



**CITY-MULTI®**  
WATER SOURCE UNITS

# What is Water-Cooled?

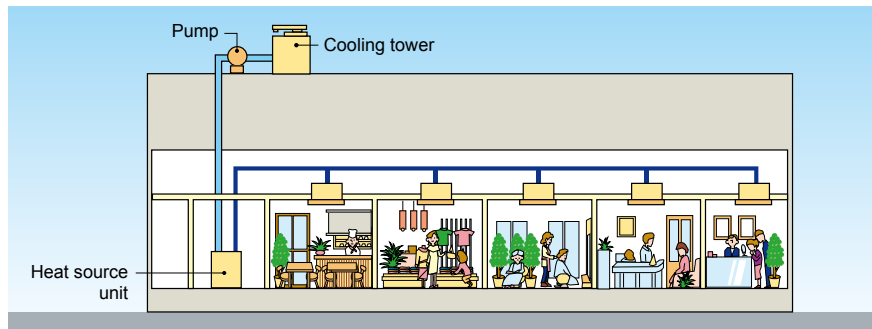
A unique system from Mitsubishi Electric

It is possible now to combine the features of VRF with a water circuit using CITY MULTI WY/WR2. In this case, the heat is discharged to a water source rather than to the outside air.

The advantages of a water cooled system are that the water can be delivered at optimized temperatures and volumes, which allows even greater flexibility and increased COP.



Water cooled systems are ideal for use in temperate and cooler climates, since it does not involve heat exchange with the outside air.



Water cooled systems can be used even in buildings that are taller than 164 ft (50 m) by running a main water pipe through each floor.

Any heat source system that can supply heat source water between 10°C–45°C (50°F–113°F) can be used.

## Simultaneous heating and cooling operation is possible. (WR2-Series)

Water cooled systems are recommended for use in buildings that have the following heating and cooling needs.

- Buildings that require year-round cooling
  - For example,
    - Tenant buildings in which kitchens and offices exist together
    - Buildings in which equipment rooms and offices exist together
  - Buildings in which there are large room temperature differences between sunny and unsunny rooms
  - Hotels in which there are a lot of individual operation needs

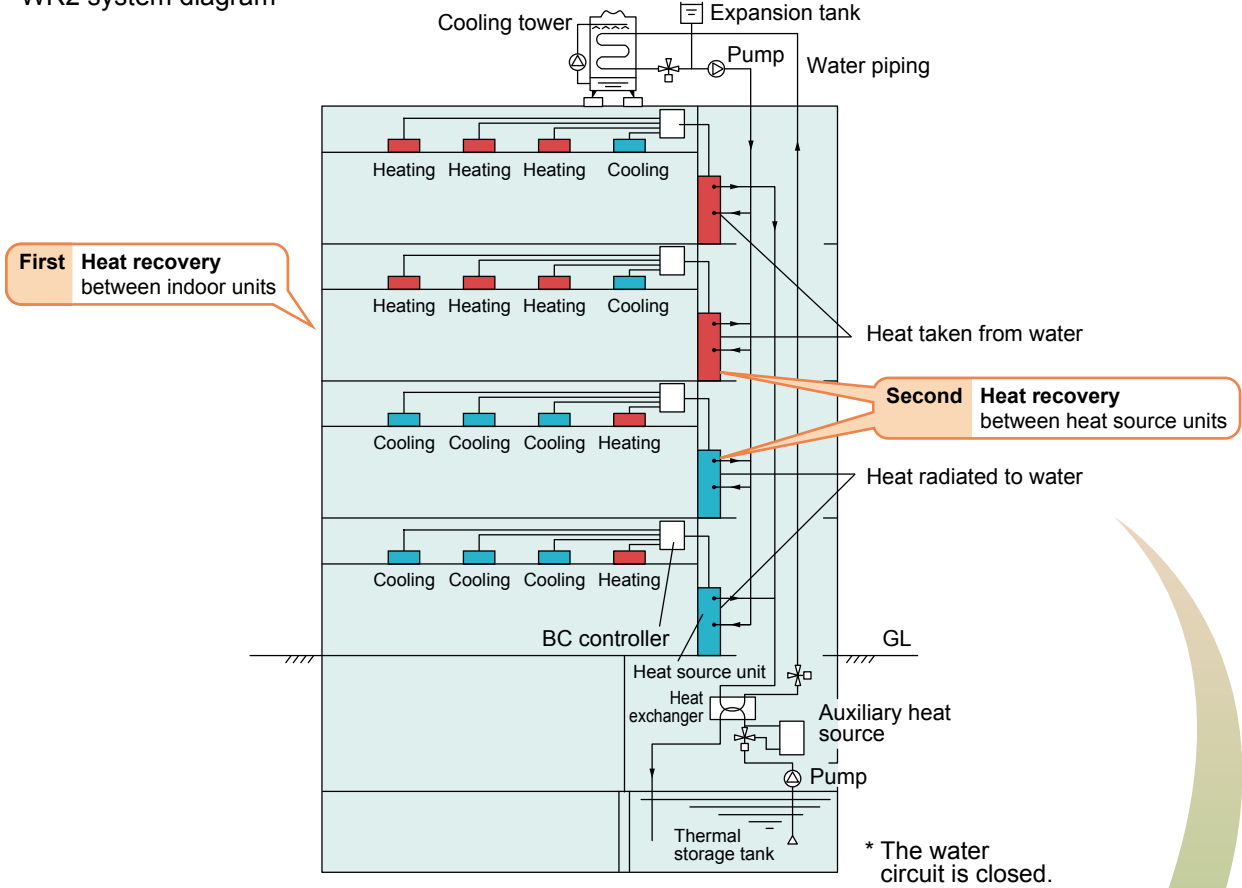
- Installation image



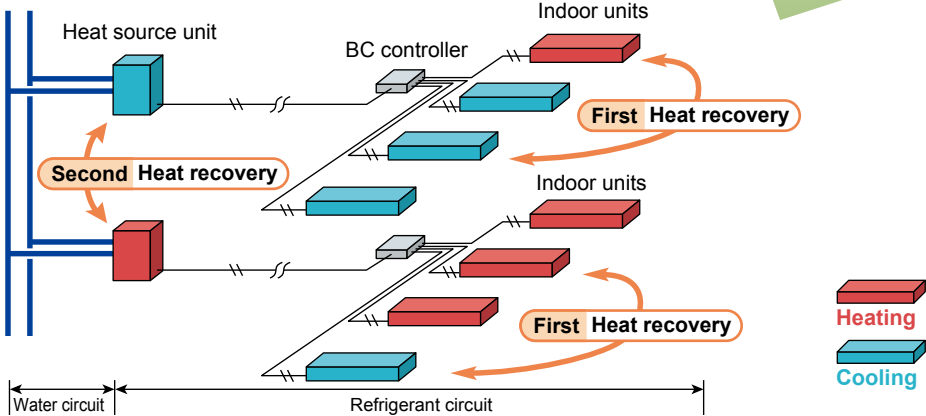
# Double heat recovery (WR2-Series)

Mitsubishi Electric now offers double heat recovery operation. The first heat recovery is within the refrigerant system. Heat is recovered between the indoor units to allow simultaneous heating and cooling operation. The second heat recovery is within the water loop, where heat is recovered between the PQRV units. This double heat recovery operation substantially improves energy efficiency and delivers an ideal solution to the requirements of modern office buildings, where some areas require cooling even in winter.

## • WR2 system diagram



## • Double heat recovery (WR2)

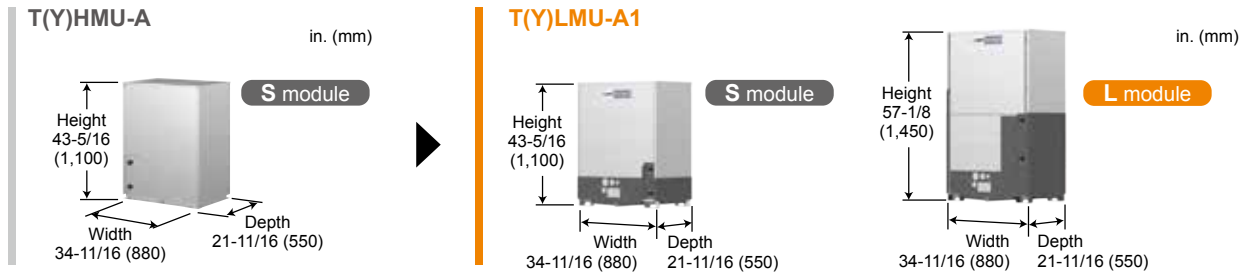


# Water-cooled system

A wide range of capacities are available, from single modules capable of up to **P240** and combination modules up to **P336**.



Single or combination module units are available to meet various installation conditions and capacity requirements.



## <WY-Series>

Single-module units available up to P240

		P72	P96	P120	P144	P168	P192	P216	P240	P264	P288	P312	P336	P360
PQHY-P T(Y)LMU-A1	Single	S	S	S	L	L	L	L	L					
PQHY-P T(Y)HMU-A	Single	S	S	S										
PQHY-P T(Y)SLMU-A1	Combination				S+S	S+S	S+S	S+S	S+S		L+L	L+L	L+L	L+L
PQHY-P T(Y)SHMU-A	Combination				S+S	S+S	S+S	S+S	S+S	S+S+S	S+S+S	S+S+S	S+S+S	S+S+S

## <WR2-Series>

Single-module units available up to P240

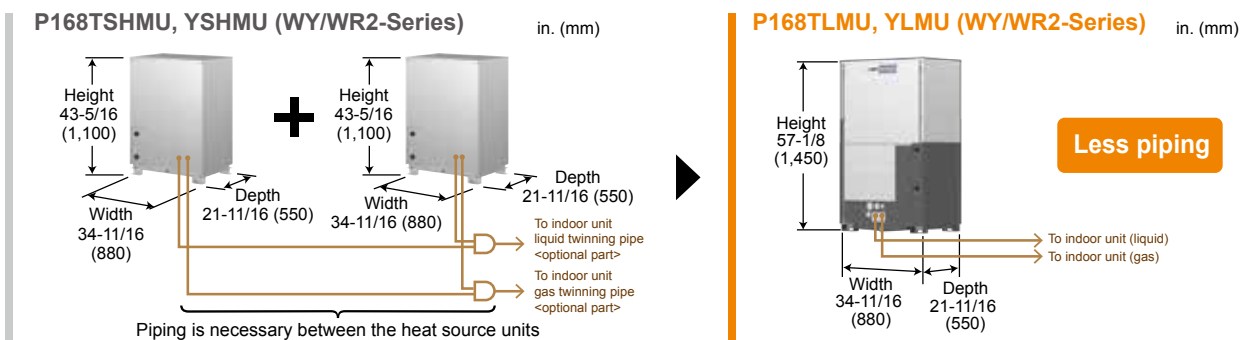
Large capacities up to P336

		P72	P96	P120	P144	P168	P192	P216	P240	P288	P312	P336
PQRY-P T(Y)LMU-A1	Single	S	S	S	L	L	L	L	L			
PQRY-P T(Y)HMU-A	Single	S	S	S								
PQRY-P T(Y)SLMU-A1	Combination				S+S	S+S	S+S	S+S	S+S	L+L	L+L	L+L
PQRY-P T(Y)SHMU-A	Combination				S+S	S+S	S+S	S+S	S+S			

## Advantages of single modules in a wide range of capacities

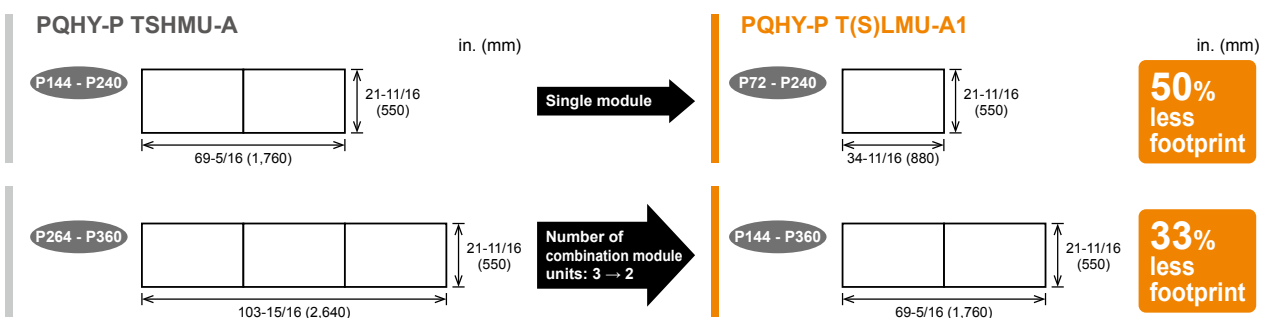
### • Less piping

Capable of covering up to P240 (20 ton) with a single module.



### • Less footprint

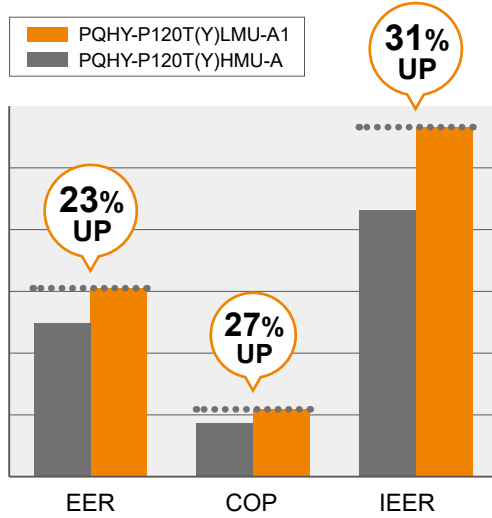
Less footprint by the enhanced lineup of single module units.



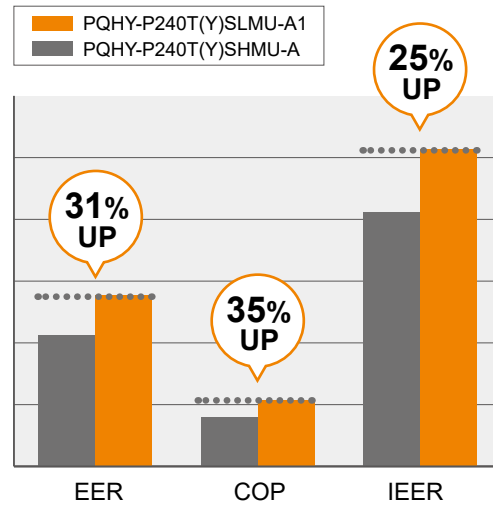
## High energy efficiency

### High EER, COP and IEER compared to conventional models

- Comparisons of single-module P120 units (based on the values registered to AHRI)



- Comparisons of combination-module P240 units (based on the values registered to AHRI)



## Water flow rate control

System energy consumption can be improved by changing the water flow volume during partial load and thereby reducing water pump consumption.

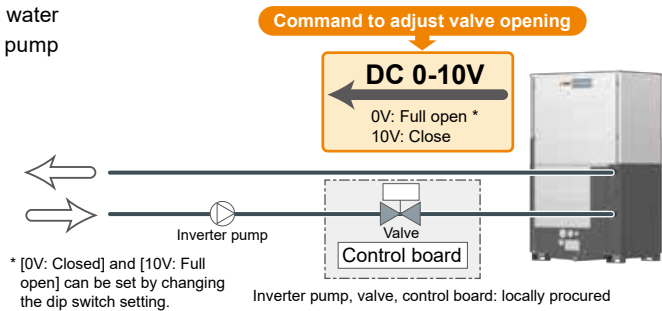
- Control of water flow rate

Control output voltage (0-10V) to adjust valve opening [0V: Full open, 10V: Closed]

Voltage at 0 volt: Even when power is down, water will continue to circulate.

\*When using "water flow rate control," the pump needs to be controlled by inverter.

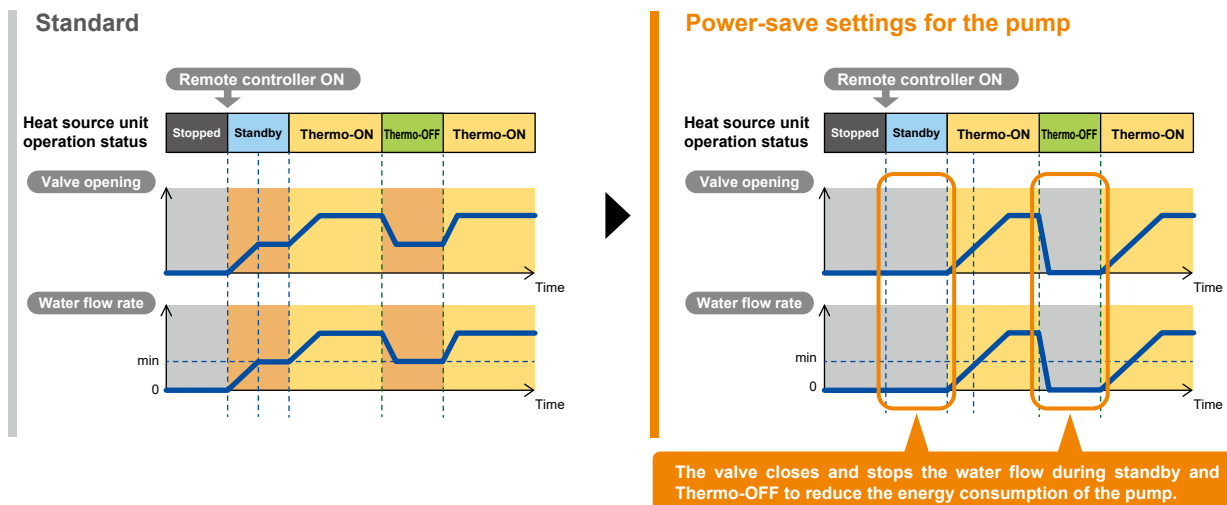
\*Pump interlock is required.



### Power-save function PQHY-P T(S)LMU-A1/Y(S)LMU-A1/Z(S)LMU-A1, PQRV-P T(S)LMU-A1/Y(S)LMU-A1/Z(S)LMU-A1

In previous models (A type), the pump was operated at a constant flow rate during standby and Thermo-OFF.

In the new models, the water control valve is closed during standby and Thermo-OFF to reduce the circulating water flow rate and reduce the power consumption of the pump.



# WY-Series

Heating or Cooling Heat pump

- Optional parts
- Specifications
 

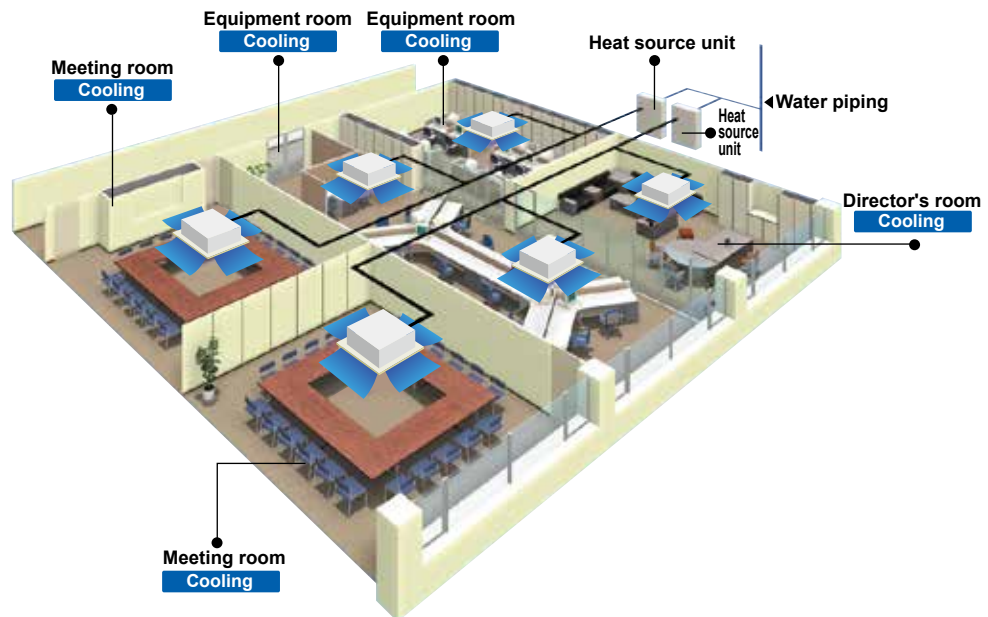
208-230V, 460V	<b>PQHY-P T(S)LMU-A1/Y(S)LMU-A1</b>
575V	<b>PQHY-P Z(S)LMU-A1</b>



## A water energy source system that allows switching between heating and cooling

The CITY MULTI WY-Series provides all the benefits of the Y-Series using water-cooled heat source units. Heat source units can be situated indoors for greater design flexibility with no limitations on building size. Depending on capacity, up to 15 to 50 indoor units can be connected to a single heat source unit with individualized and/or centralized control. The two-pipe system allows all CITY MULTI units to switch between cooling and heating while maintaining a constant indoor temperature.

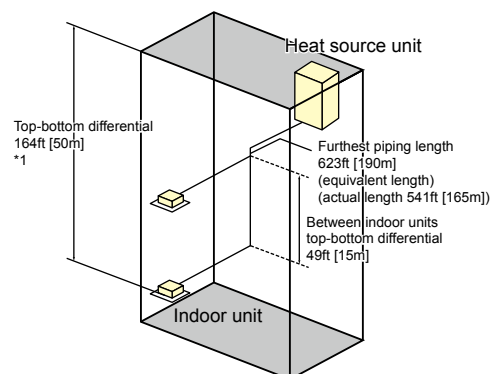
- Installation image (WY-Series)



- System Pipe Lengths

[P72-P360 (WY-Series)]

Refrigerant Piping Lengths	Maximum feet [Meters]
Total length .....	984-1,640 [300-500]
Maximum allowable length .....	541 (623equivalent) [165 (190)]
Farthest indoor from first branch .....	131 [40]*2
Vertical differentials between units	Maximum feet [Meters]
Indoor/heat source (heat source higher) .....	164 [50]
Indoor/heat source (heat source lower) .....	131 [40]
Indoor/indoor .....	49 [15]



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

\*2 295ft [90m] is available. When the piping length exceeds 131ft [40m], use one size larger liquid pipe starting with the section of piping where 131ft [40m] is exceeded and all piping after that point.

## Optional parts

### • For WY-Series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	72 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	73–144 (Total capacity of indoor unit)
	CMY-Y202S-G2	The 1st branch of P96–P120 TLMU/YLMU/ZLMU
		145–240 (Total capacity of indoor unit)
		The 1st branch of P144–P192ZLMU, P144–P240TSLMU/YSLMU/ZSLMU
CMY-Y302S-G2	241 or above (Total capacity of indoor unit) The 1st branch of P288–P360TSLMU/YSLMU/ZSLMU	
Branch pipe (Header)	CMY-Y104C-G	For 4 branches
	CMY-Y108C-G	For 8 branches
	CMY-Y1010C-G	For 10 branches
Twinning kit	CMY-Y100CBK3	For PQHY-P144–P240TSLMU/YSLMU/ZSLMU
	CMY-Y200CBK2	For PQHY-P288–P360TSLMU/YSLMU/ZSLMU

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TLMU-A1



## ► Specifications

Heat Source Model		PQHY-P72TLMU-A1		PQHY-P96TLMU-A1		PQHY-P120TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	72,000		96,000		120,000		
	*1	21.1		28.1		35.2		
(208-230)	Power input	3.61		5.21		7.51		
	Current input	11.1-10.0		16.0-14.5		23.1-20.9		
(Rated)		69,000		92,000		114,000		
		20.2		27.0		33.4		
(208-230)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	10.3-9.3	9.6-8.7	14.8-13.4	16.0-14.4	21.4-19.3	22.6-20.5	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	80,000		108,000		135,000		
	*2	23.4		31.7		39.6		
(208-230)	Power input	4.04		5.64		7.09		
	Current input	12.4-11.2		17.3-15.7		21.8-19.7		
(Rated)		76,000		103,000		129,000		
		22.3		30.2		37.8		
(208-230)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	11.5-10.4	10.3-9.3	16.0-14.5	13.8-12.4	20.2-18.2	18.2-16.5	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model / Quantity	P04-P72/1~18		P04-P96/1~24		P04-P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 3/8 (9.52) Brazed		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 90 m)		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 40 m)		
	Gas pipe	in. (mm) 3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	13-12		19-17		29-26		
Maximum Overcurrent Protection	A	20-20		30-25		50-45		
Inlet water	Water flow rate	G / h	1,522		1,522		1,522	
		G / min (gpm)	25.4		25.4		25.4	
		m³ / h	5.76		5.76		5.76	
		L / min	96		96		96	
	Pressure drop	cfm	3.4		3.4		3.4	
		psi	3.48		3.48		3.48	
		kPa	24		24		24	
Operating volume range	G / h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902		
	G / min (gpm)	13.2 ~ 31.7		13.2 ~ 31.7		13.2 ~ 31.7		
	m³ / h	3.0 ~ 7.2		3.0 ~ 7.2		3.0 ~ 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 4.3		6.0		7.7		
	Case heater	kW -		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	375 (170)		375 (170)		375 (170)		
Heat exchanger		plate type		plate type		plate type		
	Water volume in plate	G	1.32		1.32		1.32	
		l	5.0		5.0		5.0	
	Water pressure	psi	290		290		290	
Max.	MPa	2.0		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

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



# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TLMU-A1



## ► Specifications

Model		PQHY-P144TLMU-A1		PQHY-P168TLMU-A1		PQHY-P192TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(208-230)	Power input	8.78		12.05		15.05		
	Current input	27.0-24.4		37.1-33.6		46.4-41.9		
(Rated)		137,000		161,000		183,000		
		40.2		47.2		53.6		
(208-230)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	24.8-22.5	30.7-27.8	34.2-30.9	36.6-33.1	42.7-38.6	43.7-39.5	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(208-230)	Power input	8.11		9.86		11.90		
	Current input	25.0-22.6		30.4-27.5		36.7-33.1		
(Rated)		152,000		179,000		205,000		
		44.5		52.5		60.1		
(208-230)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	23.0-20.8	24.3-22.0	28.0-25.3	29.9-27.1	33.8-30.5	35.6-32.2	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model / Quantity	P04~P96/1~36		P04~P96/1~42		P04~P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	54.0		56.0		58.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed		
	Gas pipe	in. (mm) 1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	35-32		44-39		54-49		
Maximum Overcurrent Protection	A	60-50		70-70		90-80		
Inlet water	Water flow rate	G / h	1,902		1,902		1,902	
		G / min (gpm)	31.7		31.7		31.7	
		m <sup>3</sup> / h	7.20		7.20		7.20	
		L / min	120		120		120	
		cfm	4.2		4.2		4.2	
	Pressure drop	psi	6.38		6.38		6.38	
		kPa	44		44		44	
	Operating volume range	G / h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054	
		G / min (gpm)	19.8 ~ 50.9		19.8 ~ 50.9		19.8 ~ 50.9	
		m <sup>3</sup> / h	4.5 ~ 11.6		4.5 ~ 11.6		4.5 ~ 11.6	
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 9.5		11.0		12.4		
	Case heater	kW -		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	474 (215)		474 (215)		474 (215)		
Heat exchanger		plate type		plate type		plate type		
	Water volume	G	1.32		1.32		1.32	
	in plate	l	5.0		5.0		5.0	
	Water pressure	psi	290		290		290	
Max.	MPa	2.0		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		

### Notes:

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	Indoor	Water temperature
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\*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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

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

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TLMU-A1



## ► Specifications

Heat Source Model		PQHY-P216TLMU-A1		PQHY-P240TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	216,000		240,000		
	*1 kW	63.3		70.3		
(208-230)	Power input	19.23		21.14		
	Current input	59.3-53.6		65.1-58.9		
(Rated)	BTU / h	206,000		228,000		
	kW	60.4		66.8		
(208-230)	Power input	17.72	16.10	19.49	18.74	
	Current input	54.6-49.4	49.6-44.9	60.1-54.3	57.7-52.2	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	243,000		270,000		
	*2 kW	71.2		79.1		
(208-230)	Power input	13.04		15.12		
	Current input	40.2-36.3		46.6-42.1		
(Rated)	BTU / h	232,000		258,000		
	kW	68.0		75.6		
(208-230)	Power input	12.01	12.34	13.93	14.62	
	Current input	37.0-33.4	38.0-34.4	42.9-38.8	45.0-40.7	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model / Quantity	P04~P96/2~50		P04~P96/2~50		
Sound pressure level (measured in anechoic room)	dB <A>	58.0		58.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 5/8 (15.88) Brazed		5/8 (15.88) Brazed		
	Gas pipe	in. (mm) 1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	69-63		79-71		
Maximum Overcurrent Protection	A	110-110		125-125		
Inlet water	Water flow rate	G / h	3,044		3,044	
		G / min (gpm)	50.7		50.7	
		m <sup>3</sup> / h	11.52		11.52	
		L / min	192		192	
	Pressure drop	cfm	6.8		6.8	
		psi	6.53		6.53	
Operating volume range	kPa	45		45		
	G / h	1,585 ~ 3,804		1,585 ~ 3,804		
	G / min (gpm)	26.4 ~ 63.4		26.4 ~ 63.4		
	m <sup>3</sup> / h	6.0 ~ 14.4		6.0 ~ 14.4		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	kW 14.5		16.1		
	Case heater	kW 0.045 (240 V)		0.045 (240 V)		
External finish		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 25 lbs + 13 oz (11.7 kg)		R410A x 25 lbs + 13 oz (11.7 kg)		
Net weight	lbs (kg)	552 (250)		552 (250)		
Heat exchanger		plate type		plate type		
	Water volume in plate	G	2.64		2.64	
		l	10.0		10.0	
	Water pressure Max.	psi	290		290	
MPa		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

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

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P144TSLMU-A1		PQHY-P168TSLMU-A1		PQHY-P192TSLMU-A1	
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1 BTU / h	144,000		168,000		192,000	
	*1 kW	42.2		49.2		56.3	
(208-230)	Power input kW	7.11		9.33		11.30	
	Current input A	21.9-19.8		28.7-26.0		34.8-31.5	
(Rated)	BTU / h	137,000		161,000		183,000	
	kW	40.2		47.2		53.6	
(208-230)	Power input kW	6.53	7.72	8.58	9.22	10.40	10.98
	Current input A	20.1-18.2	23.8-21.5	26.4-23.9	28.4-25.7	32.0-29.0	33.8-30.6
Temp. range of cooling	Indoor W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2 BTU / h	160,000		188,000		215,000	
	*2 kW	46.9		55.1		63.0	
(208-230)	Power input kW	7.45		9.34		11.02	
	Current input A	22.9-20.7		28.8-26.0		33.9-30.7	
(Rated)	BTU / h	152,000		179,000		205,000	
	kW	44.5		52.5		60.1	
(208-230)	Power input kW	6.86	7.22	8.60	8.03	10.16	8.90
	Current input A	21.1-19.1	22.2-20.1	26.5-23.9	24.7-22.3	31.3-28.3	27.4-24.8
Temp. range of heating	Indoor D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity	
Model / Quantity		P04-P96/1-36		P04-P96/1-42		P04-P96/1-48	
Sound pressure level (measured in anechoic room)	dB <A>	49.0		50.0		51.0	
Refrigerant	Liquid pipe in. (mm)	1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed	
	Gas pipe in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	

### Set Model

Model		PQHY-P72TLMU-A1	PQHY-P72TLMU-A1	PQHY-P96TLMU-A1	PQHY-P72TLMU-A1	PQHY-P96TLMU-A1	PQHY-P96TLMU-A1	
Minimum Circuit Ampacity	A	13-12		13-12	19-17	13-12	19-17	
Maximum Overcurrent Protection	A	20-20		20-20	30-25	20-20	30-25	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48	3.48	3.48	3.48	3.48	3.48	
	kPa	24	24	24	24	24	24	
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	4.3		6.0		4.3		
	Case heater kW	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
	lbs (kg)	375 (170)	375 (170)	375 (170)	375 (170)	375 (170)	375 (170)	
Heat exchanger	plate type	plate type	plate type	plate type	plate type	plate type		
Water volume in plate	G	1.32	1.32	1.32	1.32	1.32	1.32	
	l	5.0	5.0	5.0	5.0	5.0	5.0	
	psi	290	290	290	290	290	290	
Water pressure Max.	MPa	2.0	2.0	2.0	2.0	2.0	2.0	
Pipe between unit and distributor	Liquid pipe in. (mm)	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	
	Gas pipe in. (mm)	3/4 (19.05) Brazed	3/4 (19.05) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P216TSLMU-A1				PQHY-P240TSLMU-A1			
Indoor Model			Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source			3-phase 3-wire 208-230 V ±10% 60 Hz				3-phase 3-wire 208-230 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU / h	216,000				240,000			
		*1 kW	63.3				70.3			
(208-230)	Power input	kW	14.03				16.89			
		Current input	A		43.2-39.1		52.0-47.1		66.8	
(Rated)	Power input	BTU / h	206,000				228,000			
		kW	60.4				66.8			
(208-230)	Power input	kW	12.93		13.24		15.57		16.15	
		Current input	A		39.8-36.0		40.8-36.9		48.0-43.4	
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)				59~75°F (15~24°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Heating capacity (Nominal)	*2	BTU / h	243,000				270,000			
		*2 kW	71.2				79.1			
(208-230)	Power input	kW	12.88				14.58			
		Current input	A		39.7-35.9		44.9-40.6		52.0-47.1	
(Rated)	Power input	BTU / h	232,000				258,000			
		kW	68.0				75.6			
(208-230)	Power input	kW	11.88		10.35		13.45		12.02	
		Current input	A		36.6-33.1		31.9-28.8		41.4-37.5	
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)				59~81°F (15~27°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Indoor unit connectable	Model / Quantity		P04~P96/2~50				P04~P96/2~50			
Sound pressure level (measured in anechoic room)	dB <A>		55.0				57.0			
Refrigerant piping diameter	Liquid pipe	in. (mm)	5/8 (15.88) Brazed				5/8 (15.88) Brazed			
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed				1-1/8 (28.58) Brazed			
<b>Set Model</b>										
Model			PQHY-P120TLMU-A1		PQHY-P96TLMU-A1		PQHY-P120TLMU-A1		PQHY-P120TLMU-A1	
Minimum Circuit Ampacity			A		29-26		19-17		29-26	
Maximum Overcurrent Protection			A		50-45		30-25		50-45	
Inlet water	Water flow rate	G / h	1,522 + 1,522				1,522 + 1,522			
		G / min (gpm)	25.4 + 25.4				25.4 + 25.4			
		m <sup>3</sup> / 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	psi	3.48		3.48		3.48		3.48
	kPa	24		24		24		24		
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902				793 + 793 ~ 1,902 + 1,902				
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7				13.2 + 13.2 ~ 31.7 + 31.7				
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2				3.0 + 3.0 ~ 7.2 + 7.2				
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1			
	Starting method		Inverter				Inverter			
	Motor output		kW		7.7		6.0		7.7	
	Case heater		kW		-		-		-	
External finish			Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension H x W x D			in.		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16	
			mm		1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit		Over-heat protection, Over-current protection				Over-heat protection, Over-current protection			
	Compressor		Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)	
Net weight	lbs (kg)		375 (170)		375 (170)		375 (170)		375 (170)	
Heat exchanger	plate type		plate type				plate type			
	Water volume in plate	G	1.32		1.32		1.32		1.32	
		l	5.0		5.0		5.0		5.0	
	Water pressure Max.	psi	290		290		290		290	
MPa		2.0		2.0		2.0		2.0		
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed	
	Gas pipe	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Optional parts			Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G				Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G			

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P288TSLMU-A1		PQHY-P312TSLMU-A1	
Indoor Model			Non-Ducted	Ducted	Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	BTU / h	288,000		312,000	
	*1	kW	84.4		91.4	
(208-230)	Power input	kW	20.42		23.41	
	Current input	A	62.9-56.9		72.1-65.2	
(Rated)		BTU / h	275,000		297,000	
		kW	80.6		87.0	
(208-230)	Power input	kW	18.82	21.43	21.59	23.67
	Current input	A	58.0-52.4	66.1-59.7	66.5-60.2	73.0-66.0
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	BTU / h	323,000		350,000	
	*2	kW	94.7		102.6	
(208-230)	Power input	kW	17.50		19.11	
	Current input	A	53.9-48.8		58.9-53.3	
(Rated)		BTU / h	308,000		334,000	
		kW	90.3		97.9	
(208-230)	Power input	kW	16.13	16.05	17.62	17.96
	Current input	A	49.7-44.9	49.5-44.7	54.3-49.1	55.3-50.0
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable	Model / Quantity		P04~P96/2~50		P04~P96/2~50	
Sound pressure level (measured in anechoic room)	dB <A>		57.0		58.0	
Refrigerant piping diameter	Liquid pipe	in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed	
	Gas pipe	in. (mm)	1-3/8 (34.93) Brazed		1-3/8 (34.93) Brazed	
<b>Set Model</b>						
Model			PQHY-P144TLMU-A1	PQHY-P144TLMU-A1	PQHY-P168TLMU-A1	PQHY-P144TLMU-A1
Minimum Circuit Ampacity	A		35-32	35-32	44-39	35-32
Maximum Overcurrent Protection	A		60-50	60-50	70-70	60-50
Inlet water	Water flow rate	G / h	1,902 + 1,902		1,902 + 1,902	
		G / min (gpm)	31.7 + 31.7		31.7 + 31.7	
		m <sup>3</sup> / h	7.20 + 7.20		7.20 + 7.20	
		L / min	120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2	
	Pressure drop	psi	6.38	6.38	6.38	6.38
kPa		44	44	44	44	
Operating volume range	G / h	1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		
	m <sup>3</sup> / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	9.5		11.0		
	Case heater	kW		-		
External finish	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	
	mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	
Net weight	lbs (kg)	474 (215)	474 (215)	474 (215)	474 (215)	
Heat exchanger	Water volume in plate	G	1.32	1.32	1.32	1.32
		l	5.0	5.0	5.0	5.0
	Water pressure Max.	psi	290	290	290	290
		MPa	2.0	2.0	2.0	2.0
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed	1/2 (12.7) Brazed	5/8 (15.88) Brazed	5/8 (15.88) Brazed
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Optional parts	Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G	

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (208-230V) PQHY-P TSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P336TSLMU-A1		PQHY-P360TSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	BTU / h	336,000	360,000		
	*1	kW	98.5	105.5		
(208-230)	Power input	kW	26.84	29.43		
	Current input	A	82.7-74.8	90.7-82.0		
(Rated)		BTU / h	320,000	342,000		
		kW	93.8	100.2		
(208-230)	Power input	kW	24.76	25.85	27.17	27.41
	Current input	A	76.3-69.0	79.7-72.0	83.7-75.7	84.5-76.4
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	BTU / h	378,000	405,000		
	*2	kW	110.8	118.7		
(208-230)	Power input	kW	20.77	22.85		
	Current input	A	64.0-57.9	70.4-63.7		
(Rated)		BTU / h	361,000	387,000		
		kW	105.8	113.4		
(208-230)	Power input	kW	19.16	20.05	21.09	21.70
	Current input	A	59.0-53.4	61.8-55.9	65.0-58.8	66.9-60.5
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
Model / Quantity	P04~P96/2~50		P04~P96/2~50		P04~P96/2~50	
Sound pressure level (measured in anechoic room)	dB <A>	59.0		60.0		
Refrigerant piping diameter	Liquid pipe	in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed	
	Gas pipe	in. (mm)	1-5/8 (41.28) Brazed		1-5/8 (41.28) Brazed	

### Set Model

Model	PQHY-P168TLMU-A1	PQHY-P168TLMU-A1	PQHY-P192TLMU-A1	PQHY-P168TLMU-A1		
Minimum Circuit Ampacity	A	44-39	44-39	54-49	44-39	
Maximum Overcurrent Protection	A	70-70	70-70	90-80	70-70	
Inlet water	Water flow rate	G / h	1,902 + 1,902		1,902 + 1,902	
		G / min (gpm)	31.7 + 31.7		31.7 + 31.7	
		m <sup>3</sup> / h	7.20 + 7.20		7.20 + 7.20	
		L / min	120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2	
	Pressure drop	psi	6.38	6.38	6.38	6.38
kPa		44	44	44	44	
Operating volume range	G / h	1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		
	m <sup>3</sup> / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	kW	11.0	11.0	12.4	11.0
	Case heater	kW	-	-	-	-
External finish	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	
	mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	
Net weight	lbs (kg)	474 (215)	474 (215)	474 (215)	474 (215)	
Heat exchanger	Water volume in plate	G	1.32	1.32	1.32	1.32
		l	5.0	5.0	5.0	5.0
	Water pressure Max.	psi	290	290	290	290
		MPa	2.0	2.0	2.0	2.0
Pipe between unit and distributor	Liquid pipe	in. (mm)	5/8 (15.88) Brazed	5/8 (15.88) Brazed	5/8 (15.88) Brazed	5/8 (15.88) Brazed
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Optional parts	Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G	

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YLMU-A1



## ► Specifications

Heat Source Model		PQHY-P72YLMU-A1		PQHY-P96YLMU-A1		PQHY-P120YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	72,000		96,000		120,000		
	*1	21.1		28.1		35.2		
(460)	Power input	3.61		5.21		7.51		
	Current input	5.0		7.2		10.4		
(Rated)		69,000		92,000		114,000		
		20.2		27.0		33.4		
(460)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	4.6	4.3	6.7	7.2	9.6	10.2	
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	80,000		108,000		135,000		
	*2	23.4		31.7		39.6		
(460)	Power input	4.04		5.64		7.09		
	Current input	5.6		7.8		9.8		
(Rated)		76,000		103,000		129,000		
		22.3		30.2		37.8		
(460)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	5.2	4.6	7.2	6.2	9.1	8.2	
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model / Quantity	P04-P72/1~18		P04-P96/1~24		P04-P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	Liquid pipe	3/8 (9.52) Brazed		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 90 m)		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 40 m)		
	Gas pipe	3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	6		9		13		
Maximum Overcurrent Protection	A	15		15		20		
Inlet water	Water flow rate	G / h	1,522		1,522		1,522	
		G / min (gpm)	25.4		25.4		25.4	
		m <sup>3</sup> / h	5.76		5.76		5.76	
		L / min	96		96		96	
	Pressure drop	psi	3.48		3.48		3.48	
		kPa	24		24		24	
Operating volume range	G / h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902		
	G / min (gpm)	13.2 ~ 31.7		13.2 ~ 31.7		13.2 ~ 31.7		
	m <sup>3</sup> / h	3.0 ~ 7.2		3.0 ~ 7.2		3.0 ~ 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	4.3		6.0		7.7		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	400 (181)		400 (181)		400 (181)		
Heat exchanger	Water volume in plate	G	1.32		1.32		1.32	
		l	5.0		5.0		5.0	
	Water pressure Max.	psi	290		290		290	
		MPa	2.0		2.0		2.0	
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YLMU-A1



## ► Specifications

Model		PQHY-P144YLMU-A1		PQHY-P168YLMU-A1		PQHY-P192YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(460)	Power input	8.78		12.05		15.05		
	Current input	12.2		16.8		20.9		
(Rated)		137,000		161,000		183,000		
		40.2		47.2		53.6		
(460)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	11.2	13.9	15.4	16.5	19.3	19.7	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(460)	Power input	8.11		9.86		11.90		
	Current input	11.3		13.7		16.5		
(Rated)		152,000		179,000		205,000		
		44.5		52.5		60.1		
(460)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	10.4	11.0	12.6	13.5	15.2	16.1	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model / Quantity	P04~P96/1~36		P04~P96/1~42		P04~P96/1~48		
Sound pressure level (measured in anechoic room)	Model / Quantity	54.0		56.0		58.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed		
	Gas pipe	in. (mm) 1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	16		20		25		
Maximum Overcurrent Protection	A	25		30		40		
Inlet water	Water flow rate	G / h	1,902		1,902		1,902	
		G / min (gpm)	31.7		31.7		31.7	
		m³ / h	7.20		7.20		7.20	
		L / min	120		120		120	
		cfm	4.2		4.2		4.2	
	Pressure drop	psi	6.38		6.38		6.38	
		kPa	44		44		44	
	Operating volume range	G / h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054	
		G / min (gpm)	19.8 ~ 50.9		19.8 ~ 50.9		19.8 ~ 50.9	
		m³ / h	4.5 ~ 11.6		4.5 ~ 11.6		4.5 ~ 11.6	
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 9.5		11.0		12.4		
	Case heater	kW -		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	501 (227)		501 (227)		501 (227)		
Heat exchanger		plate type		plate type		plate type		
	Water volume in plate	G	1.32		1.32		1.32	
		l	5.0		5.0		5.0	
	Water pressure Max.	psi	290		290		290	
MPa		2.0		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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



# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YLMU-A1



## ► Specifications

Heat Source Model		PQHY-P216YLMU-A1		PQHY-P240YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz				
Cooling capacity (Nominal)	*1	BTU / h		240,000		
	*1	kW		70.3		
(460)	Power input	kW		21.14		
	Current input	A		29.4		
(Rated)		BTU / h		228,000		
		kW		66.8		
(460)	Power input	17.72	16.10	19.49	18.74	
	Current input	24.7	22.4	27.1	26.1	
Temp. range of cooling	Indoor	W.B.		59~75°F (15~24°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	BTU / h		270,000		
	*2	kW		79.1		
(460)	Power input	kW		15.12		
	Current input	A		21.0		
(Rated)		BTU / h		258,000		
		kW		75.6		
(460)	Power input	12.01	12.34	13.93	14.62	
	Current input	16.7	17.2	19.4	20.3	
Temp. range of heating	Indoor	D.B.		59~81°F (15~27°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Indoor unit connectable	Model / Quantity		P04~P96/2~50			
Sound pressure level (measured in anechoic room)	dB <A>		58.0			
Refrigerant piping diameter	Liquid pipe	in. (mm)		5/8 (15.88) Brazed		
	Gas pipe	in. (mm)		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A		31			
Maximum Overcurrent Protection	A		50			
Inlet water	Water flow rate	G / h	3,044		3,044	
		G / min (gpm)	50.7		50.7	
		m³ / h	11.52		11.52	
		L / min	192		192	
	Pressure drop	cfm	6.8		6.8	
		psi	6.53		6.53	
		kPa	45		45	
Operating volume range	G / h	1,585 ~ 3,804		1,585 ~ 3,804		
	G / min (gpm)	26.4 ~ 63.4		26.4 ~ 63.4		
	m³ / h	6.0 ~ 14.4		6.0 ~ 14.4		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	kW		16.1		
	Case heater	kW		0.045 (240 V)		
External finish	Galvanized steel sheets		Galvanized steel sheets			
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 25 lbs + 13 oz (11.7 kg)		R410A x 25 lbs + 13 oz (11.7 kg)		
Net weight	lbs (kg)	567 (257)		567 (257)		
Heat exchanger			plate type		plate type	
	Water volume in plate	G	2.64		2.64	
		l	10.0		10.0	
	Water pressure Max.	psi	290		290	
MPa		2.0		2.0		
Optional parts	joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G			

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P144YSLMU-A1		PQHY-P168YSLMU-A1		PQHY-P192YSLMU-A1	
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	144,000		168,000		192,000	
	*1	42.2		49.2		56.3	
(460)	Power input	7.11		9.33		11.30	
	Current input	9.9		13.0		15.7	
(Rated)	BTU / h	137,000		161,000		183,000	
	kW	40.2		47.2		53.6	
(460)	Power input	6.53	7.72	8.58	9.22	10.40	10.98
	Current input	9.1	10.7	11.9	12.8	14.5	15.3
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	160,000		188,000		215,000	
	*2	46.9		55.1		63.0	
(460)	Power input	7.45		9.34		11.02	
	Current input	10.3		13.0		15.3	
(Rated)	BTU / h	152,000		179,000		205,000	
	kW	44.5		52.5		60.1	
(460)	Power input	6.86	7.22	8.60	8.03	10.16	8.90
	Current input	9.5	10.0	11.9	11.1	14.1	12.4
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable		Total capacity 50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity	
Model / Quantity		P04~P96/1~36		P04~P96/1~42		P04~P96/1~48	
Sound pressure level (measured in anechoic room)		dB <A> 49.0		50.0		51.0	
Refrigerant		Liquid pipe 1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed	
piping diameter		Gas pipe 1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	

### Set Model

Model		PQHY-P72YLMU-A1	PQHY-P72YLMU-A1	PQHY-P96YLMU-A1	PQHY-P72YLMU-A1	PQHY-P96YLMU-A1	PQHY-P96YLMU-A1	
Minimum Circuit Ampacity		A 6	6	9	6	9	9	
Maximum Overcurrent Protection		A 15	15	15	15	15	15	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48	3.48	3.48	3.48	3.48	3.48
	kPa	24	24	24	24	24	24	
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 4.3		6.0		6.0		
	Case heater	kW -		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
	lbs (kg)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	
Net weight		plate type		plate type		plate type		
Heat exchanger	Water volume	G 1.32	1.32	1.32	1.32	1.32	1.32	
	in plate	l 5.0	5.0	5.0	5.0	5.0	5.0	
	Water pressure	psi 290	290	290	290	290	290	
	Max.	MPa 2.0	2.0	2.0	2.0	2.0	2.0	
Pipe between unit and distributor	Liquid pipe	in. (mm) 3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	
	Gas pipe	in. (mm) 3/4 (19.05) Brazed	3/4 (19.05) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P216YSLMU-A1			PQHY-P240YSLMU-A1		
Indoor Model			Non-Ducted			Ducted		
Power source			3-phase 3-wire 460 V ±10% 60 Hz					
Cooling capacity (Nominal)	*1	BTU / h	216,000			240,000		
	*1	kW	63.3			70.3		
(460)	Power input	kW	14.03			16.89		
	Current input	A	19.5			23.5		
(Rated)		BTU / h	206,000			228,000		
		kW	60.4			66.8		
(460)	Power input	kW	12.93			13.24	15.57	16.15
	Current input	A	18.0			18.4	21.7	22.5
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)			59~75°F (15~24°C)		
	Inlet water	°F	50~113°F (10~45°C)			50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	BTU / h	243,000			270,000		
	*2	kW	71.2			79.1		
(460)	Power input	kW	12.88			14.58		
	Current input	A	17.9			20.3		
(Rated)		BTU / h	232,000			258,000		
		kW	68.0			75.6		
(460)	Power input	kW	11.88			10.35	13.45	12.02
	Current input	A	16.5			14.4	18.7	16.7
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)			59~81°F (15~27°C)		
	Inlet water	°F	50~113°F (10~45°C)			50~113°F (10~45°C)		
Indoor unit connectable	Total capacity		50~130% of heatsource unit capacity			50~130% of heatsource unit capacity		
	Model / Quantity		P04~P96/2~50			P04~P96/2~50		
Sound pressure level (measured in anechoic room)	dB <A>		55.0			57.0		
Refrigerant piping diameter	Liquid pipe	in. (mm)	5/8 (15.88) Brazed			5/8 (15.88) Brazed		
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed			1-1/8 (28.58) Brazed		
<b>Set Model</b>								
Model	PQHY-P120YLMU-A1		PQHY-P96YLMU-A1		PQHY-P120YLMU-A1		PQHY-P120YLMU-A1	
Minimum Circuit Ampacity	A		13		9		13	
Maximum Overcurrent Protection	A		20		15		20	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48		3.48		3.48	
	kPa	24		24		24		
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW		6.0		7.7		
	Case heater	kW		-		-		
External finish	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension H x W x D	in.		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16	
	mm		1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	400 (181)		400 (181)		400 (181)		
Heat exchanger	plate type		plate type		plate type		plate type	
	Water volume in plate	G	1.32		1.32		1.32	
		l	5.0		5.0		5.0	
	Water pressure	psi	290		290		290	
	Max.	MPa	2.0		2.0		2.0	
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed	
	Gas pipe	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Optional parts	Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G	

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P288YSLMU-A1				PQHY-P312YSLMU-A1			
Indoor Model		Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz				3-phase 3-wire 460 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU / h	288,000		312,000				
	*1	kW	84.4		91.4				
(460)	Power input	kW	20.42		23.41				
	Current input	A	28.4		32.6				
(Rated)		BTU / h	275,000		297,000				
		kW	80.6		87.0				
(460)	Power input	kW	18.82	21.43	21.59	23.67			
	Current input	A	26.2	29.8	30.1	33.0			
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)				
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)				
Heating capacity (Nominal)	*2	BTU / h	323,000		350,000				
	*2	kW	94.7		102.6				
(460)	Power input	kW	17.50		19.11				
	Current input	A	24.4		26.6				
(Rated)		BTU / h	308,000		334,000				
		kW	90.3		97.9				
(460)	Power input	kW	16.13	16.05	17.62	17.96			
	Current input	A	22.4	22.3	24.5	25.0			
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)				
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)				
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity				50~130% of heatsource unit capacity			
Model / Quantity	P04~P96/2~50				P04~P96/2~50				
Sound pressure level (measured in anechoic room)	dB <A>	57.0				58.0			
Refrigerant	Liquid pipe	in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed				
piping diameter	Gas pipe	in. (mm)	1-3/8 (34.93) Brazed		1-3/8 (34.93) Brazed				

Set Model		PQHY-P144YLMU-A1		PQHY-P168YLMU-A1		PQHY-P144YLMU-A1		
Minimum Circuit Ampacity	A	16	16	20	16	20	16	
Maximum Overcurrent Protection	A	25	25	35	25	35	25	
Inlet water	Water flow rate	G / h	1,902 + 1,902		1,902 + 1,902			
		G / min (gpm)	31.7 + 31.7		31.7 + 31.7			
		m <sup>3</sup> / h	7.20 + 7.20		7.20 + 7.20			
		L / min	120 + 120		120 + 120			
		cfm	4.2 + 4.2		4.2 + 4.2			
	Pressure drop	psi	6.38	6.38	6.38	6.38	6.38	6.38
	kPa	44	44	44	44	44	44	
Operating volume range	G / h	1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054				
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9				
	m <sup>3</sup> / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6				
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1				
	Starting method	Inverter		Inverter				
	Motor output	kW	9.5	9.5	11.0	9.5		
	Case heater	kW	-	-	-	-		
External finish	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets	
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	
	mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	
Net weight	lbs (kg)	501 (227)	501 (227)	501 (227)	501 (227)	501 (227)	501 (227)	
Heat exchanger	Water volume in plate	G	1.32	1.32	1.32	1.32		
		l	5.0	5.0	5.0	5.0		
	Water pressure Max.	psi	290	290	290	290		
		MPa	2.0	2.0	2.0	2.0		
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed	1/2 (12.7) Brazed	5/8 (15.88) Brazed	5/8 (15.88) Brazed		
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed		
Optional parts	Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G				Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G			

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (460V) PQHY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P336YSLMU-A1				PQHY-P360YSLMU-A1				
Indoor Model		Non-Ducted		Ducted		Non-Ducted		Ducted		
Power source		3-phase 3-wire 460 V ±10% 60 Hz				3-phase 3-wire 460 V ±10% 60 Hz				
Cooling capacity (Nominal)	*1	BTU / h		336,000		360,000				
	*1	kW		98.5		105.5				
(460)	Power input	kW		26.84		29.43				
	Current input	A		37.4		41.0				
(Rated)		BTU / h		320,000		342,000				
		kW		93.8		100.2				
(460)	Power input	kW		24.76	25.85	27.17		27.41		
	Current input	A		34.5	36.0	37.8		38.2		
Temp. range of cooling	Indoor	W.B.		59~75°F (15~24°C)		59~75°F (15~24°C)				
	Inlet water	°F		50~113°F (10~45°C)		50~113°F (10~45°C)				
Heating capacity (Nominal)	*2	BTU / h		378,000		405,000				
	*2	kW		110.8		118.7				
(460)	Power input	kW		20.77		22.85				
	Current input	A		28.9		31.8				
(Rated)		BTU / h		361,000		387,000				
		kW		105.8		113.4				
(460)	Power input	kW		19.16	20.05	21.09		21.70		
	Current input	A		26.7	27.9	29.4		30.2		
Temp. range of heating	Indoor	D.B.		59~81°F (15~27°C)		59~81°F (15~27°C)				
	Inlet water	°F		50~113°F (10~45°C)		50~113°F (10~45°C)				
Indoor unit connectable	Total capacity		50~130% of heatsource unit capacity				50~130% of heatsource unit capacity			
Model / Quantity	P04-P96/2-50				P04-P96/2-50					
Sound pressure level (measured in anechoic room)	dB <A>		59.0				60.0			
Refrigerant piping diameter	Liquid pipe	in. (mm)		3/4 (19.05) Brazed		3/4 (19.05) Brazed				
	Gas pipe	in. (mm)		1-5/8 (41.28) Brazed		1-5/8 (41.28) Brazed				

### Set Model

Model		PQHY-P168YLMU-A1		PQHY-P168YLMU-A1		PQHY-P192YLMU-A1		PQHY-P168YLMU-A1		
Minimum Circuit Ampacity	A	20		20		25		20		
Maximum Overcurrent Protection	A	35		35		40		35		
Inlet water	Water flow rate	G / h		1,902 + 1,902		1,902 + 1,902				
		G / min (gpm)		31.7 + 31.7		31.7 + 31.7				
		m <sup>3</sup> / h		7.20 + 7.20		7.20 + 7.20				
		L / min		120 + 120		120 + 120				
		cfm		4.2 + 4.2		4.2 + 4.2				
Pressure drop	psi	6.38		6.38		6.38		6.38		
	kPa	44		44		44		44		
Operating volume range	G / h	1,189 + 1,189 ~ 3,054 + 3,054				1,189 + 1,189 ~ 3,054 + 3,054				
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9				19.8 + 19.8 ~ 50.9 + 50.9				
	m <sup>3</sup> / h	4.5 + 4.5 ~ 11.6 + 11.6				4.5 + 4.5 ~ 11.6 + 11.6				
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1				
	Starting method	Inverter				Inverter				
	Motor output	kW		11.0		12.4		11.0		
	Case heater	kW		-		-		-		
External finish	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets			
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection				
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	501 (227)		501 (227)		501 (227)		501 (227)		
Heat exchanger	plate type	plate type		plate type		plate type		plate type		
		Water volume	G		1.32		1.32		1.32	
		in plate	l		5.0		5.0		5.0	
		Water pressure	psi		290		290		290	
Max.	MPa		2.0		2.0		2.0			
Pipe between unit and distributor	Liquid pipe	in. (mm)		5/8 (15.88) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed		
	Gas pipe	in. (mm)		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Optional parts	Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G				Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010C-G					

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZLMU-A1



## ► Specifications

Heat Source Model		PQHY-P72ZLMU-A1		PQHY-P96ZLMU-A1		PQHY-P120ZLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	72,000		96,000		120,000		
	*1	21.1		28.1		35.2		
(575)	Power input	3.61		5.21		7.51		
	Current input	4.0		5.8		8.3		
(Rated)		69,000		92,000		114,000		
		20.2		27.0		33.4		
(575)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	3.7	3.4	5.3	5.7	7.7	8.2	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	80,000		108,000		135,000		
	*2	23.4		31.7		39.6		
(575)	Power input	4.04		5.64		7.09		
	Current input	4.5		6.2		7.9		
(Rated)		76,000		103,000		129,000		
		22.3		30.2		37.8		
(575)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	4.1	3.7	5.8	4.9	7.3	6.6	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model/Quantity	P04~P72/1~18		P04~P96/1~24		P04~P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 3/8 (9.52) Brazed		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 90 m)		3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 40 m)		
	Gas pipe	in. (mm) 3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	5		7		11		
Maximum Overcurrent Protection	A	15		15		15		
Inlet water	Water flow rate	G/h	1,522		1,522		1,522	
		G/min (gpm)	25.4		25.4		25.4	
		m³/h	5.76		5.76		5.76	
		L/min	96		96		96	
	Pressure drop	cfm	3.4		3.4		3.4	
		psi	3.48		3.48		3.48	
	Operating volume range	kPa	24		24		24	
		G/h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902	
	G/min (gpm)	13.2 ~ 31.7		13.2 ~ 31.7		13.2 ~ 31.7		
	m³/h	3.0 ~ 7.2		3.0 ~ 7.2		3.0 ~ 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 4.3		6.0		7.7		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	404 (183)		404 (183)		404 (183)		
Heat exchanger		plate type		plate type		plate type		
	Water volume in plate	G 1.32		1.32		1.32		
	Water pressure	l 5.0		5.0		5.0		
	Max.	psi 290		290		290		
Optional parts		MPa 2.0		2.0		2.0		
		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104, 108, 1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104, 108, 1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010C-G		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZLMU-A1



## ► Specifications

Heat Source Model		PQHY-P144ZLMU-A1		PQHY-P168ZLMU-A1		PQHY-P192ZLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(575)	Power input	8.78		12.05		15.05		
	Current input	9.7		13.4		16.7		
(Rated)	BTU/h	137,000		161,000		183,000		
	kW	40.2		47.2		53.6		
(575)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	9.0	11.1	12.3	13.2	15.4	15.8	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(575)	Power input	8.11		9.86		11.90		
	Current input	9.0		11.0		13.2		
(Rated)	BTU/h	152,000		179,000		205,000		
	kW	44.5		52.5		60.1		
(575)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	8.3	8.8	10.1	10.8	12.2	12.8	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		
	Model/Quantity	P04~P96/1~36		P04~P96/1~42		P04~P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	54.0		56.0		58.0		
Refrigerant piping diameter	Liquid pipe	in. (mm) 1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed		
	Gas pipe	in. (mm) 1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	13		16		20		
Maximum Overcurrent Protection	A	20		25		30		
Inlet water	Water flow rate	G/h	1,902		1,902		1,902	
		G/min (gpm)	31.7		31.7		31.7	
		m <sup>3</sup> /h	7.20		7.20		7.20	
		L/min	120		120		120	
	Pressure drop	cfm	4.2		4.2		4.2	
		psi	6.38		6.38		6.38	
		kPa	44		44		44	
Operating volume range	G/h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054		
	G/min (gpm)	19.8 ~ 50.9		19.8 ~ 50.9		19.8 ~ 50.9		
	m <sup>3</sup> /h	4.5 ~ 11.6		4.5 ~ 11.6		4.5 ~ 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 9.5		11.0		12.4		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	505 (229)		505 (229)		505 (229)		
Heat exchanger			plate type		plate type		plate type	
	Water volume	G	1.32		1.32		1.32	
	in plate	l	5.0		5.0		5.0	
	Water pressure	psi	290		290		290	
Max.	MPa	2.0		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010C-G		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQHY-P144ZSLMU-A1		PQHY-P168ZSLMU-A1		PQHY-P192ZSLMU-A1	
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	144,000		168,000		192,000	
	*1	42.2		49.2		56.3	
(575)	Power input	7.11		9.33		11.30	
	Current input	7.9		10.4		12.6	
(Rated)	BTU/h	137,000		161,000		183,000	
	kW	40.2		47.2		53.6	
(575)	Power input	6.53	7.72	8.58	9.22	10.40	10.98
	Current input	7.2	8.6	9.5	10.2	11.6	12.2
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	160,000		188,000		215,000	
	*2	46.9		55.1		63.0	
(575)	Power input	7.45		9.34		11.02	
	Current input	8.3		10.4		12.2	
(Rated)	BTU/h	152,000		179,000		205,000	
	kW	44.5		52.5		60.1	
(575)	Power input	6.86	7.22	8.60	8.03	10.16	8.90
	Current input	7.6	8.0	9.5	8.9	11.3	9.9
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity		50~130% of heatsource unit capacity		50~130% of heatsource unit capacity	
Model/Quantity		P04~P96/1~36		P04~P96/1~42		P04~P96/1~48	
Sound pressure level (measured in anechoic room)	dB <A>	49.0		50.0		51.0	
Refrigerant	Liquid pipe	1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed	
	Gas pipe	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	

Set Model		PQHY-P72ZLMU-A1	PQHY-P72ZLMU-A1	PQHY-P96ZLMU-A1	PQHY-P72ZLMU-A1	PQHY-P96ZLMU-A1	PQHY-P96ZLMU-A1	
Minimum Circuit Ampacity	A	5	5	7	5	7	7	
Maximum Overcurrent Protection	A	15	15	15	15	15	15	
Inlet water	Water flow rate	G/h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G/min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		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	psi	3.48	3.48	3.48	3.48	3.48	3.48
	kPa	24	24	24	24	24	24	
Operating volume range	G/h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G/min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m³/h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	4.3		6.0		4.3		
	Case heater	kW		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
Net weight	lbs (kg)	404 (183)	404 (183)	404 (183)	404 (183)	404 (183)	404 (183)	
Heat exchanger		plate type	plate type	plate type	plate type	plate type	plate type	
	Water volume	G	1.32	1.32	1.32	1.32	1.32	
	in plate	l	5.0	5.0	5.0	5.0	5.0	
	Water pressure	psi	290	290	290	290	290	
Max.	MPa	2.0	2.0	2.0	2.0	2.0		
Pipe between unit and distributor	Liquid pipe	in. (mm)	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	3/8 (9.52) Brazed	
	Gas pipe	in. (mm)	3/4 (19.05) Brazed	3/4 (19.05) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104, 108, 1010C-G		Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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



# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P216ZSLMU-A1				PQHY-P240ZSLMU-A1			
Indoor Model			Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source			3-phase 3-wire 575 V ±10% 60 Hz				3-phase 3-wire 575 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU/h	216,000		240,000		240,000		240,000	
		*1 kW	63.3		70.3		70.3		70.3	
(575)	Power input	kW	14.03		16.89		16.89		16.89	
		Current input	A		15.6		18.8		18.8	
(Rated)	BTU/h	206,000		228,000		228,000		228,000		
		kW	60.4		66.8		66.8		66.8	
(575)	Power input	kW	12.93	13.24		15.57	16.15		16.15	
		Current input	A	14.4	14.7		17.3	18.0		
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)				59~75°F (15~24°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Heating capacity (Nominal)	*2	BTU/h	243,000		270,000		270,000		270,000	
		*2 kW	71.2		79.1		79.1		79.1	
(575)	Power input	kW	12.88		14.58		14.58		14.58	
		Current input	A		14.3		16.2		16.2	
(Rated)	BTU/h	232,000		258,000		258,000		258,000		
		kW	68.0		75.6		75.6		75.6	
(575)	Power input	kW	11.88	10.35		13.45	12.02		12.02	
		Current input	A	13.2	11.5		15.0	13.4		
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)				59~81°F (15~27°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity				50~130% of heatsource unit capacity				
Model/Quantity	P04~P96/2~50				P04~P96/2~50					
Sound pressure level (measured in anechoic room)	dB <A>	55.0				57.0				
Refrigerant piping diameter	Liquid pipe	in. (mm)	5/8 (15.88) Brazed				5/8 (15.88) Brazed			
Gas pipe	in. (mm)	1-1/8 (28.58) Brazed				1-1/8 (28.58) Brazed				
Set Model			PQHY-P120ZLMU-A1				PQHY-P96ZLMU-A1			
Minimum Circuit Ampacity	A	11		7		11		11		
Maximum Overcurrent Protection	A	15		15		15		15		
Inlet water	Water flow rate	G/h	1,522 + 1,522				1,522 + 1,522			
		G/min (gpm)	25.4 + 25.4				25.4 + 25.4			
		m³/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	psi	3.48		3.48		3.48		3.48
kPa	24		24		24		24			
Operating volume range	G/h	793 + 793 ~ 1,902 + 1,902				793 + 793 ~ 1,902 + 1,902				
		13.2 + 13.2 ~ 31.7 + 31.7				13.2 + 13.2 ~ 31.7 + 31.7				
		3.0 + 3.0 ~ 7.2 + 7.2				3.0 + 3.0 ~ 7.2 + 7.2				
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1				
	Starting method	Inverter				Inverter				
	Motor output	kW		7.7		6.0		7.7		
	Case heater	kW		-		-		-		
	External finish	Galvanized steel sheets				Galvanized steel sheets				
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection				
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	404 (183)		404 (183)		404 (183)		404 (183)		
Heat exchanger	plate type	plate type		plate type		plate type		plate type		
		Water volume	G	1.32		1.32		1.32		
		in plate	l	5.0		5.0		5.0		
		Water pressure	psi	290		290		290		
Max.	MPa	2.0		2.0		2.0				
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed	
	Gas pipe	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Optional parts	Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G				Heat Source Twinning kit: CMY-Y100CBK3 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G					

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P288ZSLMU-A1				PQHY-P312ZSLMU-A1			
Indoor Model			Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source			3-phase 3-wire 575 V ±10% 60 Hz				3-phase 3-wire 575 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU/h	288,000		312,000		312,000		312,000	
		*1 kW	84.4		91.4		91.4		91.4	
(575)	Power input	kW	20.42		23.41		23.41		23.41	
		Current input	A		22.7		26.1		26.1	
(Rated)	BTU/h	275,000		297,000		297,000		297,000		
		kW	80.6		87.0		87.0		87.0	
(575)	Power input	kW	18.82	21.43		21.59	23.67		23.67	
		Current input	A	20.9	23.9		24.0	26.4		26.4
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)				59~75°F (15~24°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Heating capacity (Nominal)	*2	BTU/h	323,000		350,000		350,000		350,000	
		*2 kW	94.7		102.6		102.6		102.6	
(575)	Power input	kW	17.50		19.11		19.11		19.11	
		Current input	A		19.5		21.3		21.3	
(Rated)	BTU/h	308,000		334,000		334,000		334,000		
		kW	90.3		97.9		97.9		97.9	
(575)	Power input	kW	16.13	16.05		17.62	17.96		17.96	
		Current input	A	17.9	17.9		19.6	20.0		20.0
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)				59~81°F (15~27°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Indoor unit connectable	Total capacity	50~130% of heatsource unit capacity				50~130% of heatsource unit capacity				
Model/Quantity	P04~P96/2~50				P04~P96/2~50					
Sound pressure level (measured in anechoic room)	dB <A>	57.0				58.0				
Refrigerant piping diameter	Liquid pipe	in. (mm)	3/4 (19.05) Brazed				3/4 (19.05) Brazed			
	Gas pipe	in. (mm)	1-3/8 (34.93) Brazed				1-3/8 (34.93) Brazed			
Set Model			PQHY-P144ZLMU-A1				PQHY-P168ZLMU-A1			
Minimum Circuit Ampacity	A	13		13		16		13		
Maximum Overcurrent Protection	A	20		20		25		20		
Inlet water	Water flow rate	G/h	1,902 + 1,902				1,902 + 1,902			
		G/min (gpm)	31.7 + 31.7				31.7 + 31.7			
		m <sup>3</sup> /h	7.20 + 7.20				7.20 + 7.20			
		L/min	120 + 120				120 + 120			
		cfm	4.2 + 4.2				4.2 + 4.2			
	Pressure drop	psi	6.38		6.38		6.38		6.38	
kPa		44		44		44		44		
Operating volume range	G/h	1,189 + 1,189 ~ 3,054 + 3,054				1,189 + 1,189 ~ 3,054 + 3,054				
	G/min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9				19.8 + 19.8 ~ 50.9 + 50.9				
	m <sup>3</sup> /h	4.5 + 4.5 ~ 11.6 + 11.6				4.5 + 4.5 ~ 11.6 + 11.6				
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1				
	Starting method	Inverter				Inverter				
	Motor output	kW		9.5		11.0		9.5		
	Case heater	kW		-		-		-		
External finish			Galvanized steel sheets				Galvanized steel sheets			
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection				
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	505 (229)		505 (229)		505 (229)		505 (229)		
Heat exchanger	Water volume in plate	G	1.32		1.32		1.32		1.32	
		l	5.0		5.0		5.0		5.0	
	Water pressure Max.	psi	290		290		290		290	
		MPa	2.0		2.0		2.0		2.0	
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed	
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Optional parts			Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G				Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G			

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WY-Series (575V) PQHY-P ZSLMU-A1



## ► Specifications

Heat Source Model			PQHY-P336ZSLMU-A1				PQHY-P360ZSLMU-A1			
Indoor Model			Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source			3-phase 3-wire 575 V ±10% 60 Hz				3-phase 3-wire 575 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU/h	336,000				360,000			
		*1 kW	98.5				105.5			
(575)	Power input	kW	26.84				29.43			
		A	29.9				32.8			
(Rated)	BTU/h		320,000				342,000			
		kW	93.8				100.2			
(575)	Power input	kW	24.76		25.85		27.17		27.41	
		A	27.6		28.8		30.3		30.5	
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)				59~75°F (15~24°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Heating capacity (Nominal)	*2	BTU/h	378,000				405,000			
		*2 kW	110.8				118.7			
(575)	Power input	kW	20.77				22.85			
		A	23.1				25.4			
(Rated)	BTU/h		361,000				387,000			
		kW	105.8				113.4			
(575)	Power input	kW	19.16		20.05		21.09		21.70	
		A	21.3		22.3		23.5		24.2	
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)				59~81°F (15~27°C)			
	Inlet water	°F	50~113°F (10~45°C)				50~113°F (10~45°C)			
Indoor unit connectable			50~130% of heatsource unit capacity				50~130% of heatsource unit capacity			
Model/Quantity			P04~P96/2~50				P04~P96/2~50			
Sound pressure level (measured in anechoic room)			59.0				60.0			
Refrigerant piping diameter	Liquid pipe	in. (mm)	3/4 (19.05) Brazed				3/4 (19.05) Brazed			
	Gas pipe	in. (mm)	1-5/8 (41.28) Brazed				1-5/8 (41.28) Brazed			
Set Model										
Model	PQHY-P168ZLMU-A1		PQHY-P168ZLMU-A1		PQHY-P192ZLMU-A1		PQHY-P168ZLMU-A1			
Minimum Circuit Ampacity	A		16		16		20			
Maximum Overcurrent Protection	A		25		25		30			
Inlet water	Water flow rate	G/h	1,902 + 1,902				1,902 + 1,902			
		G/min (gpm)	31.7 + 31.7				31.7 + 31.7			
		m³/h	7.20 + 7.20				7.20 + 7.20			
		L/min	120 + 120				120 + 120			
		cfm	4.2 + 4.2				4.2 + 4.2			
		Pressure drop	psi	6.38		6.38		6.38		6.38
kPa	44		44		44		44			
Operating volume range	G/h	1,189 + 1,189 ~ 3,054 + 3,054				1,189 + 1,189 ~ 3,054 + 3,054				
	G/min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9				19.8 + 19.8 ~ 50.9 + 50.9				
	m³/h	4.5 + 4.5 ~ 11.6 + 11.6				4.5 + 4.5 ~ 11.6 + 11.6				
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1				
	Starting method	Inverter				Inverter				
	Motor output	kW		11.0		12.4		11.0		
	Case heater	kW		-		-		-		
External finish			Galvanized steel sheets				Galvanized steel sheets			
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection				
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	505 (229)		505 (229)		505 (229)		505 (229)		
Heat exchanger	Water volume in plate	G	1.32		1.32		1.32		1.32	
		l	5.0		5.0		5.0		5.0	
		Water pressure	psi		290		290		290	
		Max.	MPa		2.0		2.0		2.0	
Pipe between unit and distributor	Liquid pipe	in. (mm)	5/8 (15.88) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed		5/8 (15.88) Brazed	
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Optional parts			Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G				Heat Source Twinning kit: CMY-Y200CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104, 108, 1010C-G			

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# WR2-Series

Simultaneous Heating and Cooling Heat recovery

- Optional parts
- Specifications 208-230V, 460V PQRV-P T(S)LMU-A1/Y(S)LMU-A1  
575V PQRV-P Z(S)LMU-A1
- BC controllers

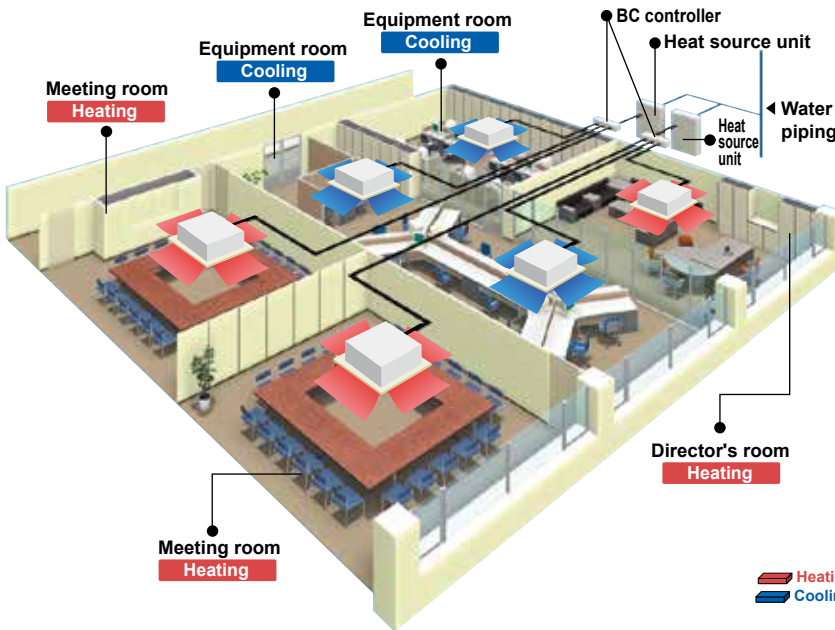


## Advanced water heat source unit with the benefits of the R2-Series

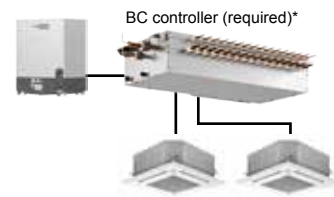
The CITY MULTI WR2-Series provides all of the advantages of the R2-Series with the added benefits of a water heat source system, making it suitable for a wider range of applications in high-rise buildings, cold climates, coastal areas, etc.

Not only does it recover heat from the indoor units along the same 2-pipe refrigerant circuit, it also recovers heat via the water circuit between heat source units, making it a very economical system.

### • Installation image (WR2-Series)

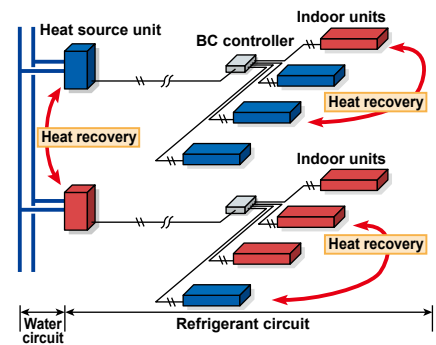


### • System example



\*WR2-Series systems require the use of BC controllers.

### • Double heat recovery (WR2)

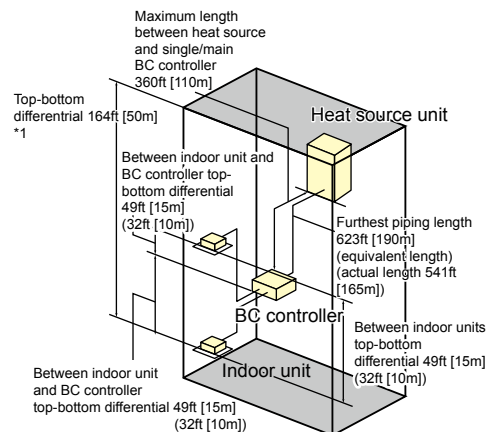


### • System pipe lengths

[P72-P336 (WR2-Series)]

Refrigerant Piping Lengths	Maximum feet [Meters]
Total length	1,804-2,460 [550-750]
Maximum allowable length	541 (623 equivalent) [165 (190)]
Maximum length between heat source and single/main BC controller	360 [110]*2
*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	131 [40]*3
Vertical differentials between units	Maximum feet [Meters]
Indoor/ heat source ( heat source higher)	164 [50]
Indoor/ heat source ( heat source lower)	131 [40]
Indoor/BC controller (single/main)	49 [15]*4
Indoor/indoor	98 [30]*5
Main BC Controller/Sub BC Controller	49 [15]*6

\*1 When the heat source unit is installed below the indoor unit, top-bottom differential is 131ft [40m].  
 \*2 Details refer to the DATA BOOK.  
 \*3 Farthest Indoor from BC controller can exceed 131ft [40m] till 197ft [60m] if no Indoor sized P72, P96 connected. Details refer to the DATA BOOK.  
 \*4 Height between Indoor sized P72, P96 and BC must be less than 32ft [10m], if any.  
 \*5 Height between Indoor sized P72, P96 and IU must be less than 65ft [20m], if any.  
 \*6 Height between BC (Main or Sub) and BC (Sub) must be less than 32ft [10m] if two BC(sub) are installed or IU size is P72, P96.



## Optional parts

- For WR2-Series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	72 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	73-144 (Total capacity of indoor unit)
	CMY-Y202S-G2	145-240 (Total capacity of indoor unit)
Twinning kit	CMY-Q100CBK2	For PQRV-P144-P240TSLMU-A/YSLMU-A/ZSLMU
	CMY-Q200CBK	For PQRV-P288-P336TSLMU-A/YSLMU-A/ZSLMU

# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TLMU-A1



## ► Specifications

Heat Source Model		PQRY-P72TLMU-A1		PQRY-P96TLMU-A1		PQRY-P120TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	72,000		96,000		120,000		
	*1 kW	21.1		28.1		35.2		
(208-230)	Power input	3.61		5.21		7.51		
	Current input	11.1-10.0		16.0-14.5		23.1-20.9		
(Rated)	BTU / h	69,000		92,000		114,000		
	kW	20.2		27.0		33.4		
(208-230)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	10.3-9.3	9.6-8.7	14.8-13.4	16.0-14.4	21.4-19.3	22.6-20.5	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	80,000		108,000		135,000		
	*2 kW	23.4		31.7		39.6		
(208-230)	Power input	4.04		5.64		7.09		
	Current input	12.4-11.2		17.3-15.7		21.8-19.7		
(Rated)	BTU / h	76,000		103,000		129,000		
	kW	22.3		30.2		37.8		
(208-230)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	11.5-10.4	10.3-9.3	16.0-14.5	13.8-12.4	20.2-18.2	18.2-16.5	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/1~18		P04-P96/1~24		P04-P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	High pressure	in. (mm) 5/8 (15.88) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed		
	Low pressure	in. (mm) 3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	13-12		19-17		29-26		
Maximum Overcurrent Protection	A	20-20		30-25		50-45		
Inlet water	Water flow rate	G / h	1,522		1,522		1,522	
		G / min (gpm)	25.4		25.4		25.4	
		m <sup>3</sup> / h	5.76		5.76		5.76	
	Pressure drop	L / min	96		96		96	
		cfm	3.4		3.4		3.4	
		psi	3.48		3.48		3.48	
Operating volume range	kPa	24		24		24		
	G / h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
Case heater	Motor output	kW 4.3		6.0		7.7		
	Case heater	kW -		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	382 (173)		382 (173)		382 (173)		
Heat exchanger			plate type		plate type		plate type	
	Water volume in plate	G	1.32		1.32		1.32	
	Water pressure	psi	5.0		5.0		5.0	
	Max.	MPa	2.90		2.90		2.90	
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 10161NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144TLMU-A1		PQRY-P168TLMU-A1		PQRY-P192TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(208-230)	Power input	8.78		12.05		15.05		
	Current input	27.0-24.4		37.1-33.6		46.4-41.9		
(Rated)		137,000		161,000		183,000		
		40.2		47.2		53.6		
(208-230)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	24.8-22.5	30.7-27.8	34.2-30.9	36.6-33.1	42.7-38.6	43.7-39.5	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(208-230)	Power input	8.11		9.86		11.90		
	Current input	25.0-22.6		30.4-27.5		36.7-33.1		
(Rated)		152,000		179,000		205,000		
		44.5		52.5		60.1		
(208-230)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	23.0-20.8	24.3-22.0	28.0-25.3	29.9-27.1	33.8-30.5	35.6-32.2	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/1~36		P04-P96/1~42		P04-P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	54.0		56.0		58.0		
Refrigerant piping diameter	High pressure	in. (mm) 7/8 (22.2) Braze		7/8 (22.2) Braze		7/8 (22.2) Braze		
	Low pressure	in. (mm) 1-1/8 (28.58) Braze		1-1/8 (28.58) Braze		1-1/8 (28.58) Braze		
Minimum Circuit Ampacity	A	35-32		44-39		54-49		
Maximum Overcurrent Protection	A	60-50		70-70		90-80		
Inlet water	Water flow rate	G / h	1,902		1,902		1,902	
		G / min (gpm)	31.7		31.7		31.7	
		m <sup>3</sup> / h	7.20		7.20		7.20	
	Pressure drop	L / min	120		120		120	
		cfm	4.2		4.2		4.2	
		psi	6.38		6.38		6.38	
Operating volume range	kPa	44		44		44		
	G / h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054		
	G / min (gpm)	19.8 ~ 50.9		19.8 ~ 50.9		19.8 ~ 50.9		
	m <sup>3</sup> / h	4.5 ~ 11.6		4.5 ~ 11.6		4.5 ~ 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	kW 9.5		11.0		12.4		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	481 (218)		481 (218)		481 (218)		
Heat exchanger		plate type		plate type		plate type		
	Water volume in plate	G 1.32		1.32		1.32		
	Water pressure	psi 5.0		5.0		5.0		
	Max.	psi 290		290		290		
Optional parts		2.0		2.0		2.0		
		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TLMU-A1



## ► Specifications

Heat Source Model		PQRY-P216TLMU-A1		PQRY-P240TLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	BTU / h		240,000		
	*1	kW		70.3		
(208-230)	Power input	kW		21.14		
	Current input	A		65.1-58.9		
(Rated)		BTU / h		228,000		
		kW		66.8		
(208-230)	Power input	17.72	16.10	19.49	18.74	
	Current input	54.6-49.4	49.6-44.9	60.1-54.3	57.7-52.2	
Temp. range of cooling	Indoor	W.B.		59~75°F (15~24°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	BTU / h		270,000		
	*2	kW		79.1		
(208-230)	Power input	kW		15.12		
	Current input	A		46.6-42.1		
(Rated)		BTU / h		232,000		
		kW		75.6		
(208-230)	Power input	12.01	12.34	13.93	14.62	
	Current input	37.0-33.4	38.0-34.4	42.9-38.8	45.0-40.7	
Temp. range of heating	Indoor	D.B.		59~81°F (15~27°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04~P96/2~50 (Connectable branch pipe number is max. 48.)		P04~P96/2~50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	58.0		58.0		
Refrigerant piping diameter	High pressure	in. (mm) 7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		
	Low pressure	in. (mm) 1-1/8 (28.58) Brazed		1-3/8 (34.93) Brazed		
Minimum Circuit Ampacity	A	69-63		79-71		
Maximum Overcurrent Protection	A	110-110		125-125		
Inlet water	Water flow rate	G / h	3,044		3,044	
		G / min (gpm)	50.7		50.7	
		m <sup>3</sup> / h	11.52		11.52	
		L / min	192		192	
	Pressure drop	cfm	6.8		6.8	
		psi	6.53		6.53	
Operating volume range	kPa	45		45		
	G / h	1,585 ~ 3,804		1,585 ~ 3,804		
	G / min (gpm)	26.4 ~ 63.4		26.4 ~ 63.4		
	m <sup>3</sup> / h	6.0 ~ 14.4		6.0 ~ 14.4		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	kW		16.1		
	Case heater	kW		0.045 (240 V)		
External finish		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 25 lbs + 13 oz (11.7 kg)		R410A x 25 lbs + 13 oz (11.7 kg)		
Net weight	lbs (kg)	558 (253)		558 (253)		
Heat exchanger		plate type		plate type		
	Water volume in plate	G	2.64		2.64	
		l	10.0		10.0	
	Water pressure Max.	psi	290		290	
MPa		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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



# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144TSLMU-A1		PQRY-P168TSLMU-A1		PQRY-P192TSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	144,000		168,000		192,000		
	*1 kW	42.2		49.2		56.3		
(208-230)	Power input kW	7.11		9.33		11.30		
	Current input A	21.9-19.8		28.7-26.0		34.8-31.5		
(Rated)	BTU / h	137,000		161,000		183,000		
	kW	40.2		47.2		53.6		
(208-230)	Power input kW	6.53	7.72	8.58	9.22	10.40	10.98	
	Current input A	20.1-18.2	23.8-21.5	26.4-23.9	28.4-25.7	32.0-29.0	33.8-30.6	
Temp. range of cooling	Indoor W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	160,000		188,000		215,000		
	*2 kW	46.9		55.1		63.0		
(208-230)	Power input kW	7.45		9.34		11.02		
	Current input A	22.9-20.7		28.8-26.0		33.9-30.7		
(Rated)	BTU / h	152,000		179,000		205,000		
	kW	44.5		52.5		60.1		
(208-230)	Power input kW	6.86	7.22	8.60	8.03	10.16	8.90	
	Current input A	21.1-19.1	22.2-20.1	26.5-23.9	24.7-22.3	31.3-28.3	27.4-24.8	
Temp. range of heating	Indoor D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
Model / Quantity		P04~P96/1~36		P04~P96/1~42		P04~P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	49.0		50.0		51.0		
Refrigerant piping diameter	High pressure in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
	Low pressure in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
<b>Set Model</b>								
<b>Model</b>		<b>PQRY-P72TLMU-A1</b>	<b>PQRY-P72TLMU-A1</b>	<b>PQRY-P96TLMU-A1</b>	<b>PQRY-P72TLMU-A1</b>	<b>PQRY-P96TLMU-A1</b>	<b>PQRY-P96TLMU-A1</b>	
Minimum Circuit Ampacity	A	13-12	13-12	19-17	13-12	19-17	19-17	
Maximum Overcurrent Protection	A	20-20	20-20	30-25	20-20	30-25	30-25	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48	3.48	3.48	3.48	3.48	3.48
	kPa	24	24	24	24	24	24	
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	4.3		6.0		6.0		
	Case heater kW	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
	lbs (kg)	382 (173)	382 (173)	382 (173)	382 (173)	382 (173)	382 (173)	
Net weight		plate type		plate type		plate type		
Heat exchanger	Water volume in plate	G	1.32	1.32	1.32	1.32	1.32	
		l	5.0	5.0	5.0	5.0	5.0	
	Water pressure	psi	290	290	290	290	290	
	Max.	MPa	2.0	2.0	2.0	2.0	2.0	
Pipe between unit and distributor	High pressure in. (mm)	5/8 (15.88) Brazed	5/8 (15.88) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	
	Low pressure in. (mm)	-	3/4 (19.05) Brazed	-	7/8 (22.2) Brazed	-	7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P216TSLMU-A1		PQRY-P240TSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	216,000		240,000		
	*1 kW	63.3		70.3		
(208-230)	Power input kW	14.03		16.89		
	Current input A	43.2-39.1		52.0-47.1		
(Rated)	BTU / h	206,000		228,000		
	kW	60.4		66.8		
(208-230)	Power input kW	12.93	13.24	15.57	16.15	
	Current input A	39.8-36.0	40.8-36.9	48.0-43.4	49.8-45.0	
Temp. range of cooling	Indoor W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	243,000		270,000		
	*2 kW	71.2		79.1		
(208-230)	Power input kW	12.88		14.58		
	Current input A	39.7-35.9		44.9-40.6		
(Rated)	BTU / h	232,000		258,000		
	kW	68.0		75.6		
(208-230)	Power input kW	11.88	10.35	13.45	12.02	
	Current input A	36.6-33.1	31.9-28.8	41.4-37.5	37.0-33.5	
Temp. range of heating	Indoor D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity Model / Quantity	50~150% of heat source unit capacity P04~P96/2~50 (Connectable branch pipe number is max. 48.)		50~150% of heat source unit capacity P04~P96/2~50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	55.0		57.0		
Refrigerant piping diameter	High pressure in. (mm)	7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		
	Low pressure in. (mm)	1-1/8 (28.58) Brazed		1-3/8 (34.93) Brazed		
<b>Set Model</b>						
Model		PQRY-P120TLMU-A1	PQRY-P96TLMU-A1	PQRY-P120TLMU-A1	PQRY-P120TLMU-A1	
Minimum Circuit Ampacity	A	29-26	19-17	29-26	29-26	
Maximum Overcurrent Protection	A	50-45	30-25	50-45	50-45	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48	3.48	3.48	3.48	
	kPa	24	24	24	24	
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output kW	7.7	6.0	7.7	7.7	
	Case heater kW	-	-	-	-	
External finish		Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets	Galvanized steel sheets	
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
Refrigerant	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	
	Type x original charge	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
Net weight	lbs (kg)	382 (173)	382 (173)	382 (173)	382 (173)	
Heat exchanger	plate type	plate type		plate type		
		plate type		plate type		
	Water volume in plate	G	1.32	1.32	1.32	1.32
	Water pressure Max.	psi	290	290	290	290
Pipe between unit and distributor	High pressure in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed		
	Low pressure in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Optional parts		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (208-230V) PQRY-P TSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P288TSLMU-A1		PQRY-P312TSLMU-A1		PQRY-P336TSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	288,000		312,000		336,000		
	*1 kW	84.4		91.4		98.5		
(208-230)	Power input kW	20.42		23.41		26.84		
	Current input A	62.9-56.9		72.1-65.2		82.7-74.8		
(Rated)	BTU / h	275,000		297,000		320,000		
	kW	80.6		87.0		93.8		
(208-230)	Power input kW	18.82	21.43	21.59	23.67	24.76	25.85	
	Current input A	58.0-52.4	66.1-59.7	66.5-60.2	73.0-66.0	76.3-69.0	79.7-72.0	
Temp. range of cooling	Indoor W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	323,000		350,000		378,000		
	*2 kW	94.7		102.6		110.8		
(208-230)	Power input kW	17.50		19.11		20.77		
	Current input A	53.9-48.8		58.9-53.3		64.0-57.9		
(Rated)	BTU / h	308,000		334,000		361,000		
	kW	90.3		97.9		105.8		
(208-230)	Power input kW	16.13	16.05	17.62	17.96	19.16	20.05	
	Current input A	49.7-44.9	49.5-44.7	54.3-49.1	55.3-50.0	59.0-53.4	61.8-55.9	
Temp. range of heating	Indoor D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/2-50 (Connectable branch pipe number is max. 48.)		P04-P96/2-50 (Connectable branch pipe number is max. 48.)		P04-P96/2-50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	57.0		58.0		59.0		
Refrigerant piping diameter	High pressure in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
	Low pressure in. (mm)	1-3/8 (34.93) Brazed		1-3/8 (34.93) Brazed		1-5/8 (41.28) Brazed		
<b>Set Model</b>								
Model		PQRY-P144TLMU-A1	PQRY-P144TLMU-A1	PQRY-P168TLMU-A1	PQRY-P144TLMU-A1	PQRY-P168TLMU-A1	PQRY-P168TLMU-A1	
Minimum Circuit Ampacity	A	35-32		35-32		44-39		
Maximum Overcurrent Protection	A	60-50		60-50		70-70		
Inlet water	Water flow rate	G / h	1,902 + 1,902		1,902 + 1,902		1,902 + 1,902	
		G / min (gpm)	31.7 + 31.7		31.7 + 31.7		31.7 + 31.7	
		m <sup>3</sup> / h	7.20 + 7.20		7.20 + 7.20		7.20 + 7.20	
		L / min	120 + 120		120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2		4.2 + 4.2	
	Pressure drop	psi	6.38	6.38	6.38	6.38	6.38	6.38
	kPa	44	44	44	44	44	44	
Operating volume range	G / h	1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		
	m <sup>3</sup> / h	4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6		4.5 + 4.5 ~ 11.6 + 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	9.5		11.0		9.5		
	Case heater kW	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16	
	mm	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	1,450 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)	
	Net weight	481 (218)		481 (218)		481 (218)		
Heat exchanger	Water volume in plate	plate type	plate type	plate type	plate type	plate type	plate type	
		G	1.32	1.32	1.32	1.32	1.32	
		l	5.0	5.0	5.0	5.0	5.0	
		psi	290	290	290	290	290	
Pipe between unit and distributor	High pressure in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	7/8 (22.2) Brazed	
	Low pressure in. (mm)	-	1-1/8 (28.58) Brazed	-	1-1/8 (28.58) Brazed	-	1-1/8 (28.58) Brazed	
Optional parts	Heat Source Twinning Kit: CMY-Q200CBK		Heat Source Twinning Kit: CMY-Q200CBK		Heat Source Twinning Kit: CMY-Q200CBK		Heat Source Twinning Kit: CMY-Q200CBK	
	joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1	
	Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1	
	Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1	

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YLMU-A1



## ► Specifications

Heat Source Model		PQRY-P72YLMU-A1		PQRY-P96YLMU-A1		PQRY-P120YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	72,000		96,000		120,000		
	*1	21.1		28.1		35.2		
(460)	Power input	3.61		5.21		7.51		
	Current input	5.0		7.2		10.4		
(Rated)		69,000		92,000		114,000		
		20.2		27.0		33.4		
(460)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	4.6	4.3	6.7	7.2	9.6	10.2	
Temp. range of cooling	Indoor	W.B. 59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	80,000		108,000		135,000		
	*2	23.4		31.7		39.6		
(460)	Power input	4.04		5.64		7.09		
	Current input	5.6		7.8		9.8		
(Rated)		76,000		103,000		129,000		
		22.3		30.2		37.8		
(460)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	5.2	4.6	7.2	6.2	9.1	8.2	
Temp. range of heating	Indoor	D.B. 59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	°F 50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/1~18		P04-P96/1~24		P04-P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	High pressure	in. (mm) 5/8 (15.88) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed		
	Low pressure	in. (mm) 3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	6		9		13		
Maximum Overcurrent Protection	A	15		15		20		
Inlet water	Water flow rate	G / h	1,522		1,522		1,522	
		G / min (gpm)	25.4		25.4		25.4	
		m <sup>3</sup> / h	5.76		5.76		5.76	
		L / min	96		96		96	
	Pressure drop	cfm	3.4		3.4		3.4	
		psi	3.48		3.48		3.48	
	Operating volume range	kPa	24		24		24	
		G / h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902	
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
Motor output	kW	4.3		6.0		7.7		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	406 (184)		406 (184)		406 (184)		
Heat exchanger	Water volume in plate	plate type		plate type		plate type		
		G	1.32		1.32		1.32	
	Water pressure	psi	5.0		5.0		5.0	
	Max.	MPa	2.90		2.90		2.90	
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144YLMU-A1		PQRY-P168YLMU-A1		PQRY-P192YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(460)	Power input	8.78		12.05		15.05		
	Current input	12.2		16.8		20.9		
(Rated)		137,000		161,000		183,000		
		40.2		47.2		53.6		
(460)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	11.2	13.9	15.4	16.5	19.3	19.7	
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(460)	Power input	8.11		9.86		11.90		
	Current input	11.3		13.7		16.5		
(Rated)		152,000		179,000		205,000		
		44.5		52.5		60.1		
(460)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	10.4	11.0	12.6	13.5	15.2	16.1	
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/1~36		P04-P96/1~42		P04-P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	54.0		56.0		58.0		
Refrigerant piping diameter	High pressure	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
	Low pressure	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	16		20		25		
Maximum Overcurrent Protection	A	25		35		40		
Inlet water	Water flow rate	G / h	1,902		1,902		1,902	
		G / min (gpm)	31.7		31.7		31.7	
		m <sup>3</sup> / h	7.20		7.20		7.20	
		L / min	120		120		120	
	Pressure drop	cfm	4.2		4.2		4.2	
		psi	6.38		6.38		6.38	
Operating volume range	kPa	44		44		44		
	G / h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
Motor output	kW	9.5		11.0		12.4		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	508 (230)		508 (230)		508 (230)		
Heat exchanger			plate type		plate type		plate type	
	Water volume in plate	G	1.32		1.32		1.32	
	Water pressure	l	5.0		5.0		5.0	
	Max.	psi	290		290		290	
Optional parts			2.0		2.0		2.0	
			joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1	

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YLMU-A1



## ► Specifications

Heat Source Model		PQRY-P216YLMU-A1		PQRY-P240YLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz				
Cooling capacity (Nominal)	*1	BTU / h		240,000		
	*1	kW		70.3		
(460)	Power input	kW		21.14		
	Current input	A		29.4		
(Rated)		BTU / h		228,000		
		kW		66.8		
(460)	Power input	17.72	16.10	19.49	18.74	
	Current input	24.7	22.4	27.1	26.1	
Temp. range of cooling	Indoor	W.B.		59~75°F (15~24°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	BTU / h		270,000		
	*2	kW		79.1		
(460)	Power input	kW		15.12		
	Current input	A		21.0		
(Rated)		BTU / h		258,000		
		kW		75.6		
(460)	Power input	12.01	12.34	13.93	14.62	
	Current input	16.7	17.2	19.4	20.3	
Temp. range of heating	Indoor	D.B.		59~81°F (15~27°C)		
	Inlet water	°F		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity				
	Model / Quantity	P04~P96/2~50 (Connectable branch pipe number is max. 48.)				
Sound pressure level (measured in anechoic room)	dB <A>	58.0				
Refrigerant piping diameter	High pressure	7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)				
	Low pressure	1-1/8 (28.58) Brazed				
Minimum Circuit Ampacity	A	31		36		
Maximum Overcurrent Protection	A	50		60		
Inlet water	Water flow rate	G / h	3,044		3,044	
		G / min (gpm)	50.7		50.7	
		m³ / h	11.52		11.52	
		L / min	192		192	
	Pressure drop	cfm	6.8		6.8	
		psi	6.53		6.53	
	Operating volume range	kPa	45		45	
		G / h	1,585 ~ 3,804		1,585 ~ 3,804	
	G / min (gpm)	26.4 ~ 63.4		26.4 ~ 63.4		
	m³ / h	6.0 ~ 14.4		6.0 ~ 14.4		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				
	Starting method	Inverter				
	Motor output	kW		16.1		
	Case heater	kW		0.045 (240 V)		
External finish		Galvanized steel sheets				
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550				
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection				
Refrigerant	Type x original charge	R410A x 25 lbs + 13 oz (11.7 kg)				
Net weight	lbs (kg)	574 (260)		574 (260)		
Heat exchanger		plate type				
	Water volume in plate	G		2.64		
		l		10.0		
	Water pressure	psi		290		
Max.	MPa		2.0			
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144YSLMU-A1		PQRY-P168YSLMU-A1		PQRY-P192YSLMU-A1	
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	144,000		168,000		192,000	
	*1	42.2		49.2		56.3	
(460)	Power input	7.11		9.33		11.30	
	Current input	9.9		13.0		15.7	
(Rated)	BTU / h	137,000		161,000		183,000	
	kW	40.2		47.2		53.6	
(460)	Power input	6.53	7.72	8.58	9.22	10.40	10.98
	Current input	9.1	10.7	11.9	12.8	14.5	15.3
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)	
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	160,000		188,000		215,000	
	*2	46.9		55.1		63.0	
(460)	Power input	7.45		9.34		11.02	
	Current input	10.3		13.0		15.3	
(Rated)	BTU / h	152,000		179,000		205,000	
	kW	44.5		52.5		60.1	
(460)	Power input	6.86	7.22	8.60	8.03	10.16	8.90
	Current input	9.5	10.0	11.9	11.1	14.1	12.4
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)	
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity	
	Model / Quantity	P04-P96/1~36		P04-P96/1~42		P04-P96/1~48	
Sound pressure level (measured in anechoic room)	dB <A>	49.0		50.0		51.0	
Refrigerant piping diameter	High pressure	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed	
	Low pressure	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	

### Set Model

Model		PQRY-P72YLMU-A1	PQRY-P72YLMU-A1	PQRY-P96YLMU-A1	PQRY-P72YLMU-A1	PQRY-P96YLMU-A1	PQRY-P96YLMU-A1	
Minimum Circuit Ampacity	A	6	6	9	6	9	9	
Maximum Overcurrent Protection	A	15	15	15	15	15	15	
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522		1,522 + 1,522	
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> / 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	psi	3.48	3.48	3.48	3.48	3.48	3.48	
	kPa	24	24	24	24	24	24	
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	4.3		6.0		6.0		
	Case heater	kW		kW		kW		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
	Net weight	406 (184)		406 (184)		406 (184)		
Heat exchanger		plate type	plate type	plate type	plate type	plate type	plate type	
	Water volume in plate	G	1.32	1.32	1.32	1.32	1.32	
	Water pressure	psi	290	290	290	290	290	
	Max.	MPa	2.0	2.0	2.0	2.0	2.0	
Pipe between unit and distributor	High pressure	5/8 (15.88) Brazed	5/8 (15.88) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	3/4 (19.05) Brazed	
	Low pressure	in. (mm)	3/4 (19.05) Brazed	in. (mm)	7/8 (22.2) Brazed	in. (mm)	7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P216YSLMU-A1			PQRY-P240YSLMU-A1					
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted					
Power source		3-phase 3-wire 460 V ±10% 60 Hz			3-phase 3-wire 460 V ±10% 60 Hz					
Cooling capacity (Nominal)	*1	BTU / h		216,000			240,000			
	*1	kW		63.3			70.3			
(460)	Power input	kW		14.03			16.89			
	Current input	A		19.5			23.5			
(Rated)		BTU / h		206,000			228,000			
		kW		60.4			66.8			
(460)	Power input	12.93	13.24	15.57	16.15					
	Current input	18.0	18.4	21.7	22.5					
Temp. range of cooling	Indoor	W.B.			59~75°F (15~24°C)			59~75°F (15~24°C)		
	Inlet water	°F			50~113°F (10~45°C)			50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	BTU / h		243,000			270,000			
	*2	kW		71.2			79.1			
(460)	Power input	kW		12.88			14.58			
	Current input	A		17.9			20.3			
(Rated)		BTU / h		232,000			258,000			
		kW		68.0			75.6			
(460)	Power input	11.88	10.35	13.45	12.02					
	Current input	16.5	14.4	18.7	16.7					
Temp. range of heating	Indoor	D.B.			59~81°F (15~27°C)			59~81°F (15~27°C)		
	Inlet water	°F			50~113°F (10~45°C)			50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity			50~150% of heat source unit capacity					
Model / Quantity		P04~P96/2~50 (Connectable branch pipe number is max. 48.)			P04~P96/2~50 (Connectable branch pipe number is max. 48.)					
Sound pressure level (measured in anechoic room)	dB <A>	55.0			57.0					
Refrigerant piping diameter	High pressure	in. (mm)	7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)					
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed		1-3/8 (34.93) Brazed					
<b>Set Model</b>										
Model		PQRY-P120YLMU-A1		PQRY-P96YLMU-A1		PQRY-P120YLMU-A1		PQRY-P120YLMU-A1		
Minimum Circuit Ampacity	A	13		9		13		13		
Maximum Overcurrent Protection	A	20		15		20		20		
Inlet water	Water flow rate	G / h	1,522 + 1,522		1,522 + 1,522					
		G / min (gpm)	25.4 + 25.4		25.4 + 25.4					
		m <sup>3</sup> / 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	psi	3.48		3.48		3.48			
	kPa	24		24		24				
Operating volume range	G / h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902						
	G / min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7						
	m <sup>3</sup> / h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2						
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1			Inverter scroll hermetic compressor x 1					
	Starting method	Inverter			Inverter					
	Motor output	kW		7.7		7.7				
	Case heater	kW		-		-				
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)					
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	406 (184)		406 (184)		406 (184)		406 (184)		
Heat exchanger	Water volume in plate	G	1.32		1.32		1.32		1.32	
		l	5.0		5.0		5.0		5.0	
	Water pressure Max.	psi	290		290		290		290	
		MPa	2.0		2.0		2.0		2.0	
Pipe between unit and distributor	High pressure	in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed	
	Low pressure	in. (mm)	-		7/8 (22.2) Brazed		-		7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1			Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1					

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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



# HEAT SOURCE UNIT WR2-Series (460V) PQRY-P YSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P288YSLMU-A1		PQRY-P312YSLMU-A1		PQRY-P336YSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		3-phase 3-wire 460 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1 BTU / h	288,000		312,000		336,000		
	*1 kW	84.4		91.4		98.5		
(460)	Power input kW	20.42		23.41		26.84		
	Current input A	28.4		32.6		37.4		
(Rated)	BTU / h	275,000		297,000		320,000		
	kW	80.6		87.0		93.8		
(460)	Power input kW	18.82	21.43	21.59	23.67	24.76	25.85	
	Current input A	26.2	29.8	30.1	33.0	34.5	36.0	
Temp. range of cooling	Indoor W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2 BTU / h	323,000		350,000		378,000		
	*2 kW	94.7		102.6		110.8		
(460)	Power input kW	17.50		19.11		20.77		
	Current input A	24.4		26.6		28.9		
(Rated)	BTU / h	308,000		334,000		361,000		
	kW	90.3		97.9		105.8		
(460)	Power input kW	16.13	16.05	17.62	17.96	19.16	20.05	
	Current input A	22.4	22.3	24.5	25.0	26.7	27.9	
Temp. range of heating	Indoor D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water °F	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model / Quantity	P04-P96/2-50 (Connectable branch pipe number is max. 48.)		P04-P96/2-50 (Connectable branch pipe number is max. 48.)		P04-P96/2-50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	57.0		58.0		59.0		
Refrigerant	High pressure in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
	Low pressure in. (mm)	1-3/8 (34.93) Brazed		1-3/8 (34.93) Brazed		1-5/8 (41.28) Brazed		
<b>Set Model</b>								
Model		PQRY-P144YLMU-A1	PQRY-P144YLMU-A1	PQRY-P168YLMU-A1	PQRY-P144YLMU-A1	PQRY-P168YLMU-A1	PQRY-P168YLMU-A1	
Minimum Circuit Ampacity	A	16	16	20	16	20	20	
Maximum Overcurrent Protection	A	25	25	35	25	35	35	
Inlet water	Water flow rate	G / h	1,902 + 1,902		1,902 + 1,902		1,902 + 1,902	
		G / min (gpm)	31.7 + 31.7		31.7 + 31.7		31.7 + 31.7	
		m <sup>3</sup> / h	7.20 + 7.20		7.20 + 7.20		7.20 + 7.20	
	Pressure drop	L / min	120 + 120		120 + 120		120 + 120	
		cfm	4.2 + 4.2		4.2 + 4.2		4.2 + 4.2	
		psi	6.38	6.38	6.38	6.38	6.38	6.38
Operating volume range	kPa	44	44	44	44	44	44	
	G / h	1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		1,189 + 1,189 ~ 3,054 + 3,054		
	G / min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		19.8 + 19.8 ~ 50.9 + 50.9		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
		Inverter		Inverter		Inverter		
		kW		9.5		11.0		9.5
External finish	Galvanized steel sheets	Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
		mm		1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
		Inverter circuit		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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
		508 (230)		508 (230)		508 (230)		
Net weight	lbs (kg)	508 (230)		508 (230)		508 (230)		
Heat exchanger	Water volume in plate	plate type		plate type		plate type		
		G		1.32		1.32		
		l		5.0		5.0		
		psi		290		290		
Pipe between unit and distributor	High pressure in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Optional parts	Heat Source Twinning Kit: CMY-Q200CBK	Heat Source Twinning Kit: CMY-Q200CBK		Heat Source Twinning Kit: CMY-Q200CBK		Heat Source Twinning Kit: CMY-Q200CBK		
		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1		
		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 1016NU-HA1		

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZLMU-A1



## ► Specifications

Heat Source Model		PQRY-P72ZLMU-A1		PQRY-P96ZLMU-A1		PQRY-P120ZLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	72,000		96,000		120,000		
	*1	21.1		28.1		35.2		
(575)	Power input	3.61		5.21		7.51		
	Current input	4.0		5.8		8.3		
(Rated)		69,000		92,000		114,000		
		20.2		27.0		33.4		
(575)	Power input	3.34	3.12	4.82	5.19	6.95	7.35	
	Current input	3.7	3.4	5.3	5.7	7.7	8.2	
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	80,000		108,000		135,000		
	*2	23.4		31.7		39.6		
(575)	Power input	4.04		5.64		7.09		
	Current input	4.5		6.2		7.9		
(Rated)		76,000		103,000		129,000		
		22.3		30.2		37.8		
(575)	Power input	3.74	3.36	5.21	4.48	6.55	5.92	
	Current input	4.1	3.7	5.8	4.9	7.3	6.6	
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model/Quantity	P04~P96/1~18		P04~P96/1~24		P04~P96/1~30		
Sound pressure level (measured in anechoic room)	dB <A>	46.0		48.0		54.0		
Refrigerant piping diameter	High pressure	5/8 (15.88) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed		
	Low pressure	3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
Minimum Circuit Ampacity	A	5		7		11		
Maximum Overcurrent Protection	A	15		15		15		
Inlet water	Water flow rate	G/h	1,522		1,522		1,522	
		G/min (gpm)	25.4		25.4		25.4	
		m³/h	5.76		5.76		5.76	
		L/min	96		96		96	
	Pressure drop	cfm	3.4		3.4		3.4	
		psi	3.48		3.48		3.48	
	Operating volume range	kPa	24		24		24	
		G/h	793 ~ 1,902		793 ~ 1,902		793 ~ 1,902	
	G/min (gpm)	13.2 ~ 31.7		13.2 ~ 31.7		13.2 ~ 31.7		
	m³/h	3.0 ~ 7.2		3.0 ~ 7.2		3.0 ~ 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	4.3		6.0		7.7		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)	411 (186)		411 (186)		411 (186)		
Heat exchanger		plate type		plate type		plate type		
	Water volume in plate	1.32		1.32		1.32		
	Water pressure	5.0		5.0		5.0		
	Max.	290		290		290		
Optional parts		2.0		2.0		2.0		
		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		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, 1016NU-G1		BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1		BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016NU-G1		
		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1		Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1		
	Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1			

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144ZLMU-A1		PQRY-P168ZLMU-A1		PQRY-P192ZLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	144,000		168,000		192,000		
	*1	42.2		49.2		56.3		
(575)	Power input	8.78		12.05		15.05		
	Current input	9.7		13.4		16.7		
(Rated)	BTU/h	137,000		161,000		183,000		
	kW	40.2		47.2		53.6		
(575)	Power input	8.07	9.98	11.10	11.88	13.87	14.19	
	Current input	9.0	11.1	12.3	13.2	15.4	15.8	
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	160,000		188,000		215,000		
	*2	46.9		55.1		63.0		
(575)	Power input	8.11		9.86		11.90		
	Current input	9.0		11.0		13.2		
(Rated)	BTU/h	152,000		179,000		205,000		
	kW	44.5		52.5		60.1		
(575)	Power input	7.47	7.90	9.09	9.72	10.97	11.56	
	Current input	8.3	8.8	10.1	10.8	12.2	12.8	
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		50~150% of heat source unit capacity		
Model/Quantity		P04~P96/1~36		P04~P96/1~42		P04~P96/1~48		
Sound pressure level (measured in anechoic room)	dB <A>	54.0		56.0		58.0		
Refrigerant piping diameter	High pressure	7/8 (22.2) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed		
	Low pressure	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Minimum Circuit Ampacity	A	13		16		20		
Maximum Overcurrent Protection	A	20		25		30		
Inlet water	Water flow rate	G/h	1,902		1,902		1,902	
		G/min (gpm)	31.7		31.7		31.7	
		m <sup>3</sup> /h	7.20		7.20		7.20	
		L/min	120		120		120	
		cfm	4.2		4.2		4.2	
Pressure drop		psi	6.38		6.38		6.38	
		kPa	44		44		44	
Operating volume range	G/h	1,189 ~ 3,054		1,189 ~ 3,054		1,189 ~ 3,054		
	G/min (gpm)	19.8 ~ 50.9		19.8 ~ 50.9		19.8 ~ 50.9		
	m <sup>3</sup> /h	4.5 ~ 11.6		4.5 ~ 11.6		4.5 ~ 11.6		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	9.5		11.0		12.4		
	Case heater	-		-		-		
External finish		Galvanized steel sheets		Galvanized steel sheets		Galvanized steel sheets		
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,450 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	512 (232)		512 (232)		512 (232)		
Heat exchanger			plate type		plate type		plate type	
	Water volume in plate	G	1.32		1.32		1.32	
		l	5.0		5.0		5.0	
	Water pressure	psi	290		290		290	
Max.	MPa	2.0		2.0		2.0		
Optional parts		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1		

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 Install the supplied insulation material to the unused drain-socket.

\*9 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*10 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P144ZSLMU-A1				PQRY-P168ZSLMU-A1			
Indoor Model		Non-Ducted		Ducted		Non-Ducted		Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz				3-phase 3-wire 575 V ±10% 60 Hz			
Cooling capacity (Nominal)	*1	BTU/h		144,000		168,000			
	*1	kW		42.2		49.2			
(575)	Power input	kW		7.11		9.33			
	Current input	A		7.9		10.4			
(Rated)		BTU/h		137,000		161,000			
		kW		40.2		47.2			
(575)	Power input	kW		6.53		7.72		8.58	
	Current input	A		7.2		8.6		9.5	
Temp. range of cooling	Indoor	W.B.		59~75°F (15~24°C)		59~75°F (15~24°C)			
	Inlet water	°F		50~113°F (10~45°C)		50~113°F (10~45°C)			
Heating capacity (Nominal)	*2	BTU/h		160,000		188,000			
	*2	kW		46.9		55.1			
(575)	Power input	kW		7.45		9.34			
	Current input	A		8.3		10.4			
(Rated)		BTU/h		152,000		179,000			
		kW		44.5		52.5			
(575)	Power input	kW		6.86		7.22		8.60	
	Current input	A		7.6		8.0		9.5	
Temp. range of heating	Indoor	D.B.		59~81°F (15~27°C)		59~81°F (15~27°C)			
	Inlet water	°F		50~113°F (10~45°C)		50~113°F (10~45°C)			
Indoor unit connectable	Model/Quantity		P04~P96/1~36		P04~P96/1~42				
Sound pressure level (measured in anechoic room)	dB <A>		49.0		50.0				
Refrigerant piping diameter	High pressure	in. (mm)		7/8 (22.2) Brazed		7/8 (22.2) Brazed			
	Low pressure	in. (mm)		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed			

Set Model		PQRY-P72ZLMU-A1		PQRY-P72ZLMU-A1		PQRY-P96ZLMU-A1		PQRY-P72ZLMU-A1			
Minimum Circuit Ampacity	A	5		5		7		5			
Maximum Overcurrent Protection	A	15		15		15		15			
Inlet water	Water flow rate	G/h		1,522 + 1,522		1,522 + 1,522					
		G/min (gpm)		25.4 + 25.4		25.4 + 25.4					
		m³/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	psi	3.48		3.48		3.48		3.48		
	kPa	24		24		24		24			
Operating volume range	G/h		793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902						
	G/min (gpm)		13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7						
	m³/h		3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2						
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1						
	Starting method		Inverter		Inverter						
	Motor output		kW		4.3		6.0		4.3		
	Case heater		kW		-		-		-		
External finish		Galvanized steel sheets				Galvanized steel sheets					
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16			
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550		1,100 x 880 x 550			
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit		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 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		
Net weight	lbs (kg)		411 (186)		411 (186)		411 (186)		411 (186)		
Heat exchanger	plate type		plate type		plate type		plate type		plate type		
	Water volume	G	1.32		1.32		1.32		1.32		
	in plate	l	5.0		5.0		5.0		5.0		
	Water pressure	psi	290		290		290		290		
	Max.	MPa	2.0		2.0		2.0		2.0		
Pipe between unit and distributor	High pressure	in. (mm)		5/8 (15.88) Brazed		5/8 (15.88) Brazed		3/4 (19.05) Brazed		3/4 (19.05) Brazed	
	Low pressure	in. (mm)		-		3/4 (19.05) Brazed		-		7/8 (22.2) Brazed	
Optional parts		Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1				Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1					

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 The Heat Source twinning kit (low pressure) should be connected to the low pressure side of the heat source unit.

\*9 Install the supplied insulation material to the unused drain-socket.

\*10 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*11 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P192ZSLMU-A1		PQRY-P216ZSLMU-A1		
Indoor Model		Non-Ducted	Ducted	Non-Ducted	Ducted	
Power source		3-phase 3-wire 575 V ±10% 60 Hz		3-phase 3-wire 575 V ±10% 60 Hz		
Cooling capacity (Nominal)	*1	192,000		216,000		
	*1	56.3		63.3		
(575)	Power input	11.30		14.03		
	Current input	12.6		15.6		
(Rated)		183,000		206,000		
		53.6		60.4		
(575)	Power input	10.40	10.98	12.93	13.24	
	Current input	11.6	12.2	14.4	14.7	
Temp. range of cooling	Indoor	59~75°F (15~24°C)		59~75°F (15~24°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		
Heating capacity (Nominal)	*2	215,000		243,000		
	*2	63.0		71.2		
(575)	Power input	11.02		12.88		
	Current input	12.2		14.3		
(Rated)		205,000		232,000		
		60.1		68.0		
(575)	Power input	10.16	8.90	11.88	10.35	
	Current input	11.3	9.9	13.2	11.5	
Temp. range of heating	Indoor	59~81°F (15~27°C)		59~81°F (15~27°C)		
	Inlet water	50~113°F (10~45°C)		50~113°F (10~45°C)		
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity		50~150% of heat source unit capacity		
	Model/Quantity	P04~P96/1~48		P04~P96/2~50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	51.0		55.0		
Refrigerant piping diameter	High pressure	7/8 (22.2) Brazed		7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)		
	Low pressure	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Set Model						
Model		PQRY-P96ZLMU-A1	PQRY-P96ZLMU-A1	PQRY-P120ZLMU-A1	PQRY-P96ZLMU-A1	
Minimum Circuit Ampacity	A	7	7	11	7	
Maximum Overcurrent Protection	A	15	15	15	15	
Inlet water	Water flow rate	G/h	1,522 + 1,522		1,522 + 1,522	
		G/min (gpm)	25.4 + 25.4		25.4 + 25.4	
		m <sup>3</sup> /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	psi	3.48	3.48	3.48	3.48
	kPa	24	24	24	24	
Operating volume range	G/h	793 + 793 ~ 1,902 + 1,902		793 + 793 ~ 1,902 + 1,902		
	G/min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		13.2 + 13.2 ~ 31.7 + 31.7		
	m <sup>3</sup> /h	3.0 + 3.0 ~ 7.2 + 7.2		3.0 + 3.0 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		
	Motor output	6.0		7.7		
	Case heater	kW		6.0		
External finish						
Galvanized steel sheets						
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	43-5/16 x 34-11/16 x 21-11/16	
	mm	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	1,100 x 880 x 550	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	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 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	R410A x 11 lbs + 1 oz (5.0 kg)	
Net weight	lbs (kg)	411 (186)	411 (186)	411 (186)	411 (186)	
Heat exchanger	Water volume in plate	G	1.32	1.32	1.32	
		l	5.0	5.0	5.0	
	Water pressure Max.	psi	290	290	290	290
		MPa	2.0	2.0	2.0	2.0
Pipe between unit and distributor	High pressure	3/4 (19.05) Brazed		3/4 (19.05) Brazed		
	Low pressure	-		7/8 (22.2) Brazed		
Optional parts						
Heat Source Twinning kit: CMY-Q100CBK2						
joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1						
Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1						
Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1						

### Notes:

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 The Heat Source twinning kit (low pressure) should be connected to the low pressure side of the heat source unit.

\*9 Install the supplied insulation material to the unused drain-socket.

\*10 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*11 When the high pressure piping length is 65 m or less, use 7/8 (22.2) pipe. When the high pressure piping length exceeds 65 m, use 1-1/8 (28.58) pipe until 65 m,

use 1-1/8 (28.58) pipe for the part that exceeds 65 m.

\*12 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P240ZSLMU-A1				PQRY-P288ZSLMU-A1				
Indoor Model		Non-Ducted		Ducted		Non-Ducted		Ducted		
Power source		3-phase 3-wire 575 V ±10% 60 Hz				3-phase 3-wire 575 V ±10% 60 Hz				
Cooling capacity (Nominal)	*1	BTU/h	240,000		288,000					
	*1	kW	70.3		84.4					
(575)	Power input	kW	16.89		20.42					
	Current input	A	18.8		22.7					
(Rated)		BTU/h	228,000		275,000					
		kW	66.8		80.6					
(575)	Power input	kW	15.57	16.15	18.82	21.43				
	Current input	A	17.3	18.0	20.9	23.9				
Temp. range of cooling	Indoor	W.B.	59~75°F (15~24°C)		59~75°F (15~24°C)					
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)					
Heating capacity (Nominal)	*2	BTU/h	270,000		323,000					
	*2	kW	79.1		94.7					
(575)	Power input	kW	14.58		17.50					
	Current input	A	16.2		19.5					
(Rated)		BTU/h	258,000		308,000					
		kW	75.6		90.3					
(575)	Power input	kW	13.45	12.02	16.13	16.05				
	Current input	A	15.0	13.4	17.9	17.9				
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)		59~81°F (15~27°C)					
	Inlet water	°F	50~113°F (10~45°C)		50~113°F (10~45°C)					
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity				50~150% of heat source unit capacity				
	Model/Quantity	P04~P96/2~50 (Connectable branch pipe number is max. 48.)				P04~P96/2~50 (Connectable branch pipe number is max. 48.)				
Sound pressure level (measured in anechoic room)		dB <A>	57.0				57.0			
Refrigerant piping diameter	High pressure	in. (mm)	7/8 (22.2) Brazed (1-1/8 (28.58) Brazed for the part that exceeds 65 m)				1-1/8 (28.58) Brazed			
	Low pressure	in. (mm)	1-3/8 (34.93) Brazed				1-3/8 (34.93) Brazed			
Set Model										
Model	PQRY-P120ZLMU-A1		PQRY-P120ZLMU-A1		PQRY-P144ZLMU-A1		PQRY-P144ZLMU-A1			
Minimum Circuit Ampacity	A	11	11	13	13					
Maximum Overcurrent Protection	A	15	15	20	20					
Inlet water	Water flow rate	G/h	1,522 + 1,522		1,902 + 1,902					
		G/min (gpm)	25.4 + 25.4		31.7 + 31.7					
		m³/h	5.76 + 5.76		7.20 + 7.20					
		L/min	96 + 96		120 + 120					
		cfm	3.4 + 3.4		4.2 + 4.2					
Pressure drop	psi	3.48	3.48	6.38	6.38					
	kPa	24	24	44	44					
Operating volume range	G/h	793 + 793 ~ 1,902 + 1,902		1,189 + 1,189 ~ 3,054 + 3,054						
	G/min (gpm)	13.2 + 13.2 ~ 31.7 + 31.7		19.8 + 19.8 ~ 50.9 + 50.9						
	m³/h	3.0 + 3.0 ~ 7.2 + 7.2		4.5 + 4.5 ~ 11.6 + 11.6						
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1				Inverter scroll hermetic compressor x 1				
	Starting method	Inverter		Inverter		Inverter		Inverter		
	Motor output	7.7		7.7		9.5		9.5		
	Case heater	-		-		-		-		
External finish	Galvanized steel sheets				Galvanized steel sheets					
External dimension H x W x D	in.	43-5/16 x 34-11/16 x 21-11/16		43-5/16 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		57-1/8 x 34-11/16 x 21-11/16		
	mm	1,100 x 880 x 550		1,100 x 880 x 550		1,450 x 880 x 550		1,450 x 880 x 550		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
	Inverter circuit	Over-heat protection, Over-current protection				Over-heat protection, Over-current protection				
Refrigerant	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection		
	Type x original charge	R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 11 lbs + 1 oz (5.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		R410A x 13 lbs + 4 oz (6.0 kg)		
Net weight	lbs (kg)	411 (186)		411 (186)		512 (232)		512 (232)		
Heat exchanger	Water volume in plate	G	1.32		1.32		1.32		1.32	
		l	5.0		5.0		5.0		5.0	
		psi	290		290		290		290	
		MPa	2.0		2.0		2.0		2.0	
Pipe between unit and distributor	High pressure	in. (mm)	3/4 (19.05) Brazed		3/4 (19.05) Brazed		7/8 (22.2) Brazed		7/8 (22.2) Brazed	
	Low pressure	in. (mm)	-		7/8 (22.2) Brazed		-		1-1/8 (28.58) Brazed	
Optional parts	Heat Source Twinning kit: CMY-Q100CBK2 joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016NU-GA1, 108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1				Heat Source Twinning kit: CMY-Q200CBK joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1					

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 The Heat Source twinning kit (low pressure) should be connected to the low pressure side of the heat source unit.

\*9 Install the supplied insulation material to the unused drain-socket.

\*10 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*11 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F) as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P312ZSLMU-A1	
Indoor Model		Non-Ducted	Ducted
Power source		3-phase 3-wire 575 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	BTU/h	
	*1	kW	
(575)	Power input	23.41	
	Current input	26.1	
(Rated)	BTU/h		297,000
	kW		87.0
(575)	Power input	21.59	23.67
	Current input	24.0	26.4
Temp. range of cooling	Indoor	W.B.	
	Inlet water	°F	
		59~75°F (15~24°C)	
		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	BTU/h	
	*2	kW	
(575)	Power input	19.11	
	Current input	21.3	
(Rated)	BTU/h		334,000
	kW		97.9
(575)	Power input	17.62	17.96
	Current input	19.6	20.0
Temp. range of heating	Indoor	D.B.	
	Inlet water	°F	
		59~81°F (15~27°C)	
		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity	
	Model/Quantity	P04~P96/2~50 (Connectable branch pipe number is max. 48.)	
Sound pressure level (measured in anechoic room)		dB <A>	
		58.0	
Refrigerant piping diameter	High pressure	in. (mm)	
	Low pressure	in. (mm)	
		1-1/8 (28.58) Brazed	
		1-3/8 (34.93) Brazed	
Set Model			
Model		PQRY-P168ZLMU-A1	PQRY-P144ZLMU-A1
Minimum Circuit Ampacity	A	16	13
Maximum Overcurrent Protection	A	25	20
Inlet water	Water flow rate	G/h	
		1,902 + 1,902	
		G/min (gpm)	
		31.7 + 31.7	
		m <sup>3</sup> /h	
	7.20 + 7.20		
L/min		120 + 120	
cfm		4.2 + 4.2	
Pressure drop	psi	6.38	6.38
	kPa	44	44
Operating volume range	G/h	1,189 + 1,189 ~ 3,054 + 3,054	
	G/min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9	
	m <sup>3</sup> /h	4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1	
	Starting method	Inverter	Inverter
	Motor output	11.0	9.5
	Case heater	-	-
External finish			
Galvanized steel sheets			
External dimension H x W x D	in.	57-1/8 x 34-11/16 x 21-11/16	57-1/8 x 34-11/16 x 21-11/16
	mm	1,450 x 880 x 550	1,450 x 880 x 550
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit	Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)
Net weight	lbs (kg)	512 (232)	512 (232)
Heat exchanger	plate type		plate type
	Water volume in plate	G	1.32
	Water pressure	l	5.0
	Max.	psi	290
	MPa	2.0	2.0
Pipe between unit and distributor	High pressure	7/8 (22.2) Brazed	
	Low pressure	-	
Optional parts		Heat Source Twinning kit: CMY-Q200CBK joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1	

**Notes:**

\*1,\*2 Heating and Cooling conditions (Test conditions are based on AHRI 1230)

	Indoor	Water temperature
Cooling	81°F D.B./66°F W.B. (27°C D.B./19°C W.B.)	86°F (30°C)
Heating	68°F D.B. (20°C D.B.)	68°F (20°C)

\*3 The ambient temperature of the Heat Source Unit needs to be kept below 104°F D.B. (40°C D.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.

\*8 The Heat Source Twinning kit (low pressure) should be connected to the low pressure side of the heat source unit.

\*9 Install the supplied insulation material to the unused drain-socket.

\*10 When installing insulation material around both water and refrigerant piping, follow the installation manual.

\*11 Inlet Water Temperature Range can be as low -5°C (23°F) and Anti-freeze shall be added if inlet water temperature is below 10°C (50°F)

as per recommended concentration and system settings. Please consult with your local representative and technical literature for more details.

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

# HEAT SOURCE UNIT WR2-Series (575V) PQRY-P ZSLMU-A1



## ► Specifications

Heat Source Model		PQRY-P336ZSLMU-A1	
Indoor Model		Non-Ducted	Ducted
Power source		3-phase 3-wire 575 V ±10% 60 Hz	
Cooling capacity (Nominal)	*1	BTU/h	
	*1	kW	
(575)	Power input	kW	
	Current input	A	
(Rated)		BTU/h	
		kW	
(575)	Power input	24.76	25.85
	Current input	27.6	28.8
Temp. range of cooling	Indoor	W.B.	
	Inlet water	°F	
		59~75°F (15~24°C)	
		50~113°F (10~45°C)	
Heating capacity (Nominal)	*2	BTU/h	
	*2	kW	
(575)	Power input	kW	
	Current input	A	
(Rated)		BTU/h	
		kW	
(575)	Power input	19.16	20.05
	Current input	21.3	22.3
Temp. range of heating	Indoor	D.B.	
	Inlet water	°F	
		59~81°F (15~27°C)	
		50~113°F (10~45°C)	
Indoor unit connectable	Total capacity	50~150% of heat source unit capacity	
	Model/Quantity	P04~P96/2~50 (Connectable branch pipe number is max. 48.)	
Sound pressure level (measured in anechoic room)		dB <A>	
		59.0	
Refrigerant piping diameter	High pressure	in. (mm)	
	Low pressure	in. (mm)	
		1-1/8 (28.58) Brazed	
		1-5/8 (41.28) Brazed	
Set Model			
Model		PQRY-P168ZLMU-A1	PQRY-P168ZLMU-A1
Minimum Circuit Ampacity		A	16
Maximum Overcurrent Protection		A	25
Inlet water	Water flow rate	G/h	1,902 + 1,902
		G/min (gpm)	31.7 + 31.7
		m³/h	7.20 + 7.20
		L/min	120 + 120
		cfm	4.2 + 4.2
	Pressure drop	psi	6.38
	kPa	44	
Operating volume range	G/h	1,189 + 1,189 ~ 3,054 + 3,054	
	G/min (gpm)	19.8 + 19.8 ~ 50.9 + 50.9	
	m³/h	4.5 + 4.5 ~ 11.6 + 11.6	
Compressor	Type x Quantity	Inverter scroll hermetic compressor x 1	
	Starting method	Inverter	Inverter
	Motor output	kW	11.0
	Case heater	kW	-
External finish			
Galvanized steel sheets			
External dimension H x W x D		in.	57-1/8 x 34-11/16 x 21-11/16
		mm	1,450 x 880 x 550
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	
	Inverter circuit	Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	
Refrigerant	Type x original charge	R410A x 13 lbs + 4 oz (6.0 kg)	R410A x 13 lbs + 4 oz (6.0 kg)
Net weight	lbs (kg)	512 (232)	512 (232)
Heat exchanger			plate type
	Water volume in plate	G	1.32
		l	5.0
	Water pressure Max.	psi	290
MPa		2.0	
Pipe between unit and distributor	High pressure	7/8 (22.2) Brazed	
	Low pressure	in. (mm)	
		-	
Optional parts		Heat Source Twinning kit: CMY-Q200CBK joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1016NU-HA1 Sub BC controller: CMB-P104, 108NU-GB1, CMB-P1016NU-HB1	

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