

Shivaki Modular Air-cooled Scroll Chiller High-heat Efficiency Type

We are pleased to announce that SHIVAKI new generation of modular air-cooled scroll chillers are available.

Appearance

SHIVAKI серия CTX2-T130HF
(High-heat Efficiency Type)
YEAR-ROUND COOLING OR HEATING



- a. The minimum ambient temperature at which the heat pump can be operated is -30°C ;
- b. The maximum water temperature at the outlet of the installation is $+60^{\circ}\text{C}$;
- c. Quiet fan: large blade width; quiet engine;
- d. V-shaped condenser with continuous defrosting; 4 independent circuits;
- e. Danfoss compressors: specially designed with high heating efficiency EVI technology;
- f. Intelligent control: new generation motherboard; data storage for 10 years;
- g. Seamless assembly: space saving for heat pump installation.
- i. Gold Epoxy fin Exchanger (options)
- h. Wet film cooling or adiabatic cooling (options)

Specifications

Customer conditions
Glycol 40%
50-45°C

Model			CTX2-T130HF	CTX2-T130HF (сума при -24°C)
Capacity	Cooling	kW	130	130
	Heating	kW	140	109,2
Power Input	Cooling	kW	41.9	41.9
	Heating	kW	43.7	50.7
Running Current	Cooling	A	75.5	75.5
	Heating	A	76.5	76.5
Power supply		V/N/HZ	380-3-50	
Maximum Input Power		kW	58.9	58.9
Maximum Input Current		A	100	100
Starting Current		A	268.1	268.1
Energy Regulation		%	0-50-100	0-50-100
Water Side Heat Exchanger	Type	-	High efficient shell & Tube heat exchanger	
	Water flow	m³/h	22.4/24	22.4/20.7
	Pressure drop	kPa	45	45
	Inlet/Outlet DN	DN	65	65
	Connection method	-	Viciaulic connection	
Compressor	Brand	-	DANFOSS	
	Type	-	EVI Scroll	
	Quantity	-	2	2
Fan	Type	-	Axial fan	
	Air flow	m³/h	48000	48000
	Quantity	-	2	8
Refrigerant	Type	-	R410A	
Unit Dimensions (L*W*H)		mm	2200×1100×2205	2200×1100×2205
Net weight		kg	923/1023	923/1023
Sound Level		dB	66/68	66/68

Note:

- The nominal cooling capacity and nominal cooling input power are tested at the rated water flow, water outlet temperature of 7°C, and outdoor dry-bulb temperature of 35°C.
- The nominal heating capacity is tested at the rated water flow, water outlet temperature of 45°C, outdoor dry-bulb temperature of 7°C or outdoor wet-bulb temperature of 6°C.
- About 6% loss caused by system pipelines, water pumps, valves, and dirt after unit installation shall be considered for the cooling (heating) capacity in actual application.
- The operating range is +5°C to 55°C for cooling and -30°C to 48°C for heating. **If the unit needs to run in cooling mode at an ambient temperature lower than 5°C, please contact Shivaki factory.**
- The specifications above are based on a single module. Multiple modules can be used in combination. A maximum of 16 modules can be combined.
- As a separate item, control accessory box contains a wired controller, a wired controller communication cable, user manual, and temperature sensor. The configuration is subject to changes, so please refer to actual unit upon delivery.
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Main features

1. Wide ambient temperature:

Operating temperature in heating mode: -30 to +48°C

Operating temperature in cooling mode: +5 to +55°C

Wide chilled water outlet temperature:

Cooling : 5°C~20°C

Heating: 30°C~60°C

2. Maximum 16 modules can be combined and maximum cooling capacity can be up to 2080kW .

3. Aluminum alloy large fan blades can ensure low noise and long service life.

4. 7-inch touch screen centralized controller as standard configuration makes operation easier.

5. RS-485 interface as standard configuration makes it more convenient to access to BMS.

6. Power failure memory function which is set on touch screen makes it intelligent to control and easy to use.

7. Gold Epoxy fin Exchanger (options)

8. Wet film cooling or adiabatic cooling (options)

Температура воды на выходе, °C	Температура окружающей среды																	
	5 °C		10 °C		15 °C		20 °C		25 °C		30 °C		35 °C		40 °C		48 °C	
	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.
5	1.07	0.71	1.09	0.72	1.10	0.77	1.10	0.77	1.08	0.84	1.00	0.90	0.94	0.97	0.87	1.01	0.81	1.08
7	1.15	0.74	1.17	0.75	1.18	0.80	1.17	0.80	1.14	0.87	1.06	0.93	1.00	1.00	0.94	1.04	0.86	1.11
9	1.22	0.77	1.24	0.78	1.25	0.83	1.24	0.83	1.19	0.90	1.12	0.96	1.07	1.03	1.01	1.07	0.92	1.14
12	1.30	0.80	1.32	0.81	1.33	0.86	1.32	0.86	1.26	0.93	1.20	0.99	1.14	1.06	1.08	1.10	0.96	1.17
15	1.37	0.83	1.39	0.84	1.40	0.89	1.39	0.90	1.32	0.96	1.26	1.02	1.21	1.09	1.15	1.13	1.03	1.20
20	1.42	0.86	1.45	0.87	1.46	0.92	1.44	0.93	1.42	0.99	1.35	1.05	1.31	1.13	1.25	1.15	1.13	1.22

Температура воды на выходе, °С	Температура окружающей среды																									
	-30 °С		-25 °С		-20 °С		-15 °С		-12 °С		-5 °С		0 °С		5 °С		15 °С		20 °С		25 °С		35 °С		48 °С	
	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.	произв- ность	потреб. мощн.
30	0.64	0.74	0.75	0.74	0.82	0.80	0.97	0.83	1.00	0.81	1.24	0.78	1.33	0.84	1.58	0.85	1.78	0.86	1.82	0.92	1.86	0.96	2.12	0.97	2.16	0.97
35	0.64	0.85	0.75	0.84	0.82	0.90	0.97	0.93	1.00	0.88	1.24	0.89	1.34	0.94	1.58	0.98	1.78	1.01	1.82	1.02	1.85	1.06	2.11	1.07	2.16	1.04
41	0.64	0.96	0.76	0.95	0.82	0.97	0.96	1.01	1.00	1.00	1.23	1.03	1.34	1.04	1.58	1.10	1.76	1.10	1.82	1.11	1.84	1.12	2.11	1.13	2.15	1.12
45	0.65	1.11	0.77	1.06	0.83	1.04	0.95	1.09	1.00	1.10	1.23	1.12	1.35	1.14	1.58	1.12	1.74	1.16	1.81	1.15	1.84	1.19	2.10	1.20	2.15	1.18
50	0.65	1.20	0.78	1.16	0.83	1.12	0.95	1.19	1.00	1.21	1.23	1.25	1.35	1.24	1.58	1.21	1.72	1.24	1.80	1.22	1.84	1.26	2.09	1.28	2.15	1.23
55	/	/	/	/	0.84	1.29	0.95	1.24	1.00	1.36	1.22	1.35	1.35	1.33	1.58	1.31	1.70	1.33	1.79	1.32	1.83	1.35	2.08	1.36	2.13	1.32
60	/	/	/	/	/	/	/	/	1.00	1.42	1.21	1.44	1.33	1.44	1.54	1.44	1.68	1.44	1.74	1.45	1.80	1.43	2.06	1.44	2.13	1.46