation.

Weight comparison unit : kg

		HP	8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM		272	275	-	452	-	456	-	-	-	-	-	-	-	-
	YHM		195	195	195	390	390	390	390	390	585	585	585	585	585	585
PQRY	YGM		263	266	-	440	-	444	-	-	-	-	-	-	-	-
	YHM		181	181	181	362	362	362	362	362	-	-	-	-	-	-

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YHM-A



▸Specifications

Model			PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A
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	3.92	5.45	7.36
	Current input	A	6.6-6.2-6.0	9.2-8.7-8.4	12.4-11.8-11.3
	EER	kW / kW	5.71	5.13	4.55
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5
	*2	BTU / h	85,300	107,500	128,000
	Power input	kW	4.12	5.80	8.15
	Current input	A	6.9-6.6-6.3	9.7-9.3-8.9	13.7-13.0-12.5
	COP	kW / kW	6.06	5.43	4.60
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~17	P15~P250 / 1~21	P15~P250 / 1~26
Sound pressure level (measured in anechoic room)		dB <A>	47	49	50
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	9.52(3/8) Brazed	9.52(3/8) Brazed (12.7(1/2) Brazed,total length >= 90m)	9.52(3/8) Brazed (12.7(1/2) Brazed,total length >= 40m)
	Gas pipe	mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed
Circulating water	Water flow rate	m³ / h	5.76	5.76	5.76
		L/min	96	96	96
		cfm	3.4	3.4	3.4
	Pressure drop	kPa	17	17	17
	Operating volume range	m³ / h	4.5 ~ 7.2	4.5 ~ 7.2	4.5 ~ 7.2
Compressor	Type x Quantity		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	4.6	6.3	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		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
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0
Optional parts			Joint: CMY-Y102SS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS-G2,CMY-Y102LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nomiral conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept belbw 80%.
*5 The heat source Unit should not be instaled at outdoor.
*6 Be sure to mount a strainer (more than 58 meshes) at the water inlet pipirg of the unit.
*7 Be sure to provide interlocking for the uni operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above spe:ification may be subject to charge without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A



▸Specifications

Model			PQHY-P400YSHM-A	PQHY-P450YSHM-A	PQHY-P500YSHM-A
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	45.0	50.0	56.0
	*1	BTU / h	153,500	170,600	191,100
	Power input	kW	8.25	9.84	11.45
	Current input	A	13.9-13.2-12.7	16.6-15.7-15.2	19.3-18.3-17.6
	EER	kW / kW	5.45	5.08	4.89
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0
	*2	BTU / h	170,600	191,100	215,000
	Power input	kW	8.65	10.42	12.06
	Current input	A	14.6-13.8-13.3	17.5-16.7-16.1	20.3-19.3-18.6
	COP	kW / kW	5.78	5.37	5.22
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 1~34	P15~P250 / 1~39	P15~P250 / 1~43
Sound pressure level (measured in anechoic room)		dB <A>	50	51	52
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	12.7(1/2) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed
	Gas pipe	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQHY-P200YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A
Circulating water	Water flow rate	m³ / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m³ / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	4.6	4.6	6.3	4.6	6.3	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		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	
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header:CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe engih	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A



▸Specifications

Model			PQHY-P550YSHM-A	PQHY-P600YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	63.0	69.0
	*1	BTU / h	215,000	235,400
	Power input	kW	13.46	15.48
	Current input	A	22.7-21.5-20.8	26.1-24.8-23.9
	EER	kW / kW	4.68	4.45
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	69.0	76.5
	*2	BTU / h	235,400	261,000
	Power input	kW	14.65	17.12
	Current input	A	24.7-23.4-22.6	28.9-27.4-26.4
	COP	kW / kW	4.70	4.46
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~47	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	52.5	53
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	15.88(5/8) Brazed	15.88(5/8) Brazed
	Gas pipe	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed

Set Model

Model			PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2	
Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.4	6.3	7.4	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate	Acrylic painted steel plate
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2,CMY-Y302S-G2 Header:CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2,CMY-Y302S-G2 Header:CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet pipirg of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to charge without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A



▸Specifications

Model			PQHY-P650YSHM-A	PQHY-P700YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	73.0	80.0
	*1	BTU / h	249,100	273,000
	Power input	kW	13.96	15.58
	Current input	A	23.5-22.3-21.5	26.3-24.6-24.0
	EER	kW / kW	5.22	5.13
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	81.5	88.0
	*2	BTU / h	278,100	300,300
	Power input	kW	14.74	16.51
	Current input	A	24.8-23.6-22.7	27.8-26.4-25.5
	COP	kW / kW	5.52	5.33
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	53	53.5
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model

Model			PQHY-P250YHM-A	PQHY-P200YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P200YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.3	4.6	4.6	6.3	6.3	4.6
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-32,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe engih	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A



▸Specifications

Model			PQHY-P750YSHM-A	PQHY-P800YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	85.0	90.0
	*1	BTU / h	290,000	307,100
	Power input	kW	17.19	19.18
	Current input	A	29.0-27.5-26.5	32.3-30.7-29.6
	EER	kW / kW	4.94	4.69
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	95.0	100.0
	*2	BTU / h	324,100	341,200
	Power input	kW	18.27	20.74
	Current input	A	30.8-29.3-28.2	35.0-33.2-32.0
	COP	kW / kW	5.19	4.82
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	54	54
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model

Model			PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 ~ 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.3	6.3	6.3	7.4	6.3	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet pipirg of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to charge without notice.

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P YSHM-A



▸Specifications

Model			PQHY-P850YSHM-A	PQHY-P900YSHM-A
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	96.0	101.0
	*1	BTU / h	327,600	344,600
	Power input	kW	21.20	23.22
	Current input	A	35.7-33.9-32.7	39.1-37.2-35.8
	EER	kW / kW	4.52	4.34
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2	kW	108.0	113.0
	*2	BTU / h	368,500	385,600
	Power input	kW	23.21	25.67
	Current input	A	39.1-37.2-35.8	43.3-41.1-39.6
	COP	kW / kW	4.65	4.40
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity		50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity		P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB <A>	54.5	55
Refrigerant piping diameter [O.D.]	Liquid pipe	mm (in.)	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	mm (in.)	41.28(1-5/8) Brazed	41.28(1-5/8) Brazed

Set Model

Model			PQHY-P300YHM-A	PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A	PQHY-P300YHM-A
Circulating water	Water flow rate	m^3 / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
		L/min	96 + 96 + 96			96 + 96 + 96		
		cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop	kPa	17	17	17	17	17	17
	Operating volume range	m^3 / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
Compressor	Type x Quantity		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	7.4	7.4	6.3	7.4	7.4	7.4
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish			Acrylic painted steel plate			Acrylic painted steel plate		
External dimension HxWxD		mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
		in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
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.)		Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor		Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge		R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight		kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	195(430)
Heat exchanger			plate type	plate type	plate type	plate type	plate type	plate type
	Water volume in plate	L	5.0	5.0	5.0	5.0	5.0	5.0
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0
Optional parts			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202S-G2,CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°CD.B./19°CW.B. (81°FD.B./66°FW.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°CD.B. (68°FD.B.)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°CD.B.
*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
*5 The heat source Unit should not be installed at outdoor.
*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
*7 Be sure to provide interlocking for the unit operation and water circuit.
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.