TEMPERATURE CONTROL 14/02

AIR TO WATER HEATING / COOLING PUMP

Heat pumps can be used for heating or cooling swimming pools, spas or other open water systems. The water system pressure should be less than 3 bar. (Cannot be used for closed water systems such as air conditioning, ground source heating and so on.)

Product features

High Efficiency
Our heat pumps are highly efficient, taking the energy from the ambient air and transferring that heat to the pool. The heat pump can reach a COP of 5.5.

Safety
Water and electricity are completely separate. ECO friendly gas, no fire, no electricity leakage, safer than fuel burner or electrical heater.

Environmentally Friendly
Choose R407C, R410-A, R22 as refrigerant, according to the requirements of EU Montreal Protocol.

Corrosion Prevention
The condenser uses titanium metal which is 4 to 5 times more corrosion resistant than ordinary copper tubes and is significantly more effective for the prevention of fluoride leakages. Liquids containing seawater or mild industrial water can pass through these systems without any problems.

Intelligent Defrosting
By means of both mechanical and automatic control, defrosting can be operated over a shorter time to avoid severe attenuation of heating capacity in winter and when not in use.

Antifreezing Control
The unit starts up automatic antifreezing control when shutdown (no power off), using of antifreezing heat exchanger, 10 freezing tests, no leakage..

Various protective measures
- Lack-phase and anti-phase protection
- Self memory function when power off
- Overpressure protection
- Leakage refrigerant protection
- Water protection for unit
- Overcurrent protection
- Temperature over protection

Advanced control system
- Displaying operating and trouble status
- Checking real-time operation parameters etc
- The cable length between controller and the unit can be up to 30m for flexible installation (on request)
- Keep balance running of compressor
- Automatically adjusting capacity according to the change of water inlet the temperature
- Can achieve the perfect docking with BMS. Set remote control based on user requirement for easy management and maintenance. And can set multi unit modular operation

Compressor
AQUA uses world famous brand compressor such as COPELAND and GMCC to ensure the highest quality of machine.

TEMPERATURE CONTROL

How does the unit work?

...AS A CHILLER

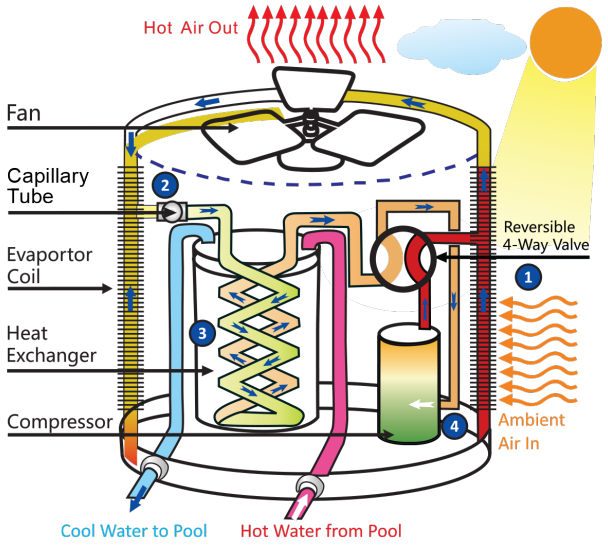
1- STAGE ONE
The temperature of the hot gaseous refrigerant discharged from the compressor is much higher than the outside ambient air temperature. When the outside air passes across the condenser coil, the gaseous refrigerant transfers its heat to the air and condenses into liquid.

2- STAGE TWO
The liquid refrigerant passes through the capillary tube, reducing its pressure and temperature.

3- STAGE THREE
The low temperature refrigerant passes to the heat exchanger evaporator, where the actual heat transfer takes place: the refrigerant absorbs heat from the water pumped into the heat exchanger and evaporates, whereby the water temperature is reduced.

4- STAGE FOUR
The gas refrigerant is then sucked to the compressor and compressed, increasing its pressure and temperature, ready to start the whole cycle once again.

CAPILLARY TUBE



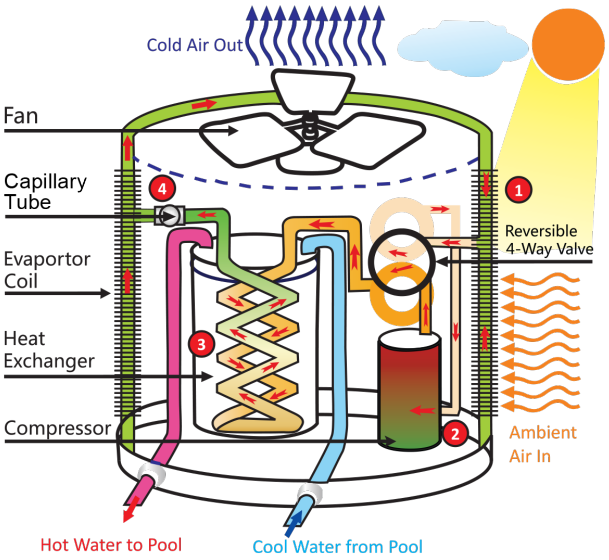
...AS A HEAT PUMP

1- STAGE ONE
The gaseous refrigerant passes to the compressor and is compressed. When compressed, the pressure is increased and the temperature of the vapor rises, effectively concentrating the heat.

2- STAGE TWO
The hot gaseous refrigerant passes to the heat exchanger condenser, where the actual heat transfer takes place: the intensely hot gaseous refrigerant transfers its heat to the water pumped into the heat exchanger and condenses back into a liquid.

3- STAGE THREE
The liquid refrigerant then passes through an capillary tube, reducing its pressure and temperature. The heat transfer medium (the refrigerant) is colder than the outside air.

4- STAGE FOUR
As the outside air passes across the evaporator coil, the liquid refrigerant absorbs heat from the air and evaporates, ready to start the whole cycle once again.



TEMPERATURE CONTROL

TEMPERATURE CONTROL

			PH2-02620-R410A	PH2-02625-R410A	PH2-02630-R410A-1	PH2-02630-R410A-2	PH2-02640-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/Hz	220~240/1/50	220~240/1/50	220~240/1/50	380~415/3/50	380~415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	9.5	12.0	14.0	14.0	17.0
		BTU/h	32,414	40,944	47,768	47,768	58,004
	Power input	kW	1.7	2.2	2.5	2.5	3.1
	COP	W/W	5.6	5.4	5.5	5.5	5.4
YL-H02-Heating: A15/W26°C	Heating capacity	kW	8.1	10.2	11.9	11.9	14.5
		BTU/h	27,552	34,802	40,603	40,603	49,303
	Power input	kW	1.8	2.3	2.6	2.6	3.3
	COP	W/W	4.5	4.4	4.5	10.1	4.4
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	6.8	8.6	10.1	34,393	12.2
		BTU/h	23,338	29,480	34,393	3.5	41,763
	Power input	kW	2.2	2.9	3.5	2.9	4.4
	EER	W/W	3.1	3.0	2.9	3.80	2.8
YL-C02-Cooling: A46/W30	Cooling capacity	kW	5.8	7.3	8.6	8.6	10.4
		BTU/h	19,837	25,058	29,234	29,234	35,498
	Power input	kW	2.4	3.2	3.8	3.8	4.8
	EER	W/W	2.4	2.3	2.2	2.2	2.2
MAX.POWER INPUT		kW	2.7	3.6	4.3	4.3	5.4
MAX.CURRENT		A	13	17	21	8	10
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	°C	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	°C	-15 ~ 53	-15 ~ 53	-15 ~ 53	-15 ~ 53	-15~53
KEY	Compressor type		Rotary	Rotary	Scroll	Scroll	Scroll
	Controller		micro processor based digital controller with LCD touch screen display				
	Sound pressure 1/5/10m	dB(A)	53/42/36	54/43/37	55/44/38	55/44/38	56/45/39
HEATING EXCHANGER	Type		Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	m^3/h	1.5	1.9	2.3	2.3	2.7
	Water flow (max)	m^3/h	4.7	6.0	7.0	7.0	8.5
	Water pressure drop (max)	KPa	8	10	11	11	12
	Water connecton	Inch	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"
	Water pipe		-	-	-	-	-
FAN	Fan Position		Verticle	Verticle	Verticle	Verticle	Verticle
	Material		Plastic	Plastic	Plastic	Plastic	Plastic
	Air flow	m^3/h	2000	2000	3500	3500	3500
DIMENSIONS (L x W x H)	Net	mm	670×670×930	670×670×930	715×715×980	715×715×980	715×715×980
	Shipping	mm	730×730×1075	730×730×1075	765×765×1135	765×765×1135	765×765×1135
Net weight / Gross weight	-	kg	98/106	98/106	118/130	105/121	111/127

TEMPERATURE CONTROL

TOP DISCHARGE

Models

			PH2-02650-R410A	PH2-02660-R410A	PH2-02670-R410A	PH2-02680-R410A	PH2-02685-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/Hz	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	21.0	25.0	31.0	35.0	40.0
		BTU/h	71,652	85,300	105,772	119,420	136,480
	Power input	kW	3.9	4.8	5.7	6.6	7.3
	COP	W/W	5.3	5.2	5.4	5.3	5.5
YL-H02-Heating: A15/W26°C	Heating capacity	kW	17.9	21.3	26.4	29.8	34.0
		BTU/h	60,904	72,505	89,906	101,507	116,008
	Power input	kW	4.1	5.0	6.0	6.9	7.6
	COP	W/W	4.3	4.2	4.4	4.3	4.5
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	15.1	18.0	22.3	25.2	28.8
		BTU/h	51,589	61,416	76,156	85,982	98,266
	Power input	kW	5.0	6.0	7.3	8.4	9.3
	EER	W/W	3.0	3.0	3.1	3.0	3.1
YL-C02-Cooling: A46/W30	Cooling capacity	kW	12.9	15.3	19.0	21.4	24.5
		BTU/h	43,851	52,204	64,732	73,085	83,526
	Power input	kW	5.6	6.6	8.1	9.3	10.3
	EER	W/W	2.3	2.3	2.3	2.3	2.4
MAX.POWER INPUT		kW	6.2	7.4	9.0	10.4	11.5
MAX.CURRENT		A	11	13	16	19	21
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	°C	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	°C	-15~53	-15~53	-15~53	-15~53	-15~53
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Controller		micro processor based digital controller with LCD touch screen display				
	Sound pressure 1/5/10m	dB(A)	57/46/40	57/46/40	59/48/43	60/49/43	61/51/45
HEATING EXCHANGER	Type		Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	m^3/h	3.4	4.0	5.0	5.6	6.4
	Water flow (max)	m^3/h	10.5	12.5	15.5	17.5	20.0
	Water pressure drop (max)	KPa	13	15	20	22	22
	Water connecton	Inch	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 2"
	Water pipe		-	-	-	-	PPR OR PVC
FAN	Fan Position		Verticle	Verticle	Verticle	Verticle	Verticle
	Material		Plastic	Plastic	Plastic	Plastic	Plastic
	Air flow	m^3/h	5500	715×715×980	860×860×1085	860×860×1085	950×950×1280
DIMENSIONS (L x W x H)	Net	mm	715×715×980	765×765×1135	920×920×1240	920×920×1240	1025×1025×1430
	Shipping	mm	765×765×1135	128/142	202/220	208/226	210/230
Net weight / Gross weight	-	kg	125/140	128/142	144/163	150 / 169	230 / 255

TEMPERATURE CONTROL

TOP DISCHARGE

Models

			PH2-02690-R410A	PH2-02695-R410A	PH2-02710-R410A	PH2-02712-R410A	PH2-02713-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/Hz	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	45.0	55.0	40.0	45.0	55.0
		BTU/h	153,540	187,660	136,480	153,540	187,660
	Power input	kW	8.4	10.5	7.3	8.4	10.6
	COP	W/W	5.4	5.2	5.5	5.3	5.2
YL-H02-Heating: A15/W26°C	Heating capacity	kW	38.3	46.8	34.0	38.3	46.8
		BTU/h	130,509	159,511	116,008	130,509	159,511
	Power input	kW	8.7	10.9	7.6	8.8	11.0
	COP	W/W	4.4	4.3	4.5	4.4	4.2
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	32.4	39.6	28.8	32.4	39.6
		BTU/h	110,549	135,115	98,266	110,549	135,115
	Power input	kW	10.8	13.7	9.3	10.8	13.7
	EER	W/W	3.0	2.9	3.1	3.0	2.9
YL-C02-Cooling: A46/W30	Cooling capacity	kW	27.5	33.7	24.5	27.5	33.7
		BTU/h	93,966	114,848	83,526	93,966	114,848
	Power input	kW	11.9	15.1	10.3	11.9	15.1
	EER	W/W	2.3	2.2	2.4	2.3	2.2
MAX.POWER INPUT		kW	13.4	16.9	11.5	13.4	16.9
MAX.CURRENT		A	24	30	21	24	30
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	°C	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	°C	-15~53	-15~53	-15~53	-15~53	-15~53
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Controller		micro processor based digital controller with LCD touch screen display				
	Sound pressure 1/5/10m	dB(A)	63/53/47	65/55/49	61/50/45	63/53/47	65/55/49
HEATING EXCHANGER	Type		Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	m^3/h	7.2	8.9	6.4	7.2	8.9
	Water flow (max)	m^3/h	22.5	27.5	20.0	22.5	27.5
	Water pressure drop (max)	KPa	23	25	22	23	25
	Water connecton	Inch	BSP threaded / 2"	BSP threaded / 2"	BSP threaded / 2"	BSP threaded / 2"	BSP threaded / 2"
	Water pipe		PPR OR PVC	PPR OR PVC	PPR OR PVC	PPR or PVC	PPR or PVC
FAN	Fan Position		Verticle	Verticle	Verticle	Verticle	Verticle
	Material		Plastic	Plastic	Plastic	Plastic	Plastic
	Air flow	m^3/h	10000	13000	9000	10000	13000
DIMENSIONS (L x W x H)	Net	mm	950×950×1280	950×950×1280	1453×708×1084	1453×708×1084	1453×708×1084
	Shipping	mm	1025×1025×1430	1025×1025×1430	1510×775×1225	1510×775×1225	1510×775×1225
Net weight / Gross weight	-	kg	214/234	218/238	254/280	259/285	285/310

TEMPERATURE CONTROL

			PH2-02714-R410A	PH2-02715-R410A	PH2-02720-R410A	PH2-02730-R410A	PH2-02740-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/Hz	65.0	82.0	100.0	135.0	160.0
YL-H01-Heating: A24/W26°C	Heating capacity	kW	221,780	279,784	341,200	460,620	545,920
		BTU/h	11.8	15.2	19.0	24.5	29.5
	Power input	kW	5.5	5.4	5.3	5.5	5.4
	COP	W/W	5.5	5.5	5.5	5.5	5.5
YL-H02-Heating: A15/W26°C	Heating capacity	kW	55.3	69.7	85.0	114.8	136.0
		BTU/h	188,513	237,816	290,020	391,527	464,032
	Power input	kW	12.3	15.8	19.8	25.5	30.6
	COP	W/W	4.5	4.4	4.3	4.5	4.4
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	46.8	59.0	72.0	97.2	115.2
		BTU/h	159,682	201,444	245,664	331,646	393,062
	Power input	kW	14.9	19.8	24.8	30.4	36.0
	EER	W/W	3.2	3.0	2.9	3.2	3.2
YL-C02-Cooling: A46/W30	Cooling capacity	kW	39.8	50.2	61.2	82.6	97.9
		BTU/h	135,729	171,228	208,814	281,899	334,103
	Power input	kW	16.4	21.9	27.4	33.5	39.7
	EER	W/W	2.4	2.3	2.2	2.5	2.5
MAX.POWER INPUT		kW	18.4	24.5	32.3	39.6	48.4
MAX.CURRENT		A	33	44	58	71	83
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	°C	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	°C	-15~53	-15~53	-15~53	-15~53	-15~53
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Controller		micro processor based digital controller with LCD touch screen display				
	Sound pressure 1/5/10m	dB(A)	66/56/51	67/57/52	68/58/53	69/60/55	70/61/56
HEATING EXCHANGER	Type		Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	m^3/h	10.5	13.2	16.1	21.7	25.8
	Water flow (max)	m^3/h	32.5	40.9	49.9	67.4	79.9
	Water pressure drop (max)	KPa	26	27	27	28	28
	Water connecton	Inch	BSP threaded / 2"	BSP threaded / 2"	flange/ 3"	flange/ 4"	flange/ 4"
	Water pipe		PPR or PVC	PPR or PVC	PVC	PVC	PVC
FAN	Fan Position		Verticle	Verticle	Verticle	Verticle	Verticle
	Material		Plastic	Plastic	Plastic	Plastic	Plastic
	Air flow	m^3/h	15000	18000	22000	28000	33000
DIMENSIONS (L x W x H)	Net	mm	1890×1000×1328	1890×1000×1328	1890×1000×1328	2188×1240×2340	2188×1240×2340
	Shipping	mm	1965×1075×1490	1965×1075×1490	1965×1075×1490	2275×1325×2530	2275×1325×2530
Net weight / Gross weight	-	kg	356/384	404/458	489/517	1100/1130	1150/1180

TEMPERATURE CONTROL

TOP DISCHARGE

Models

			PH2-02750-R410A	PH2-02760-R410A	PH2-02765-R410A	PH2-02770-R410A	PH2-02780-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/Hz	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	180.0	220.0	235.0	250.0	350.0
		BTU/h	614,160	750,640	801,820	853,000	1,194,200
	Power input	kW	33.6	41.5	45.1	48.4	68.2
	COP	W/W	5.4	5.3	5.2	5.2	5.1
YL-H02-Heating: A15/W26°C	Heating capacity	kW	153.0	187.0	199.8	212.5	297.5
		BTU/h	522,036	638,044	681,547	725,050	1,015,070
	Power input	kW	34.9	43.2	46.9	50.4	71.0
	COP	W/W	4.4	4.3	4.3	4.2	4.2
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	129.6	158.4	169.2	180.0	252.0
		BTU/h	442,195	540,461	577,310	614,160	859,824
	Power input	kW	41.8	52.8	56.4	63.2	85.1
	EER	W/W	3.1	3.0	3.0	2.9	3.0
YL-C02-Cooling: A46/W30	Cooling capacity	kW	110.2	134.6	143.8	153.0	214.2
		BTU/h	375,866	459,392	490,714	522,036	730,850
	Power input	kW	46.1	58.3	62.3	69.7	94.0
	EER	W/W	2.4	2.3	2.3	2.2	2.3
MAX.POWER INPUT		kW	51.7	65.3	69.7	78.1	105.3
MAX.CURRENT		A	92	117	125	139	188
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	°C	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	°C	-15~53	-15~53	-15~53	-15~53	-15~53
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Controller		micro processor based digital controller with LCD touch screen display				
	Sound pressure 1/5/10m	dB(A)	72/63/58	73/64/59	73/64/59	75/66/61	77/68/63
HEATING EXCHANGER	Type		Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	m^3/h	29.0	35.4	37.8	40.3	56.4
	Water flow (max)	m^3/h	89.9	109.8	117.3	124.8	174.7
	Water pressure drop (max)	KPa	29	30	33	34	35
	Water connecton	Inch	flange/ 4"	flange/ 4"	flange/ 4"	flange/ 6"	flange/ 6"
	Water pipe		PVC	PVC	PVC	PPR or PVC	PVC
FAN	Fan Position		Verticle	Verticle	Verticle	Verticle	Verticle
	Material		Plastic	Plastic	Plastic	Plastic	Plastic
	Air flow	m^3/h	39000	44000	44000	55000	77000
DIMENSIONS (L x W x H)	Net	mm	2188×1240×2340	2188×1240×2340	2320×1240×2340	2410×1280×2340	3200×2188×2340
	Shipping	mm	2275×1325×2530	2275×1325×2530	2405×1325×2530	2500×1415×2530	3250×2238×2530
Net weight / Gross weight	-	kg	1180/1210	1200/1230	1250/1280	1350/1390	2030/2100

TEMPERATURE CONTROL

FRONT DISCHARGE

Models

			PHFD2-02610-R410A	PHFD2-02615-R410A	PHFD2-02620-R410A	PHFD2-02625-R410A	PHFD2-02630-R410A-1
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/HZ	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	5.0	7.3	9.8	12.0	14.0
		BTU/h	17,060	24,908	33,438	40,944	47,768
	Power input	kW	0.9	1.4	1.8	2.3	2.7
	COP	W/W	5.5	5.4	5.3	5.3	5.3
YL-H02-Heating: A15/W26°C	Heating capacity	kW	4.3	6.2	8.3	10.2	11.9
		BTU/h	14,672	21,171	28,422	34,802	40,603
	Power input	kW	0.9	1.4	1.9	2.3	2.7
	COP	W/W	4.6	4.5	4.4	4.4	4.4
YL-H03-Heating: A7/W26°C	Heating capacity	kW	4.0	5.3	7.1	8.6	10.1
		BTU/h	13,648	17,933	24,075	29,480	34,393
	Power input	kW	1.3	1.6	2.3	3.0	3.3
	EER	W/W	3.2	3.2	3.0	2.9	3.1
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	3.1	4.5	6.0	7.3	8.6
		BTU/h	10,577	15,243	20,464	25,058	29,234
	Power input	kW	1.3	1.8	2.6	3.3	3.6
	EER	W/W	2.5	2.5	2.3	2.2	2.4
MAX.	Power input	kW	3.1	4.5	6.0	7.3	8.6
	Current	A	7	11	15	19	8
OPERATING	Water outlet temp.range	°C	15~40	15~40	15~40	15~40	15~40
	Ambient temp.range	°C	10~30	10~30	10~30	10~30	10~30
KEY	Compressor type		Rotary	Rotary	Rotary	Rotary	Scroll
	Sound pressure 1/5/10m	dB(A)	50/38/33	52/40/35	53/41/36	54/42/37	55/44/38
HEAT EXCHANGER	Type		Titanium / PVC	Titanium / PVC	Titanium / PVC	Titanium / PVC	Titanium/PVC
	Water flow (min.)	m^3/h	0.8	1.2	1.6	1.9	2.3
	Water flow (max.)	m^3/h	2.5	3.6	4.9	6.0	7.0
	Water pressure drop(max)	KPa	4	6	8	6	7
	Water pipe		_	-	-	-	_
	Water connection	Inch	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"
FAN	Position		horizontal	Horizontal	Horizontal	Horizontal	horizontal
	Air flow	m^3/h	1200	2000	2000	2000	3000
DIMENSIONS (L x W x H)	Net	mm	900×340×623	900×340×623	900×340×623	900×340×623	1100×440×673
	Shipping	mm	960×400×773	960×400×773	960×400×773	960×400×773	1157×497×823
Net weight / Gross weight	-	kg	48/55	60/71	60/71	62/73	102/109

TEMPERATURE CONTROL

FRONT DISCHARGE

Models

			PHFD2-02630-R410A-2	PHFD2-02640-R410A	PHFD2-02650-R410A	PHFD2-02660-R410A	PHFD2-02670-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/HZ	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	14.0	17.0	21.0	25.0	31.0
		BTU/h	47,768	58,004	71,652	85,300	105,772
	Power input	kW	2.7	3.3	4.0	4.8	5.8
	COP	W/W	5.3	5.2	5.3	5.3	5.3
YL-H02-Heating: A15/W26°C	Heating capacity	kW	11.9	14.5	17.9	21.3	26.4
		BTU/h	40,603	49,303	60,904	72,505	89,906
	Power input	kW	2.7	3.3	4.0	4.8	6.1
	COP	W/W	4.3	4.3	4.5	4.4	4.3
YL-H03-Heating: A7/W26°C	Heating capacity	kW	10.1	12.2	15.1	18.0	22.3
		BTU/h	34,393	41,763	51,589	61,416	76,156
	Power input	kW	3.3	4.1	5.2	5.6	7.1
	EER	W/W	3.1	3.0	2.9	3.2	3.1
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	8.6	10.4	12.9	15.3	19.0
		BTU/h	29,234	35,498	43,851	52,204	64,732
	Power input	kW	3.6	4.5	5.8	6.2	7.8
	EER	W/W	2.4	2.3	2.2	2.5	2.4
MAX.	Power input	kW	4.3	5.4	6.5	7.5	9.0
	Current	A	8	10	12	13	16
OPERATING	Water outlet temp.range	°C	15~40	15~40	15~40	15~40	15~40
	Ambient temp.range	°C	10~30	10~30	10~30	10~30	10~30
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Sound pressure 1/5/10m	dB(A)	55/44/38	55/44/38	56/45/39	58/47/41	60/49/43
HEAT EXCHANGER	Type		Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC
	Water flow (min.)	m^3/h	2.3	2.7	3.4	4.0	5.0
	Water flow (max.)	m^3/h	7.0	8.5	10.5	12.5	15.5
	Water pressure drop(max)	KPa	7	8	10	12	15
	Water pipe		_	_	_	_	PPR or PVC
	Water connection	Inch	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"	BSP threaded / 1-1/2"
FAN	Position		horizontal	horizontal	horizontal	horizontal	horizontal
	Air flow	m^3/h	3000	3000	3500	5500	7000
DIMENSIONS (L x W x H)	Net	mm	1100×440×673	1100×440×673	1100×440×873	1100×440×973	1100*440*1378
	Shipping	mm	1157×497×823	1157×497×823	1157×497×1023	1157×497×1130	1157*497*1528
WEIGHT	-	kg	102/109	106/113	107/129	136/151	160/175

TEMPERATURE CONTROL

			PHFD2-02680-R410A	PHFD2-02710-R410A	PHFD2-02712-R410A	PHFD2-02713-R410A	PHFD2-02714-R410A
Refrigerant			R410A	R410A	R410A	R410A	R410A
Power supply		V/PH/HZ	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	36.0	40.0	45.0	55.0	65.0
		BTU/h	122,832	136,480	153,540	187,660	221,780
	Power input	kW	6.7	7.7	8.7	10.4	12.3
	COP	W/W	5.4	5.2	5.2	5.3	5.3
YL-H02-Heating: A15/W26°C	Heating capacity	kW	30.2	34.0	38.3	46.8	55.3
		BTU/h	103,042	116,008	130,509	159,511	188,513
	Power input	kW	6.8	7.4	8.5	10.6	12.2
	COP	W/W	4.5	4.6	4.5	4.4	4.5
YL-H03-Heating: A7/W26°C	Heating capacity	kW	25.3	28.8	32.4	39.6	46.8
		BTU/h	86,324	98,266	110,549	135,115	159,682
	Power input	kW	8.4	9.3	10.7	13.2	14.6
	EER	W/W	3.0	3.1	3.0	3.0	3.2
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	21.4	24.5	27.5	33.7	39.8
		BTU/h	73,017	83,526	93,966	114,848	135,729
	Power input	kW	9.2	10.2	11.8	14.6	16.1
	EER	W/W	2.3	2.4	2.3	2.3	2.5
MAX.	Power input	kW	11.5	11.8	13.6	16.8	18.6
	Current	A	20	21	24	30	33
OPERATING	Water outlet temp.range	°C	15~40	15~40	15~40	15~40	15~40
	Ambient temp.range	°C	10~30	10~30	10~30	10~30	10~30
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll
	Sound pressure 1/5/10m	dB(A)	61/52/46	63/53/48	63/53/48	65/55/50	66/57/51
HEAT EXCHANGER	Type		Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC
	Water flow (min.)	m^3/h	5.8	6.4	7.2	8.9	10.5
	Water flow (max.)	m^3/h	18.0	20.0	22.5	27.5	32.5
	Water pressure drop(max)	KPa	17	20	22	25	26
	Water pipe			PPR or PVC	PPR or PVC	PPR or PVC	PPR or PVC
	Water connection	Inch	BSP threaded / 1-1/2"	BSP threaded / 2"	BSP threaded / 2"	BSP threaded / 2"	BSP threaded / 2"
FAN	Position		horizontal	horizontal	horizontal	horizontal	horizontal
	Air flow	m^3/h	7000	10000	10000	13000	15000
DIMENSIONS (L x W x H)	Net	mm	1100x440x1378	1455×755×1705	1455×755×1705	1455×755×1705	1655×755×1705
	Shipping	mm	1157x497x1528	1505×805×1855	1505×805×1855	1505×805×1855	1705×805×1855
WEIGHT	-	kg	170/185	333/368	345/380	350/385	445/485

TEMPERATURE CONTROL

			PHFD2-02715-R410A	PHFD2-02720-R410A	PHFD2-02730-R410A	PHFD2-02740-R410A
Refrigerant			R410A	R410A	R410A	R410A
Power supply		V/PH/HZ	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
YL-H01-Heating: A24/W26°C	Heating capacity	kW	82.0	105.0	135.0	158.0
		BTU/h	279,784	358,260	460,620	539,096
	Power input	kW	15.7	20.5	26.5	30.7
	COP	W/W	5.2	5.1	5.1	5.2
YL-H02-Heating: A15/W26°C	Heating capacity	kW	69.7	89.3	114.8	134.3
		BTU/h	237,816	304,521	391,527	458,232
	Power input	kW	15.7	20.5	26.8	31.5
	COP	W/W	4.4	4.3	4.3	4.3
YL-H03-Heating: A7/W26°C	Heating capacity	kW	59.0	75.6	97.2	113.8
		BTU/h	201,444	257,947	331,646	388,149
	Power input	kW	19.0	25.1	33.2	39.9
	EER	W/W	3.1	3.0	2.9	2.9
YL-C01-Cooling: A35/W30°C	Cooling capacity	kW	50.2	64.3	82.6	96.7
		BTU/h	171,228	219,255	281,899	329,927
	Power input	kW	21.0	27.7	36.6	44.1
	EER	W/W	2.4	2.3	2.3	2.2
MAX.	Power input	kW	24.2	33.5	47.5	48.8
	Current	A	45	56	85	87
OPERATING	Water outlet temp.range	°C	15~40	15~40	15~40	15~40
	Ambient temp.range	°C	10~30	10~30	10~30	10~30
KEY	Compressor type		Scroll	Scroll	Scroll	Scroll
	Noise	dB(A)	67/58/52	68/59/53	69/60/54	70/61/55
HEAT EXCHANGER	Type		Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC
	Water flow (min.)	m^3/h	13.2	16.9	21.7	25.4
	Water flow (max.)	m^3/h	40.9	52.4	67.4	78.9
	Water pressure drop(max)	KPa	27	27	28	28
	Water pipe		PPR or PVC	PPR or PVC	PPR or PVC	PPR or PVC
	Water connection	mm	BSP threaded / 2"	flange/ 4"	flange/ 4"	flange/ 4"
FAN	Position		horizontal	horizontal	horizontal	horizontal
	Air flow	m^3/h	18000	22000	28000	33000
DIMENSIONS (L x W x H)	Net	mm	2188×1000×1705	2188×1000×1705	2500×1320×2340	2500×1320×2340
	Shipping	mm	2238×1085×1855	2238×1085×1855	2585×1405×2530	2585×1405×2530
WEIGHT	-	kg	480/515	536/576	727/781	775/829

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