AQUARIUS PLUS 2

ErP

Water cooled water chillers with semi hermetic screw compressors and R134a
Nominal cooling capacity 464 – 1943 kW

Best performance and maximum reliability.

The Aquarius Plus 2 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.

MTA®

Cooling, conditioning, purifying.

Benefits

- High energy efficiency both at full load and at 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;
- Low noise levels, thanks also to the availability of two different acoustic versions;
- Fully bundled heat recovery solutions;
- Condenser outlet water temperature up to 60 °C.

Main options

- Partial or total heat recovery;
- Compressors acoustical enclosure (super silent acoustic configuration);
- Shut-off compressors' valves on suction line;
- Soft starter device allows a reduction in mechanical stress for compressors start-up;
- Capacitors for compressors;
- Condensing control kit (with servo-driven modulating valves or pressure control valves);
- Flanges kit on evaporator;
- Flanges kit or Victaulic kit on condenser and total heat recovery.

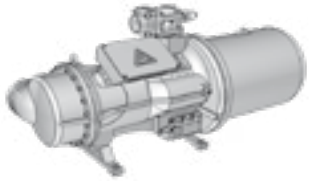
Standard features

- Environmentally friendly refrigerant R134a with zero ozone depletion potential;
- High efficiency screw compressors with stepless regulation optimized for R134a refrigerant gas;
- Automatic circuit breakers for compressors;
- Compressor crankcase heaters;
- Check valve and shut-off valve on discharge line;
- Electronic expansion valves;
- Single pass shell & tubes heat exchangers optimized for R134a refrigerant gas;
- Electrical panel with numbered wires, forced ventilation and IP54 protection class;
- 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;
- Ethernet connection featuring pre-programmed HTML supervision pages, allowing local or internet based visualization and modification of the operating parameters.

Sales kit

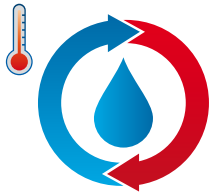
- Antivibration mounting kit;
- Remote control kit;
- xWEB300D EVO supervision kit.

Semigraphic user interface with multifunctional buttons and dynamic display icons.



High efficiency screw compressors designed for R134a refrigerant gas.

The electronic expansion valve allows an improvement of performance.



Integrated partial or total heat recovery systems.

Models AQP2		1401	1601	1801	2001	2301	2601	3001	3301	2802	3202	3402	3602	4002	4302	4602	4902	5202	5602	6002	6602
Nominal cooling capacity (1)	kW	355	413	472	520	582	641	706	759	725	831	889	938	1039	1098	1181	1230	1279	1358	1412	1497
Total absorbed power (1)	kW	72	80	92	100	112	123	134	143	143	159	171	183	198	209	223	233	244	256	268	288
EER (2)		4,92	5,19	5,15	5,22	5,20	5,23	5,28	5,30	5,06	5,24	5,21	5,13	5,24	5,24	5,30	5,27	5,24	5,29	5,28	5,20
SEPR HT (3)		6,89	7,77	7,79	7,82	7,84	7,90	7,99	8,02	7,74	7,89	7,85	7,81	7,90	7,94	7,98	7,97	7,97	7,99	8,00	7,87
Nominal cooling capacity (4)	kW	464	541	617	681	762	835	923	994	934	1080	1157	1216	1355	1432	1542	1601	1659	1765	1830	1943
Total absorbed power (4)	kW	78	86	99	108	121	132	144	154	154	170	184	197	214	225	240	251	263	277	288	311
EER (5)		5,94	6,29	6,22	6,31	6,30	6,31	6,40	6,44	6,07	6,34	6,29	6,17	6,34	6,36	6,42	6,37	6,32	6,38	6,35	6,25
Power supply	V/Ph/Hz	400±10%/3 - PE/50																			
Circuits / Compressors	N°	1/1								2/2											
Sound power (6)	dB(A)	95	96	97	97	97	97	98	98	98	98	99	99	99	99	99	100	100	100	101	101
Sound pressure (7)	dB(A)	67	68	69	69	69	69	70	70	70	70	71	71	71	71	71	72	72	72	73	73
Depth	mm	4344	4344	4326	4326	4326	4326	4334	4334	4966	4966	4920	4979	4982	4982	4982	4982	4982	5030	5030	5032
Width	mm	1460	1460	1460	1485	1485	1460	1460	1460	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390
Height	mm	1640	1645	1721	1721	1645	1770	1819	1819	2165	2165	2165	2165	2278	2278	2278	2278	2278	2278	2278	2278
Installed weight	Kg	2154	2363	2695	2738	2781	3143	3288	3338	4294	4572	4878	5185	5736	5767	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) **Nominal cooling capacity and Nominal absorbed power:** data referred to nominal conditions, evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 30/35 °C.

(2) **EER:** data referred to the full load functioning: evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 30/35 °C.

(3) **SEPR HT:** 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) **Nominal cooling capacity and Nominal absorbed power:** data referred to nominal conditions, evaporator water temperature IN/OUT 20/15 °C and condenser water temperature IN/OUT 30/35 °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 andat 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.

ISO 9001 BUREAU VERITAS Certification N° 220817

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

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

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

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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