PROFESSIONAL HOT SPRING HEAT PUMP

LHP

Used in special water quality, it can effectively resist acid, alkali and chloride ion corrosion in different degrees.

Maximum outlet water temperature up to 50°C

- ☑ NORMAL TEMPERATURE TYPE
- ☑ LOW-TEMPERATURE TYPE

ADVANTAGES AND FEATURES OF HOT SPRING HEAT PUMP

- High efficiency heat exchange and compact structure: The heat exchange tube uses a high-efficiency external threaded pure titanium tube. And the heat exchange coefficient is more than twice that of traditional shell and tube type.
- The refrigerant inlet and outlet are ingeniously sealed to avoid water leakage: The seals are made of high temperature resistant materials, which can withstand high temperature of 200°C and low temperature of -20°C.
- Corrosion resistance, long service life, heat exchanger is not easy to be blocked: Engineering plastics are more resistant to all kinds of corrosion and have a longer service life compared to metals. The water side volume of the heat exchanger is more than twice that of the plate heat exchanger, and is more resistant to dirt and blockage.
- Energy and power saving: The international advanced heat pump technology is adopted, the power consumption is only 20% of the electric boiler, and the operation cost is low.
- Heating control: Automatic heating, automatic constant temperature, automatic defrosting, with water supply and return control, electronic expansion valve control.
- Multiple protection, safe and reliable: Built-in water flow protection, compressor exhaust temperature protection, compressor high and low pressure protection, compressor over current protection, power supply phase error protection (applicable to three-phase models), winter anti-freezing protection.
- Quiet operation: Low-noise compressor and fan design are adopted to ensure quiet operation of the unit.

<LHP-030~LHP-070>
Galvanized sheet painted UV resistant shell.

<LHP-100~LHP-120>
Galvanized sheet painted UV resistant shell.

<LHP-150~LHP-500II>
Galvanized sheet painted UV resistant shell.

<LHP-400IV~LHP-600IV>
Galvanized sheet painted UV resistant shell.

PROFESSIONAL HOT SPRING HEAT PUMP
LHP Series

NORMAL TEMPERATURE TYPE

Model			LHP-030	LHP-050	LHP-070	LHP-100	LHP-120	LHP-150	LHP-200	LHP-250	LHP-300	LHP-400II	LHP-500II	LHP-400IV	LHP-500IV	LHP-600IV
Rated Heating (A20°C/W55°C)	Heating Capacity	kW	10.5	18.8	26.3	37.5	45.0	56.3	75.0	93.8	112.5	150.0	187.5	150.0	187.5	225.0
	COP	W/W	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65
	Power	kW	2.3	4.0	5.6	8.1	9.7	12.1	16.1	20.2	24.2	32.3	40.3	32.3	40.3	48.4
	Current	A	10.3	6.9	9.6	13.8	16.5	20.7	27.5	34.4	41.3	55.1	68.8	55.1	68.8	82.6
Power Supply		/	220V/~/50Hz	380V/3N~/50Hz												
Max. Current Input		A	17	13	17	23	26	32	47	58	72	90	105	90	105	120
Max. Power Input		kW	3.7	7.3	9.5	12.9	14.5	17.9	26.3	32.4	40.3	50.3	58.7	50.3	58.7	67.1
Compressor Type		/	Rotary	Fully enclosed scroll												
Water Pressure Drop		kPa	30	36	43	45	45	52	58	58	62	65	68	65	68	68
Noise		dB(A)	58	60	65	68	68	70	70	72	72	73	73	73	73	75
Connection Size		mm	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN65 Flange	DN65 Flange	DN80 Flange	DN80 Flange	DN100 Flange	DN100 Flange	DN100 Flange	DN100 Flange	DN100 Flange
Water Flow		m^3/h	5	8	10	12	16	20	30	35	40	58	65	58	65	75
Refrigerant		/	R410A													
Operating Temperature Range		°C	-12~45													
Dimensions (L*W*H)		mm	768*709*868	805*750*1068	870*810*1268	1450*780*1075	1450*780*1225	1580*900*1660	1926*1056*2190	2126*1106*2200	2126*1106*2200	2450*1302*2260	2450*1302*2260	2006*2172*2228	2006*2172*2228	2006*2172*2228
Weight		kg	105	150	160	220	265	385	515	595	710	815	982	985	1170	1380

- Rated Heating Condition: Outdoor Ambient Temp. (DB/WB): 20°C/15°C, Initial Inlet Water Temp. 15°C, and Stop Inlet Water Temp. 50°C.
- The data above is for reference only. For model specifications, please refer to the nameplate on the unit.

LOW TEMPERATURE TYPE

Model			LHP-030(E)	LHP-050(E)	LHP-070(E)	LHP-100(E)	LHP-120(E)	LHP-150(E)	LHP-200(E)	LHP-250(E)	LHP-300(E)	LHP-400II(E)	LHP-500II(E)	LHP-400IV(E)	LHP-500IV(E)	LHP-600IV(E)
Heating Condition 1 (A20°C/W50°C)	Heating Capacity	kW	10.5	18.8	26.3	37.5	45.0	56.3	75.0	93.8	112.5	150.0	187.5	150.0	187.5	225.0
	COP	W/W	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65	4.65
	Power	kW	2.3	4.0	5.6	8.1	9.7	12.1	16.1	20.2	24.2	32.3	40.3	32.3	40.3	48.4
	Current	A	10.3	6.9	9.6	13.8	16.5	20.7	27.5	34.4	41.3	55.1	68.8	55.1	68.8	82.6
Heating Condition 2 (A7°C/W50°C)	Heating Capacity	kW	8.4	15.0	20.8	30.1	35.9	45.0	59.8	74.8	89.8	119.8	149.5	119.8	149.5	179.5
	COP	W/W	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
	Power	kW	2.3	4.0	5.6	8.1	9.7	12.1	16.1	20.2	24.2	32.3	40.3	32.3	40.3	48.4
	Current	A	10.3	6.9	9.6	13.9	16.5	20.7	27.5	34.4	41.3	55.1	68.8	55.1	68.8	82.6
Heating Condition 3 (A-12°C/W50°C)	Heating Capacity	kW	6.0	10.6	14.8	21.4	25.4	31.9	42.3	53.0	63.6	84.9	106.1	84.9	106.1	127.3
	COP	W/W	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
	Power	kW	2.3	4.0	5.6	8.1	9.7	12.1	16.1	20.2	24.2	32.8	40.3	32.3	40.3	48.4
	Current	A	10.4	6.9	9.6	13.9	16.5	20.7	27.5	34.4	41.3	55.1	68.9	55.1	68.9	82.6
Power Supply		/	220V/~/50Hz	380V/3N~/50Hz												
Max. Current Input		A	17	13	17	23	26	32	47	58	72	90	105	90	105	120
Max. Power Input		kW	3.7	7.3	9.5	12.9	14.5	17.9	26.3	32.4	40.3	50.3	58.7	50.3	58.7	67.1
Compressor Type		/	Rotary	Fully enclosed scroll												
Water Pressure Drop		kPa	30	36	43	45	45	52	58	58	62	65	68	65	68	68
Noise		dB(A)	58	60	65	68	68	70	70	72	72	73	73	73	73	75
Connection Size		mm	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN50 Male thread	DN65 Flange	DN65 Flange	DN80 Flange	DN80 Flange	DN100 Flange	DN100 Flange	DN100 Flange	DN100 Flange	DN100 Flange
Water Flow		m^3/h	5	8	10	12	16	20	30	35	40	58	65	58	65	75
Refrigerant		/	R410A													
Operating Temperature Range		°C	-30~45													
Dimensions (L*W*H)		mm	768*709*868	805*750*1068	870*810*1268	1450*780*1075	1450*780*1225	1580*900*1660	1926*1056*2190	2126*1106*2200	2126*1106*2200	2450*1302*2260	2450*1302*2260	2006*2172*2228	2006*2172*2228	2006*2172*2228
Weight		kg	108	155	175	230	275	390	520	595	720	852	1125	1005	1210	1410

- Heating Condition 1: Outdoor (DB/WB) Temp. 20°C/15°C, Initial Inlet Water Temp. 15°C, and Stop Inlet Water Temp. 50°C.
- Heating Condition 2: Outdoor (DB/WB) Temp. 7°C/6°C, Initial Inlet Water Temp. 15°C, and Stop Inlet Water Temp. 50°C.
- Heating Condition 3: Outdoor (DB/WB) Temp. -12°C/-14°C, Initial Inlet Water Temp. 15°C, and Stop Inlet Water Temp. 50°C.
- The data above is for reference only. For model specifications, please refer to the nameplate on the unit.