

AQUARIUS *plus*

Water cooled water chillers and heat pumps with screw compressors.



pure energy



Opting for the highest efficiency class in the centralised air conditioning system leads to numerous benefits: reduced energy consumptions; minimised operating costs; the avoidance of unnecessary dispersion of resources; and most importantly, limited direct and indirect environmental impact. The new AQUARIUS *plus* chiller range has been specially designed to maximise the cooling properties of refrigerant R134a and can be used to optimal effect in those applications in which the effective thermal load is lower than the nominal unit capacity for the majority of the system working cycle. The technical solutions adopted, combined with continuous compressor capacity control ensuring delivery of exactly the cooling capacity required by the installation, offer ESEER seasonal performance indices which are at the very top of the category.



Cooling, conditioning, purifying.

BENEFITS

- 19 models with single or tandem compressors to match each specific system requirement;
- Class leading nominal and seasonal energy efficiency ratings;
- Reduced noise levels, thanks also to the availability of two differing acoustic versions;
- Easy access to all components;
- Continuous control of the cooling capacity.

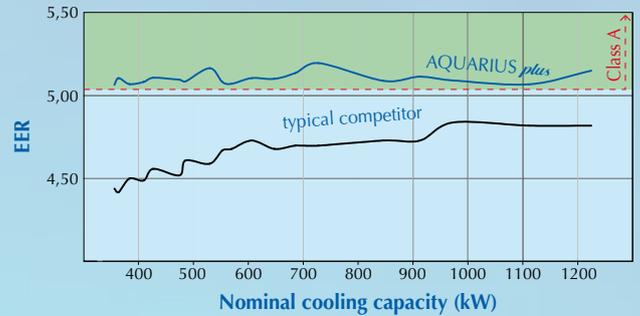
STANDARD FEATURES

- Electronic expansion valves as standard on models (1401-2401) and (2202-4802), optional for the remaining models;
- Semi-hermetic dual screw compressors expressly developed for use with R134a;
- Evaporator and shell and tube condensers optimised for operation with R134a;
- Easily adapted to heat pump operation;
- Check valve on compressor discharge, shut-off valves on suction and discharge lines;
- Shut-off valve and solenoid valve on the liquid line;
- Start-up with low peak current;
- Suitable for outdoor installation (IP44 protection rating);
- Refrigerants with R134a; Compressor crankcase heater;
- The xDRIVE control can manage in master/slave mode up to 10 units;
- Phase monitor against phase loss and phase reversal and checks the operating voltage limits.

MAIN OPTIONS

- Pressure control or servo-controlled valves for condensing pressure control;
- Condensers for tower or well water;
- Replicated remote user terminal or simple remote control;
- Connection to supervision systems;
- Antivibration dampers;
- Matching cooling towers or dry coolers available on request;
- Version for water temperatures down to -10 °C;
- Power factor correction condensers;
- Heat recovery exchangers (in dedicated unit frame).

A SAVING WHICH YOU CAN'T IGNORE



Semi-graphic user terminal with multifunction keys and dynamic icons.

Easy access to all components.

Electronic thermostatic expansion valves.

Continuous control of the cooling capacity.



Model AQP		1401	1601	1801	2101	2401	1402	1502	1602	1802	2002	2202	2502	2652	2802	3202	3402	3602	4202	4802	
Tower water																					
Cooling capacity	kW	356	427	486	553	607	364	384	410	475	530	570	648	686	728	847	913	974	1113	1225	
Absorbed power	kW	70	84	96	109	119	71	76	81	93	103	112	127	134	140	166	178	191	219	238	
ESEER	-	6,11	5,86	6,26	5,65	6,18	6,43	6,14	5,90	6,41	6,55	6,46	5,93	6,36	6,48	6,06	6,42	6,49	5,87	6,42	
Well water																					
Cooling capacity	kW	373	446	506	578	634	380	401	428	497	553	594	677	718	762	886	952	1014	1161	1281	
Absorbed power	kW	66	78	88	102	111	67	70	75	87	95	104	119	125	131	154	165	176	206	222	
Heat Pump																					
Heating capacity	kW	401	477	550	618	682	406	428	456	530	593	645	724	767	815	945	1025	1100	1242	1371	
Absorbed power	kW	84	100	117	129	143	85	90	96	110	123	138	151	159	168	198	216	234	259	285	
Power supply	V/Ph/Hz	400±10%/3/50																			
Circuits / Compressors	N°	1/1	1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	
Sound pressure level (N)	dB(A)	69,0	68,0	68,0	69,0	70,0	66,0	66,0	66,0	68,0	68,5	69,0	70,0	71,0	72,0	71,0	71,0	71,0	72,0	73,0	
Sound pressure level (SSN)	dB(A)	63,0	62,0	62,0	63,0	64,0	60,0	60,0	60,0	62,0	62,5	63,0	64,0	65,0	66,0	65,0	65,0	65,0	66,0	67,0	
Depth	mm	1020	1020	1020	1020	1020	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	
Width	mm	3345	3345	3345	3345	3345	3745	3745	3745	3745	3745	3745	3745	4295	3755	4745	4845	4860	4760	4760	
Height	mm	2020	2020	2110	2110	2110	1850	1850	1850	1850	1940	1940	1940	1940	2000	2130	2200	2200	2250	2250	
Installed weight	Kg	2455	2909	3420	3477	3586	2691	2966	2966	3024	3683	3983	4040	4409	4509	5826	6539	6539	6539	7141	

All data refers to standard units at the following nominal conditions:

Tower water: evaporator water inlet/outlet temperature 12-7 °C, condenser water inlet/outlet temperature 30-35 °C.

Well water: evaporator water inlet/outlet temperature 12-7 °C, condenser water inlet/outlet temperature 15-30 °C.

Heat pump: condenser water inlet/outlet temperature 40-45 °C; evaporator water inlet/outlet temperature 12-7 °C.

Heating capacity = Cooling capacity + Absorbed power.

Sound pressure level in hemispherical field at 10 m from condenser side and 1.6 m from ground. Values with tolerance ± 2 dB.

The sound levels refer to operation of the unit under full load in nominal conditions.

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

www.mta-it.com

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

Viale Spagna, 8 - ZI
35020 Tribano (PD) - Italy
Tel. +39 049 9588611
Fax +39 049 9588604
info@mta-it.com



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.



Cooling, conditioning, purifying.



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