WR2 Series (8-24hp)

Water Cooled Condensing Unit
Simultaneous Heating and Cooling with Double Heat Recovery

The WR2 system has double heat recovery potential, making this system very economical. Not only does it produce heat recovery from indoor units on the same refrigerant circuit, it also produces heat recovery via the water circuit between heat source units. Like the YHM-A air source versions, the water cooled units now benefit from a modular design approach. A twinning kit is required for double combinations.

- All the benefits of the R2 Series with water cooled condensing units, using a single inverter compressor
- 40% height reduction compared to previous YGM-A models
- High COPs possible thanks to increased efficiency and careful control of the system, allowing the largest operational water circuit temperature band ever
- Unique 2-pipe refrigerant circuit allows simultaneous heating and cooling plus heat recovery between up to 50 indoor units as with the R2 system
- Total building heat recovery made possible by exchanging energy in both refrigerant and water circuits
- Combining WR2 with waste heat energy provides unique application solutions
- Condensing units **must be situated indoors** allowing greater design flexibility and no limitation on building size
- Improved pipe run of 165m with a total system pipe length of up to 750m
- High Sensible Cooling Function - By raising the off coil temperature, a 10% increase in sensible cooling capacity over standard operation is achievable, the result being greater comfort for occupants
- Able to operate with closed loop ground source water temperatures, bore hole and slinky applications are now possible
- Easy maintenance - front panel access to all PCB's
- PWFY-P and size 15 indoor units are now connectable

R410A

Qualified for Energy Technology List

Technical Information

WR2 SERIES HEAT SOURCE UNIT - 8-24hp

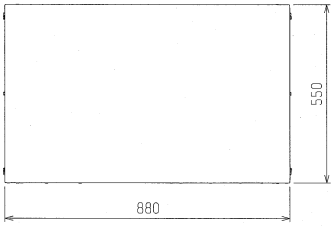
MODEL REFERENCE		PQRY-P200YHM-A	PQRY-P250YHM-A	PQRY-P300YHM-A	PQRY-P400YSHM-A	PQRY-P450YSHM-A	PQRY-P500YSHM-A	PQRY-P550YSHM-A	PQRY-P600YSHM-A
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	50.0	56.0	63.0	69.0	76.5
	Cooling (nominal)	22.4	28.0	33.5	45.0	50.0	56.0	63.0	69.0
POWER INPUT (kW)	Heating (nominal)	4.12	5.80	8.15	8.65	10.42	12.10	14.65	17.12
	Cooling (nominal)	3.96	5.51	7.44	8.32	9.94	11.57	13.60	15.62
MAX No. OF CONNECTABLE INDOOR UNITS		20	25	30	40	45	50	50	50
NOISE (dBA)		47	49	50	50	51	52	52.5	53
WEIGHT (kg)		186	186	186	186 + 186	186 + 186	186 + 186	186 + 186	186 + 186
DIMENSIONS (mm)	Width	880	880	880	880 + 880	880 + 880	880 + 880	880 + 880	880 + 880
	Depth	550	550	550	550	550	550	550	550
(1100 without legs)	Height	1160	1160	1160	1160	1160	1160	1160	1160
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		3	3	3	3	3	3	3	3
STARTING CURRENT (A)		8	8	8	8 / 8	8 / 8	8 / 8	8 / 8	8 / 8
RUNNING CURRENT (A)	Heating	6.3	8.9	12.5	13.3	16.1	18.7	22.6	26.4
	Cooling	6.1	8.5	11.5	12.8	15.3	17.8	21.0	24.1
FUSE RATING (BS88) - HRC (A)		20	20	20	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20
MAINS CABLE No. Cores		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth

PQRY-P200-600Y(S)HM-A Piping Restrictions	
TOTAL PIPING LENGTH	550m max*3 (300m) for sizes 200-300 / 750m max*3 (500m) for sizes 400-600
FURTHEST PIPING LENGTH	165m max
BETWEEN OUTDOOR AND BC CONTROLLER (MASTER) - LENGTH	110m max*4
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - LENGTH	60m max*5 (40m)
BETWEEN INDOOR AND OUTDOOR - HEIGHT	50m max (40m*1)
BETWEEN INDOOR AND INDOOR - HEIGHT	15m max (10m*2)
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - HEIGHT	15m max (10m*2)
BETWEEN BC CONTROLLER (MASTER) AND BC CONTROLLER (SLAVE) - HEIGHT	15m max (10m)*6

*1 When O/U is below indoor *2 In case of P200, P250 indoor unit *3 Distance between outdoor unit and BC Controller is 10m or less *4 Total piping length is 300m or less (500m for sizes 400-600)
*5 Height difference between the Master BC Controller and furthest indoor unit is zero and no size 200 or 250 indoor unit is used *6 When using 2 sub BC Controllers, the height between them should be considered

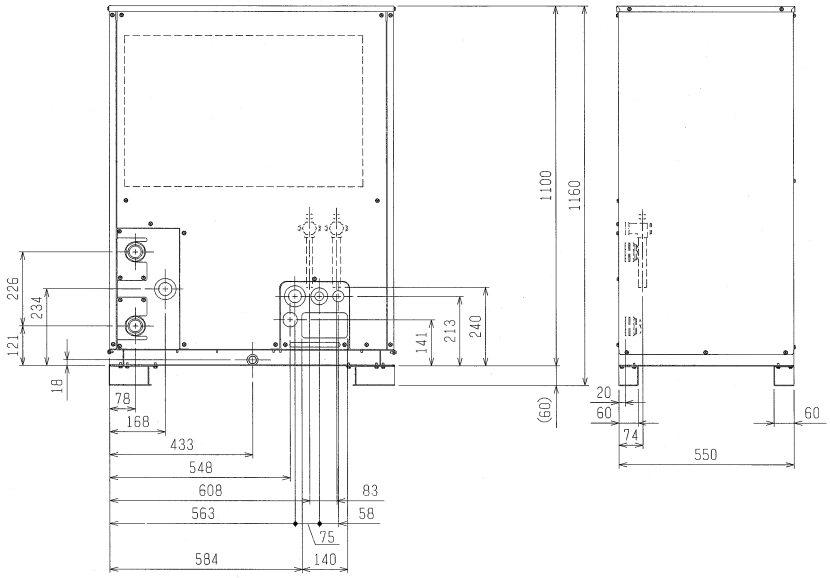
PQRY-P200, 250, 300YHM-A

Upper View >



Front View >

Right Side View >



PQRY-P400, 450, 500, 550, 600YSHM-A

Left Side View >

Front View >