



AQUARIUS G ME

Condenserless units with semi hermetic screw compressors.
Nominal cooling capacity 426 – 1829 kW

R513A



Best performance and maximum reliability.

The condenserless units AQUARIUS G ME are the best solution for large process cooling applications when reliability and high performances are the main requirements. The AQUARIUS G ME units are designed to meet market requirements in terms of versatility and energy efficiency using high quality components. The smart stepless cooling capacity regulation and electronic expansion valves allow to increase the partial and full loads efficiency optimising the seasonal performances.



Cooling, conditioning, purifying.

Benefits

- Low GWP refrigerant R513A;
- 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.

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 evaporators 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 cabinet protection rating IP54;
- Inspections and tests performed on all units.

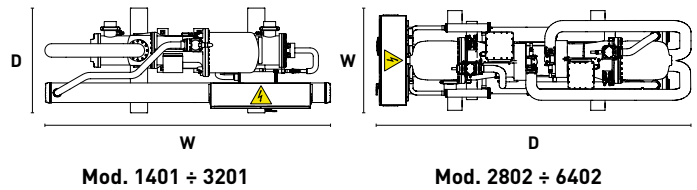
Options

- Soundproof compressors housing;
- Shut-off valve on compressors suction line;
- Soft starter;
- Power factor correction capacitors ($\cos\phi > 0,9$).

Kits

- Flanged hydraulic connections (evaporators);
- Antivibration mounts;
- Remote display;
- xWEB300D EVO to monitoring, control and register data, based on "WEB server" technology;
- Modularity kit, for master/slave system management (up to 7 units).

Product layout (top view)



Latest-generation touch screen user terminal.



High efficiency screw compressors designed for R513A refrigerant gas.



Electronic expansion valve.

Models AQG2 ME		1401	1601	1801	2101	2401	2801	3201	2802	3202	3402	3602	3902	4202	4502	4802	5202	5602	6402	
Nominal cooling capacity (1)	kW	426	488	577	674	756	850	939	876	1046	1117	1176	1288	1406	1480	1553	1641	1698	1829	
Total absorbed power (1)	kW	88,7	102,5	116,2	133,3	149,1	167,3	182,2	176,2	204,3	218,3	232,4	249,3	265,6	281,5	297,5	317,2	335,6	367,5	
EER (2)	-	4,80	4,76	4,96	5,06	5,07	5,08	5,15	4,97	5,12	5,12	5,06	5,17	5,29	5,26	5,22	5,17	5,06	4,98	
Nominal cooling capacity (3)	kW	322	369	436	507	573	640	710	670	798	850	898	978	1062	1122	1183	1244	1289	1394	
Total absorbed power (3)	kW	83	97	110	127	143	159	174	166	194	207	219	237	254	270	285	302	319	350	
EER (4)	-	3,87	3,80	3,98	3,99	4,02	4,03	4,08	4,03	4,10	4,11	4,09	4,13	4,18	4,16	4,15	4,12	4,04	3,99	
Power supply	V/Ph/Hz	400±10%/3 - PE/50																		
Circuits / Compressors	N°	1/1							2/2											
Sound power (5)	dB(A)	93	94	94	95	95	96	97	96	97	97	97	97	97	98	98	98	99	99	100
Sound pressure (6)	dB(A)	65	66	66	67	67	68	69	68	69	69	69	69	69	70	70	70	71	71	72
Width (W)	mm	3924	3876	3867	3867	3836	4111	4032	4966	4966	4979	4979	4982	4982	4982	4982	5030	5030	5032	
Depth (D)	mm	1460	1460	1460	1485	1460	1460	1460	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	1390	
Height	mm	1635	1640	1640	1640	1765	1814	1814	1985	1985	1985	1985	2098	2098	2098	2098	2098	2098	2098	
Installed weight	kg	1913	2090	2374	2402	2720	2822	2815	3765	3879	4193	4498	4954	4982	5032	5072	5191	5401	5562	

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. The listed sound levels, weights and dimensions refer to base chillers with no options/accessories fitted.

(1) Data referred to nominal conditions: evaporator water temperature IN/OUT 20/15 °C and condensing temperature 45 °C.

(2) Data referred to the full load functioning: evaporator water temperature IN/OUT 20/15 °C and condensing temperature 45 °C.

(3) Data referred to nominal conditions: evaporator water temperature IN/OUT 12/7 °C and condensing temperature 45 °C.

(4) Data referred to the full load functioning: evaporator water temperature IN/OUT 12/7 °C and condensing temperature 45 °C.

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

(6) 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 without accessories/options.



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.

M.T.A. S.p.A.

Business office
Viale Spagna, 8 - ZI
35020 Tribano (PD) - Italy
Tel. +39 049 9588611
Fax +39 049 9588612
info@mta-it.com
www.mta-it.com



Cooling, conditioning, purifying.