

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.

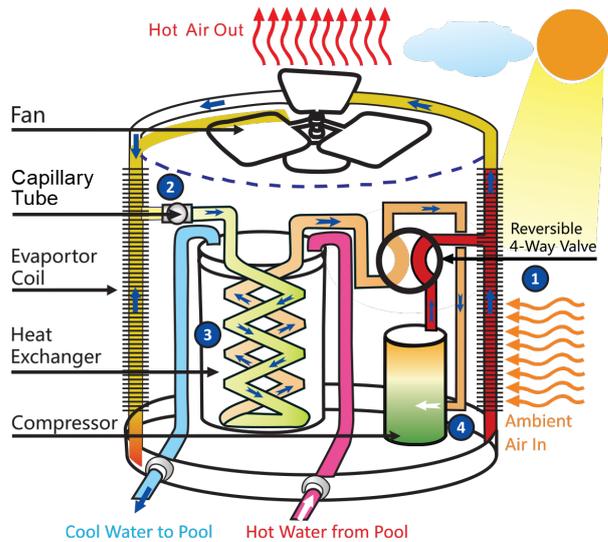
#### 3- STAGE THREE

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

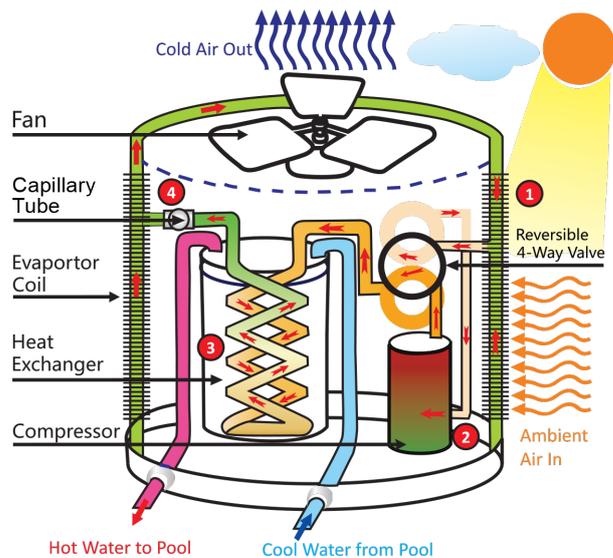
The hot gaseous refrigerant passes to the heat exchanger condenser, where the actual heat transfer takes place: the intensely hot gaseous refrigerant transfers its heat to the water pumped into the heat exchanger and condenses back into a liquid.

#### 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.



# TOP DISCHARGE

## Models

# TEMPERATURE CONTROL

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

# TOP DISCHARGE

## Models

# TEMPERATURE CONTROL

		PH2-02650-R410A	PH2-02660-R410A	PH2-02670-R410A	PH2-02680-R410A	PH2-02685-R410A	
Power supply	Refrigerant	R410A	R410A	R410A	R410A	R410A	
	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	31.0	35.0	40.0	
		BTU/h	71,652	105,772	119,420	136,480	
	Power input	kW	3.9	5.7	6.6	7.3	
YL-H02-Heating: A15/W26°C	COP	5.3	5.2	5.4	5.3	5.5	
	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
YL-C01-Cooling: A35/W30°C	Power input	kW	4.1	5.0	6.0	6.9	7.6
		W/W	4.3	4.2	4.4	4.3	4.5
	COP	15.1	18.0	22.3	25.2	28.8	
YL-C02-Cooling: A46/W30	Cooling capacity	BTU/h	51,589	61,416	76,156	85,982	98,266
		kW	5.0	6.0	7.3	8.4	9.3
	Power input	W/W	3.0	3.0	3.1	3.0	3.1
MAX.POWER INPUT	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
MAX.CURRENT	EER	W/W	2.3	2.3	2.3	2.3	2.4
		kW	6.2	7.4	9.0	10.4	11.5
	A	11	13	16	19	21	
OPERATING	Heating water temp range	°C	15~40	15~40	15~40	15~40	
		°C	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	
		m³/h	3.4	4.0	5.0	5.6	6.4
	Water flow (max)	m³/h	10.5	12.5	15.5	17.5	20.0
FAN	Water pressure drop (max)	KPa	13	15	20	22	22
		Water connection	mm	threaded / 50	threaded / 50	threaded / 50	threaded / 50
	Water pipe	mm	-	-	-	-	PPR OR PVC
DIMENSIONS (L x W x H)	Fan Position	Vertical	Vertical	Vertical	Vertical	Vertical	
		Plastic	Plastic	Plastic	Plastic	Plastic	
	Material	5500	715x715x980	860x860x1085	860x860x1085	950x950x1280	
Net weight / Gross weight	Air flow	715x715x980	765x765x1135	920x920x1240	920x920x1240	1025x1025x1430	
	Net	mm	128/142	202/220	208/226	210/230	
	Shipping	kg	125/140	144/163	150 / 169	230 / 255	

# TOP DISCHARGE

## Models

# TEMPERATURE CONTROL

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

# TOP DISCHARGE

## Models

# TEMPERATURE CONTROL

		PH2-02714-R410A	PH2-02715-R410A	PH2-02720-R410A	PH2-02730-R410A	PH2-02740-R410A
Power supply	Refrigerant	R410A	R410A	R410A	R410A	R410A
	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	65.0	82	100.0	135.0	160.0
	BTU/h	221,780	279,784	341,200	460,620	545,920
	Power input	11.8	15.2	19.0	24.5	29.5
YL-H02-Heating: A15/W26°C	COP	5.50	5.4	5.25	5.5	5.4
	Heating capacity	55.3	69.7	85.0	114.8	136.0
	BTU/h	188,513	237,816	290,020	391,527	464,032
YL-C01-Cooling: A35/W30°C	Power input	12.3	15.8	19.8	25.5	30.6
	COP	4.5	4.4	4.3	4.5	4.4
	kW	46.8	59.0	72.0	97.2	115.2
YL-C02-Cooling: A46/W30	Cooling capacity	159,682	201,444	245,664	331,646	393,062
	BTU/h	14.9	19.8	24.8	30.4	36.0
	Power input	3.2	3.0	2.9	3.2	3.2
MAX.POWER INPUT	EER	39.8	50.2	61.2	82.6	97.9
	kW	135,729	171,228	208,814	281,899	334,103
	BTU/h	16.4	21.9	27.4	33.5	39.7
MAX.CURRENT	Power input	2.4	2.3	2.2	2.5	2.5
	W/W	18.4	24.5	32.3	39.6	48.4
	kW	33	44	58	71	83
OPERATING	Heating water temp range	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	-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				
HEATING EXCHANGER	Sound pressure 1/5/10m	66/56/51	67/57/52	68/58/53	69/60/55	70/61/56
	Type	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	10.5	13.2	16.1	21.7	25.8
FAN	Water flow (max)	32.5	40.9	49.9	67.4	79.9
	Water pressure drop (max)	26	27	27	28	28
	Water connection	threaded / 63	threaded / 63	flange/90	flange/110	flange/110
DIMENSIONS (L x W x H)	Water pipe	PPR or PVC	PPR or PVC	PVC	PVC	PVC
	Fan Position	Vertical	Vertical	Vertical	Vertical	Vertical
	Material	Plastic	Plastic	Plastic	Plastic	Plastic
Net weight / Gross weight	Air flow	15000	18000	22000	28000	33000
	Net	1890x1000x1328	1890x1000x1328	1890x1000x1328	2188x1240x2340	2188x1240x2340
	Shipping	1965x1075x1490	1965x1075x1490	1965x1075x1490	2275x1325x2530	2275x1325x2530
		356/384	404/458	489/517	1100/1130	1150/1180

# TOP DISCHARGE

## Models

# TEMPERATURE CONTROL

		PH2-02750-R410A	PH2-02760-R410A	PH2-02765-R410A	PH2-02770-R410A	PH2-02780-R410A
Power supply	Refrigerant	R410A	R410A	R410A	R410A	R410A
	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	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	33.6	41.5	45.1	48.4	68.2
YL-H02-Heating: A15/W26°C	COP	5.4	5.3	5.2	5.2	5.1
	Heating capacity	153.0	187.0	199.8	212.5	297.5
	BTU/h	522,036	638,044	681,547	725,050	1,015,070
YL-C01-Cooling: A35/W30°C	Power input	34.9	43.2	46.9	50.4	71.0
	COP	4.4	4.3	4.3	4.2	4.2
	Heating capacity	129.6	158.4	169.2	180.0	252.0
YL-C02-Cooling: A46/W30	BTU/h	442,195	540,461	577,310	614,160	859,824
	Power input	41.8	52.8	56.4	63.2	85.1
	EER	3.1	3.0	3.0	2.9	3.0
MAX.POWER INPUT	Heating capacity	110.2	134.6	143.8	153.0	214.2
	BTU/h	375,866	459,392	490,714	522,036	730,850
	Power input	46.1	58.3	62.3	69.7	94.0
MAX.CURRENT	EER	2.4	2.3	2.3	2.2	2.3
	Heating capacity	51.7	65.3	69.7	78.1	105.3
	W/W	92	117	125	139	188
OPERATING	Heating water temp range	15~40	15~40	15~40	15~40	15~40
	Cooling water temp range	10~30	10~30	10~30	10~30	10~30
	Ambient temp range	-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				
HEATING EXCHANGER	Sound pressure 1/5/10m	72/63/58	73/64/59	73/64/59	75/66/61	77/68/63
	Type	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC	Titanium /PVC
	Water flow (min.)	29.0	35.4	37.8	40.3	56.4
FAN	Water flow (max)	89.9	109.8	117.3	124.8	174.7
	Water pressure drop (max)	29	30	33	34	35
	Water connection	flange/110	flange/110	flange/110	flange/160	flange/160
DIMENSIONS (L x W x H)	Water pipe	PVC	PVC	PVC	PPR or PVC	PVC
	Fan Position	Verticle	Verticle	Verticle	Verticle	Verticle
	Material	Plastic	Plastic	Plastic	Plastic	Plastic
Net weight / Gross weight	Air flow	39000	44000	44000	55000	77000
	Net	2188x1240x2340	2188x1240x2340	2320x1240x2340	2410x1280x2340	3200x2188x2340
	Shipping	2275x1325x2530	2275x1325x2530	2405x1325x2530	2500x1415x2530	3250x2238x2530
		1180/1210	1200/1230	1250/1280	1350/1390	2030/2100

# FRONT DISCHARGE

## Models

Refrigerant		PHFD2-02610-R410A	PHFD2-02615-R410A	PHFD2-02620-R410A	PHFD2-02625-R410A	PHFD2-02630-R410A-1
Power supply	V/PH/Hz	R410A 220~240/1/50	R410A 220~240/1/50	R410A 220~240/1/50	R410A 220~240/1/50	R410A 220~240/1/50
	kW	5.0	7.3	9.8	12.0	14.0
Heating capacity	BTU/h	17,060	24,908	33,438	40,944	47,768
	kW	0.9	1.4	1.8	2.3	2.7
COP	W/W	5.5	5.4	5.3	5.3	5.3
	kW	4.3	6.2	8.3	10.2	11.9
Heating capacity	BTU/h	14,672	21,171	28,422	34,802	40,603
	kW	0.9	1.4	1.9	2.3	2.7
COP	W/W	4.6	4.5	4.4	4.4	4.4
	kW	4.0	5.3	7.1	8.6	10.1
Heating capacity	BTU/h	13,648	17,933	24,075	29,480	34,393
	kW	1.3	1.6	2.3	3.0	3.3
EER	W/W	3.2	3.2	3.0	2.9	3.1
	kW	3.1	4.5	6.0	7.3	8.6
Cooling capacity	BTU/h	10,577	15,243	20,464	25,058	29,234
	kW	1.3	1.8	2.6	3.3	3.6
EER	W/W	2.5	2.5	2.3	2.2	2.4
	kW	1.6	2.2	2.9	3.6	4.3
MAX.	Current	7	11	15	19	8
	Water outlet temp.range	15~40	15~40	15~40	15~40	15~40
OPERATING	Ambient temp.range	10~30	10~30	10~30	10~30	10~30
	Compressor type	Rotary	Rotary	Rotary	Rotary	Scroll
KEY	Sound pressure 1/5/10m	50/38/33	52/40/35	53/41/36	54/42/37	55/44/38
	Type	Titanium / PVC	Titanium / PVC	Titanium / PVC	Titanium / PVC	Titanium/PVC
HEAT EXCHANGER	Water flow (min.)	0.8	1.2	1.6	1.9	2.3
	Water flow (max.)	2.5	3.6	4.9	6.0	7.0
	Water pressure drop(max)	4	6	8	6	7
	Water pipe	-	-	-	-	-
FAN	Water connection	threaded /50				
	Position	horizontal	Horizontal	Horizontal	Horizontal	horizontal
DIMENSIONS (L x W x H)	Air flow	1200	2000	2000	2000	3000
	Net	900x340x623	900x340x623	900x340x623	900x340x623	1100x440x673
	Shipping	960x400x773	960x400x773	960x400x773	960x400x773	1157x497x823
	Net weight / Gross weight	48/55	60/71	60/71	62/73	102/109

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

TEMPERATURE CONTROL

# FRONT DISCHARGE

## Models

		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	36.0	40.0	45.0	55.0	65.0
		BTU/h	136,480	153,540	187,660	221,780
	Power input	6.7	7.7	8.7	10.4	12.3
	COP	5.4	5.2	5.2	5.3	5.3
YL-H02-Heating: A15/W26°C	Heating capacity	30.2	34.0	38.3	46.8	55.3
		BTU/h	116,008	130,509	159,511	188,513
	Power input	6.8	7.4	8.5	10.6	12.2
	COP	4.5	4.6	4.5	4.4	4.5
YL-H03-Cooling: A35/W26°C	Cooling capacity	25.3	28.8	32.4	39.6	46.8
		BTU/h	86,324	98,266	110,549	135,115
	Power input	8.4	9.3	10.7	13.2	14.6
	EER	3.0	3.1	3.0	3.0	3.2
YL-C01-Cooling: A46/W30°C	Cooling capacity	21.4	24.5	27.5	33.7	39.8
		BTU/h	73,017	83,526	93,966	114,848
	Power input	9.2	10.2	11.8	14.6	16.1
	EER	2.3	2.4	2.3	2.3	2.5
MAX.	Power input	11.5	11.8	13.6	16.8	18.6
	Current	20	21	24	30	33
	Water outlet temprange	15~40	15~40	15~40	15~40	15~40
OPERATING	Ambient temprange	10~30	10~30	10~30	10~30	10~30
	Compressor type	Scroll	Scroll	Scroll	Scroll	Scroll
	Sound pressure 1/5/10m	61/52/46	63/53/48	63/53/48	65/55/50	66/57/51
KEY	Type	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC
	Water flow (min.)	5.8	6.4	7.2	8.9	10.5
	Water flow (max.)	18.0	20.0	22.5	27.5	32.5
HEAT EXCHANGER	Water pressure drop(max)	17	20	22	25	26
	Water pipe	PPR or PVC				
	Water connection	threaded /50	threaded /63	threaded /63	threaded /63	threaded /63
FAN	Position	horizontal	horizontal	horizontal	horizontal	horizontal
	Air flow	7000	10000	10000	13000	15000
	Net	1100x440x1378	1455x755x1705	1455x755x1705	1455x755x1705	1655x755x1705
DIMENSIONS (L x W x H)	Shipping	1157x497x1528	1505x805x1855	1505x805x1855	1505x805x1855	1705x805x1855
	WEIGHT	170/185	333/368	345/380	350/385	445/485

# FRONT DISCHARGE

## Models

Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A
YL-H01-Heating: A24/W26°C	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
	Heating capacity	kW	82.0	105.0	135.0	158.0	220
YL-H02-Heating: A15/W26°C	Power input	BTU/h	279,784	358,260	460,620	539,096	750,640
	COP	kW	15.7	20.5	26.5	30.7	40.0
YL-H03-Cooling: A35/W26°C	Power input	W/W	5.2	5.1	5.1	5.2	5.5
	COP	kW	69.7	89.3	114.8	134.3	187.0
YL-H04-Cooling: A46/W30°C	Power input	BTU/h	237,816	304,521	391,527	458,232	638,044
	COP	kW	15.7	20.5	26.8	31.5	43.7
YL-H05-Cooling: A35/W26°C	Power input	W/W	4.4	4.3	4.3	4.3	4.2
	COP	kW	59.0	75.6	97.2	113.8	158
YL-H06-Cooling: A46/W30°C	Power input	BTU/h	201,444	257,947	331,646	388,149	540,461
	COP	kW	19.0	25.1	33.2	39.9	52.8
MAX.	Power input	W/W	3.1	3.0	2.9	2.9	3.00
	COP	kW	50.2	64.3	82.6	96.7	134.6
OPERATING	Power input	BTU/h	171,228	219,255	281,899	329,927	459,392
	EER	kW	21.0	27.7	36.6	44.1	58.3
KEY	Power input	W/W	2.4	2.3	2.3	2.2	2.31
	Current	kW	24.2	33.5	47.5	48.8	65.3
HEAT EXCHANGER	Water outlet temp.range	A	45	56	85	87	117
	Ambient temp.range	°C	15~40	15~40	15~40	15~40	15~40
FAN	Compressor type	°C	10~30	10~30	10~30	10~30	10~30
	Noise	dB(A)	Scroll	Scroll	Scroll	Scroll	Scroll
DIMENSIONS (L x W x H)	Type	mm	67/58/52	68/59/53	69/60/54	70/61/55	73/64/59
	Water flow (min.)	m³/h	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC	Titanium/PVC
WEIGHT	Water flow (max.)	m³/h	13.2	16.9	21.7	25.4	35.4
	Water pressure drop(max)	KPa	40.9	52.4	67.4	78.9	109.8
OPERATING	Water pipe	mm	27	27	28	28	30
	Water connection	mm	PPR or PVC				
DIMENSIONS (L x W x H)	Position	mm	threaded /63	flange/ 110	flange/ 110	flange/ 110	flange/ 110
	Air flow	m³/h	horizontal	horizontal	horizontal	horizontal	horizontal
WEIGHT	Net	mm	18000	22000	28000	33000	44000
	Shipping	mm	2188×1000×1705	2188×1000×1705	2500×1320×2340	2500×1320×2340	2900×1370×2340
WEIGHT	-	kg	2238×1085×1855	2238×1085×1855	2585×1405×2530	2585×1405×2530	2985×1455×2530
	-	kg	480/515	536/576	727/781	775/829	1200/1230

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