



AQUARIUS G



Water cooled water chillers
with semi hermetic screw compressors and R513A.
Nominal cooling capacity 456 – 1934 kW
Nominal heating capacity 399 – 1721 kW



Best performance and maximum reliability.

The AQUARIUS G water cooled screw chillers are the best solution for large process cooling applications when requirements are reliability and performances. They are designed to meet market requirements in terms of versatility and energy efficiency. Stepless cooling capacity regulation, electronic expansion valves and high efficiency heat exchangers with integrated heat recovery systems, contributes to obtain high performance both at full load and at partial load with exceptional seasonal efficiency value.



Cooling, conditioning, purifying.

Benefits

- Low GWP refrigerant R513A;
- High energy efficiency at full load and partial load;
- Stepless cooling capacity regulation with self-adaptive control;
- High precision and adaptability in cooling capacity regulation;
- Compressors minimum capacity step 25%;
- Heat exchangers with low water side pressure drops in order to save pumping costs;
- Two different acoustic configurations;
- Integrated heat recovery (partial or total heat recovery);
- Condenser outlet water temperature up to 60 °C.

Options

- Water side reversible heat pump version;
- MWT version (down to -8 °C outlet water temperature);
- Partial or total heat recovery;
- Soundproof housing for compressors (low noise acoustic configuration);
- Compressors valves (suction line);
- Soft starters to reduce mechanical stress of compressors;
- Power factor correction capacitors for compressors;
- Flanged hydraulic connections (evaporator side);
- Flanged or "Victaulic" hydraulic connections (condenser and heat recovery side).

Standard features

- Refrigerant R513A;
- High efficiency screw compressors with stepless regulation optimized for R513A refrigerant;
- Automatic circuit breakers for compressors;
- Compressor crankcase heaters;
- Check valve and shut-off valve on discharge line;
- Electronic expansion valves;
- Shell & tubes heat exchangers optimized for R513A refrigerant;
- Electrical cabinet protection rating IP54;
- Phase monitor which provides protection against phase loss and phase reversal;
- Microprocessor electronic control xDRIVE with high computing capacity and user friendly interface, suitable for connection with supervisor system;
- RS485 interface for connection to ModBus supervisor systems.

Kits

- Antivibration mountings;
- Condensing control kit (with servo-driven modulating valves or pressure control valves);
- Flanged hydraulic connection kit (evaporator side);
- Flanged or "Victaulic" hydraulic connection kit (condenser and heat recovery side).
- Replicated remote user display;
- Supervision system xWEB300D EVO;
- Modularity kit (master/slave configuration from 3 to 8 units).



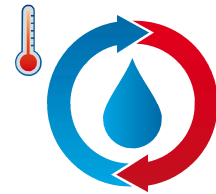
Latest-generation touch screen user terminal.



High efficiency screw compressors designed for R513A refrigerant gas.



The electronic expansion valve allows an improvement of performance.



Integrated partial or total heat recovery systems.

Models AQG2		1401	1601	1801	2101	2401	2801	3201	2802	3202	3402	3602	3902	4202	4502	4802	5202	5602	6402	
Nominal cooling capacity (1)	kW	456	520	612	717	804	905	1000	932	1109	1183	1241	1361	1492	1571	1650	1742	1803	1934	
Total absorbed power (1)	kW	82	92	106	119	134	149	163	163	185	200	215	231	240	255	270	288	303	333	
EER (2)		5,57	5,65	5,77	6,02	6	6,07	6,12	5,7	5,98	5,91	5,78	5,9	6,21	6,16	6,11	6,06	5,96	5,8	
SEPR HT (3)		8,32	7,62	8,23	8,14	8,17	8,95	9,07	8,62	8,18	8,23	8,43	8,27	8,43	8,40	8,47	8,44	8,87	8,68	
Nominal heating capacity (4)	kW	399	461	538	628	708	789	871	825	980	1044	1103	1199	1302	1377	1453	1529	1589	1721	
Total absorbed power (4)	kW	88	103	116	134	151	167	182	176	206	220	234	253	269	286	303	320	336	369	
COP (5)		4,54	4,50	4,64	4,70	4,70	4,73	4,77	4,68	4,76	4,75	4,72	4,74	4,84	4,82	4,80	4,78	4,73	4,67	
Power supply	V/Ph/Hz	400±10%/3 - PE/50																		
Circuits / Compressors	N°	1/1							2/2											
Sound power (6)	dB(A)	93	94	94	95	95	96	97	96	97	97	97	97	97	98	98	98	99	99	100
Sound pressure (7)	dB(A)	65	66	66	67	67	68	69	68	69	69	69	69	70	70	70	71	71	72	
Depth	mm	3752	3747	3807	3807	3995	3995	3995	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	
Width	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. All data refers to standard units without accessories/options which require an electrical feeding source and in nominal working conditions.

- (1) Data referred to nominal conditions, evaporator water temperature IN/OUT 20/15 °C and condenser water temperature IN/OUT 30/35 °C.
- (2) Data referred to the full load functioning: evaporator water temperature IN/OUT 20/15 °C and condenser water temperature IN/OUT 30/35 °C.
- (3) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products and high temperature process chillers.
- (4) Data referred to nominal conditions, evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 40/45 °C.
- (5) EER: data referred to the full load functioning: evaporator water temperature IN/OUT 20/15 °C and condenser water temperature IN/OUT 30/35 °C.
- (6) Sound power: determined on the basis of measurements taken in accordance with the standard ISO 3744.
- (7) Sound pressure at 10 m: average value obtained in free field on a reflective surface at a distance of 10 m from the external side of the electrical panel of machine and at a height of 1.6 m from the unit support base. Values with tolerance ± 2 dB. The sound levels refer to operation of the unit under full load in nominal conditions and with circulation pump.

The listed noise levels, weights and dimensions refer to base units with no options fitted.



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.



MTA products comply with European safety directives, as recognized by the CE symbol.



MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on: www.eurovent-certification.com Certification applied to the units: - Air/Water up to 600 kW - Water/Water up to 1500 kW



EAC Declaration

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