



Water Cooled Screw Chiller

Cooling capacity from 130 to 2500 kW

Functions



Cooling



C&H



Heat Recovery



Characteristics

- 29 sizes available ranging from 130 kW to 2500 kW cooling capacity.
- Acting as multi-function unit such as cooling, heating, sanitary hot water separately or simultaneously.
- Wide application as hotel, apartment, villa, factory, shopping center, office building, school, etc.
- Semi-hermetic screw compressor for the whole range. Each compressor is equipped with a crankcase heater and a built-in electronic protection with temperature sensor located directly in the motor winding and on the discharge line.
- The refrigerant circuit is complete with sight glass, filter drier, high and low pressure gauges, solenoid valve, electronic expansion valve, high and low pressure switch.
- Shell and tube dry expansion type condenser, factory insulated with flexible close cell material.
- Shell and tube evaporator, higher efficiency less water consumption, easy maintenance and cleaning, factory insulated with flexible close cell material.
- The electric panel consists of compressor breaker, compressor contactor, phase sequence relay, control circuit breaker, microprocessor control with function display.
- LCD display, touch screen control panel as standard.
- Automatic operation dramatically reducing maintenance cost thanks to reliable microprocessor system.

- An infinitely variable capacity control system that is capable of exactly matching the demand requirement of the system is to be supplied. This system is to provide precise and stable control of supply water temperature over the complete range of operating conditions.

Optional

- ◆ Desuperheater as optional.
- ◆ Electronic controller with BMS system.



Nomenclature

L WW C R S B 530

① ② ③ ④ ⑤ ⑥ ⑦

- ① L: Lark air product
- ② Unit type
 - WA: Water to Air
 - WW: Water to Water

- ③ C: Cooling only
H: Heat pump
- ④ Heat recovery type
--: Without heat recovery
R: With heat recovery
- ⑤ Heat exchanger
T: Tube in tube type
P: Plate type
S: Shell and tube type

- ⑥ Refrigerant type
--: R22
A: R407C
B: R134A
- ⑦ Model



Technical Data

Model	Unit	130	170	200	240	260	280	310	360	380	420
Cooling capacity*	kW	130	170	200	240	260	280	310	360	380	420
Power supply	380-415V/3Ph/50Hz										
Compressor											
Qty/refrigerant circuit	Nr.	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Cooling power input*	kW	26	33	39	47	51	55	61	71	75	83
Energy adjustment steps	step	25% - 100%									
Max. current for wiring	A	69	87	108	128	154	158	161	165	175	185
Refrigerant charge	kg	32	39	46	55	60	64	68	85	100	107
Evaporator											
Water side pressure drop	kPa	42	45	45	45	45	46	46	46	47	46
Pipe size	mm	DN65	DN80	DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Water flow rate in cooling*	m³/h	22	29	34	41	45	48	53	62	65	72
Condenser											
Water side pressure drop	kPa	42	45	44	44	45	45	44	44	44	42
Pipe size	mm	DN80	DN80	DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Water flow rate in cooling*	m³/h	27	35	41	49	54	58	64	74	78	86
Dimensions											
Length	mm	2685	2720	2660	2880	2870	3170	3270	3170	3180	3180
Width	mm	1090	1115	1175	1125	1125	1125	1230	1200	1285	1285
Height	mm	1625	1555	1650	1645	1685	1685	1685	1685	1805	1805
Net weight	kg	1600	1800	1900	2000	2100	2200	2250	2400	3000	3100
Noise level**	dB(A)	68	69	69	70	70	72	73	73	73	73

Model	Unit	480	530	610	680	710	760	860	960	1000	1120
Cooling capacity*	kW	480	530	610	680	710	760	860	960	1000	1120
Power supply	380-415V/3Ph/50Hz										
Compressor											
Qty/refrigerant circuit	Nr.	1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2
Cooling power input*	kW	94	104	120	134	140	150	169	189	197	220
Energy adjustment steps	step	25% - 100%					12.5% - 100%				
Max. current for wiring	A	258	292	302	335	2×165	2×175	2×175	2×185	2×246	2×258
Refrigerant charge	kg	126	142	160	167	171	199	210	220	242	261
Evaporator											
Water side pressure drop	kPa	46	46	46	47	47	46	47	46	46	46
Pipe size	mm	DN125	DN125	DN125	DN150	DN150	DN150	DN150	DN200	DN200	DN200
Water flow rate in cooling*	m³/h	83	91	105	117	122	131	148	165	172	193
Condenser											
Water side pressure drop	kPa	42	42	44	42	44	42	44	42	44	44
Pipe size	mm	DN125	DN125	DN125	DN150	2×DN125	2×DN125	2×DN125	2×DN125	2×DN125	2×DN150
Water flow rate in cooling*	m³/h	99	109	126	140	146	156	177	198	206	231
Dimensions											
Length	mm	3505	3505	3505	3520	4060	4505	4505	4505	4660	4660
Width	mm	1280	1315	1375	1380	1415	1415	1415	1415	1460	1460
Height	mm	1970	1990	1980	1980	1975	2000	2000	2000	2090	2090
Net weight	kg	3500	3800	4000	4100	4210	4400	4740	5600	6600	6800
Noise level**	dB(A)	74	74	74	73	74	74	74	74	74	74

Model	Unit	1200	1250	1360	1470	1720	1840	2000	2350	2500
Cooling capacity*	kW	1200	1250	1360	1470	1720	1840	2000	2350	2500
Power supply	380-415V/3Ph/50Hz									
Compressor										
Qty/refrigerant circuit	Nr.	2/2	2/2	2/2	4/4	4/4	4/4	4/4	4/4	4/4
Cooling power input*	kW	236	246	268	289	339	362	394	463	492
Energy adjustment steps	step	12.5% - 100%				6.25% - 100%				
Max. current for wiring	A	2×292	2×302	2×315	4×175	4×185	4×246	4×258	4×258	4×292
Refrigerant charge	kg	295	302	327	338	393	430	453	494	537
Evaporator										
Water side pressure drop	kPa	46	46	46	45	45	46	46	47	47
Pipe size	mm	DN200	DN200	DN200	2×DN150	2×DN150	2×DN200	2×DN200	2×DN200	2×DN200
Water flow rate in cooling*	m³/h	206	215	234	253	296	316	344	404	430
Condenser										
Water side pressure drop	kPa	44	42	45	52	52	52	52	52	52
Pipe size	mm	2×DN150	2×DN150	2×DN150	2×DN200	2×DN200	2×DN200	2×DN200	2×DN200	2×DN200
Water flow rate in cooling*	m³/h	247	257	280	303	354	379	412	484	515
Dimensions										
Length	mm	4660	4660	4660	4600	4650	4690	4600	4780	4800
Width	mm	1585	1585	1585	2250	2270	2300	2450	2450	2450
Height	mm	2215	2215	2240	2350	2380	2410	2460	2470	2500
Net weight	kg	7000	7400	8000	8800	9000	9800	11600	12300	13000
Noise level**	dB(A)	74	74	75	76	80	80	81	81	81

* Performance values refer to the following conditions:
Condenser water inlet/outlet temperature: 30°C/35°C.
Evaporator water inlet/outlet temperature: 12°C/7°C.

** Noise level measured in free field condition at distance of 1 meter.