Trane[®] XStream[™] Water-cooled water chillers

With semi hermetic screw compressors for high temperature industrial process

Nominal cooling capacity 350 - 1500 kW

SEPR HT COMPLIANT

Best performance and maximum reliability

The water-cooled water chiller XStream[™] is the best solution for large process cooling applications when reliability and high performances are the main requirements. The XStream[™] units are designed to meet market requirements in terms of versatility and energy efficiency using high quality components. The smart stepless cooling capacity regulation, electronic expansion valves and high efficiency heat exchangers allow to increase the partial and full loads efficiency optimizing the seasonal performances.

Benefits

- Low GWP refrigerant R513A;
- Seasonal energy efficiency compliant with ErP Directive 2009/125/EC;
- · High energy efficiency levels, especially at partial loads;
- Smart stepless cooling capacity regulation with self-adaptive control;
- · High accuracy and adaptability in cooling capacity regulation;
- · Single compressors minimum capacity step 25%;
- Heat exchangers with low water side pressure drops in order to reduce the pumping systems management costs;
- Condenser outlet water temperature up to 60 °C.

Kits

- Pressure controlled or modulating condensing regulation valves;
- · Flanged hydraulic connections (evaporators);
- · Victaulic or flanged hydraulic connections (condensers);
- Anti-vibration mounts;
- · Remote display;
- xWEB300D PRO to monitoring, control and register data, based on "WEB server" technology;
- Modularity kit, for master/slave system management (up to 7 units).

Standard features

- High efficiency screw compressors with smart stepless cooling capacity regulation optimised for R513A refrigerant;
- · Check valve and shut-off valve on compressors discharge line;
- · Compressors crankcase heater and phase monitor;
- Automatic circuit breakers for compressors;
- · Electronic expansion valves;
- Single pass shell & tube heat exchangers optimised for R513A refrigerant;
- "Unloading" function that allows the start-up and operation of the units, even in conditions very different by the nominal ones;
- Programmable microprocessor electronic control with high computing capacity and user friendly interface, suitable for connectivity with RS485 Modbus protocol supervisor systems;
- Electrical panel protection rating IP54;
- · Inspections and tests performed on all units;
- · Non-freezing oil and refrigerant factory charged.

Configurations and options

- · Silent acoustic configuration;
- · Shut-off valve on compressors suction line;
- Soft-starter;
- Power factor correction capacitors (cosφ > 0,9).







Latest-generation touch screen user terminal.





High efficiency screw compressors designed for R513A refrigerant gas.

Electronic expansion valve.

General specifications

AQG2		1401	1601	1801	2101	2401	2801	3201	2802	3202	3402	3602	3902	4202	4502	4802	5202	5602	6402
Refrigerant		R513A																	
Nominal cooling capacity (1)	kW	351	400	471	550	619	693	767	724	860	916	965	1053	1148	1212	1275	1343	1392	1499
Total absorbed power (1)	kW	74	85	97	111	125	139	153	148	171	183	195	211	224	237	251	267	281	310
EER	-	4,73	4,69	4,87	4,95	4,95	4,98	5,03	4,89	5,03	5,00	4,94	4,99	5,13	5,10	5,07	5,03	4,95	4,84
SEPR HT (2)	-	8,34	7,63	8,25	8,15	8,18	8,97	9,09	8,64	8,19	8,25	8,44	8,29	8,44	8,42	8,49	8,46	8,88	8,70
Power supply	V/Ph/Hz	400±10%/3 - PE/50																	
Circuits / Compressors	N°				1/1									2/2					
Sound power (3)	dB(A)	93	94	94	95	95	96	97	96	97	97	97	97	98	98	98	99	99	100
Sound pressure (4)	dB(A)	65	66	66	67	67	68	69	68	69	69	69	69	70	70	70	71	71	72
Dimensions and weight		1401	1601	1801	2101	2401	2801	3201	2802	3202	3402	3602	3902	4202	4502	4802	5202	5602	6402
Width (W)	mm	3752	3747	3807	3807	3995	3995	3995	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390
Depth (D)	mm	1460	1460	1460	1460	1460	1460	1460	4966	4966	4920	4979	4982	4982	4982	4982	5030	5030	5032
Height	mm	1645	1645	1735	1735	1820	1820	1820	2165	2165	2165	2165	2278	2278	2278	2278	2278	2278	2278
Installed weight	kg	2154	2363	2695	2781	3143	3288	3338	4294	4572	4878	5185	5736	5802	5881	5961	6143	6295	6399

Data declared according to UNI EN 14511:2018. The listed noise levels, weights and dimensions refer to base units with no options fitted.

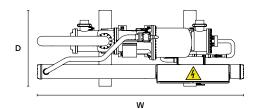
(1) Evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 30/35 °C;

(2) Data declared in compliance with the European Regulation (EU) 2016/2281 for high temperature process chillers;

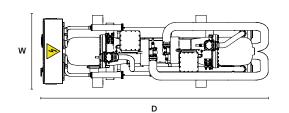
(3) Sound power: determined on the basis of measurements taken in accordance with the standard ISO 3744;

(4) Average value obtained in free field on a reflective surface at the distance of 10 m by the external side of the electrical panel of the unit and at height of 1.6 m by the unit foothold. Considered tolerances ±2 dB. The sound levels are referred to the full load operations in nominal working conditions.

Product layout (top view)



Mod. 1401 ÷ 3201



Mod. 2802 ÷ 6402





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