



GALAXYTECH



Air cooled water chillers featuring hermetic scroll compressors with R410A.
Nominal cooling capacity 450 – 1349 kW



Precision and reliability for process cooling applications.

The GALAXYTECH range is the MTA product specific for cooling of large process cooling applications. It has been developed to ensure maximum efficiency at full load and, thanks to the multi-scroll technology, a precise regulation according to thermal load variations.

The multi-scroll solution, allowing the division of the total refrigerating capacity on a large number of steps, is also indicated for those installations where redundancy is a must, in order to ensure the continuous operation of the production process.



Cooling, conditioning, purifying.

Benefits

- HE version high efficiency;
- SHE and SSN version with super low noise levels;
- High efficiency performances at full load (EER);
- High value of SEPR efficiency, compliant with requirements of Regulation ERP EcoDesign;
- Wide operating limits for starting up and functioning even in the worst conditions;
- Wide range of options and kits for easy installation;
- Easy access to all components;
- Advanced electronic control with integrated web server;
- Supervision system connectivity.

Main options

- Shell and tube evaporator (only for 2 circuits units);
- Single or double water pump (one in stand-by) with low or medium head pressure;
- Water accumulation tank;
- Electronic expansion valves;
- IN/OUT compressors' valves;
- High efficiency Brushless EC condenser fans;
- Compressor housings for acoustic insulation (HE Version);
- Protection coating for condenser coils, suitable for installation in aggressive environments;
- Antifreeze heater on evaporator, pumps and tank;
- Metal mesh filters for condenser coil protection;
- Soft starter: are installed on each compressor and allow a reduction from 20% (depending by the model) of the start-up current compared to the direct start.

Standard features

- Environment friendly refrigerant R410A;
- Multiple scroll compressors (4, 6, 9 or 12 depending on the model) connected in parallel (tandem or trio) on 2, 3 or 4 independent refrigeration circuits;
- Stainless steel brazed plate dual-circuit evaporators "dual-circuit";
- xDRIVE electronic microprocessor controller with high computing capacity and an easy to use graphical interface;
- Crankcase heater and phase-monitor;
- Axial fans, developed on the basis of bionic principles that allow to achieve high performance with low noise emissions;
- Electrical protection rating IP54;
- High and low pressure transducer;
- Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit;
- Water flow switch to protect the plates evaporators;
- Water pressure switch to protect the shell and tube evaporator;
- Refrigerant charge, non-freezing oil and tests performed in the factory;
- Modbus RS485 serial output for connection to supervision systems;
- Ethernet port with HTML supervision pages preloaded for viewing and modifying the machine parameters to corporate or internet network;
- Serial connection to supervision systems;
- MTA xCONNECT Supervision based on internal web pages;
- xDRIVE features the ModBUS-RTU communication protocol as standard, allowing connection with the most widely utilised Building Management Systems (BMS). It also features an Ethernet port as standard, with HTML supervision pages preloaded for connection to a company intranet or the Internet. The xDRIVE can manage in master/slave mode up to 8 units.

Sales kit

- Antivibration mountings kit;
- Replicated remote user terminal kit;
- Simple remote control;
- Modularity kit for xDRIVE.



Semi-graphic user terminal with multi-function keys and dynamic icons.



Pump section with or without storage tank.



Optimisation of performance thanks to the multiscroll logic.



High efficiency EC axial fans with inverter technology.

Models GLT - HE version		120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Nominal cooling capacity [1]	kW	329	350	391	442	492	505	546	587	638	688	739	741	782	832	883	934	985
Total absorbed power [1]	kW	125	122	134	157	181	176	188	201	224	248	271	256	268	291	315	339	362
EER [2]		2,64	2,88	2,92	2,80	2,72	2,87	2,89	2,92	2,84	2,78	2,73	2,90	2,92	2,86	2,80	2,76	2,72
SEPR [3]		4,97	5,21	5,27	5,22	5,18	5,20	5,24	5,26	5,26	5,23	5,20	5,19	5,22	5,27	5,22	5,18	5,17
Max external air temperature [4]	°C	46	46	46	46	46	46	46	45	45	46	46	46	46	46	46	46	46
Nominal cooling capacity [5]	kW	450	474	528	601	675	685	738	792	865	939	1013	1002	1055	1129	1202	1275	1349
Total absorbed power [5]	kW	113	109	120	142	164	159	169	180	202	224	246	230	241	263	285	307	329
EER [6]		3,98	4,33	4,40	4,22	4,11	4,32	4,36	4,39	4,27	4,19	4,12	4,36	4,38	4,30	4,22	4,16	4,10
Max external air temperature [7]	°C	43	43	42	42	43	43	42	42	42	42	42	42	42	42	42	42	43
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50																
Circuits / Compressors	N°	2/4	2/6	2/6	2/6	2/6	3/9	3/9	3/9	3/9	3/9	3/9	4/12	4/12	4/12	4/12	4/12	4/12
Sound power [8]	dB(A)	97	97	96	96	97	98	98	97	98	98	98	99	99	99	99	99	99
Sound pressure [9]	dB(A)	69	69	68	68	69	70	70	69	70	70	70	71	71	71	71	71	71
Depth	mm	4530	4530	4530	4530	4530	6510	6510	6510	6510	6510	6510	8490	8490	8490	8490	8490	8490
Width	mm	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190
Height	mm	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425	2425
Installed weight	kg	3120	3458	3476	3512	3548	5146	5164	5189	5430	5665	5887	6781	6799	7038	7268	7508	7737

Data declared according to UNI EN 14511:2013.

- (1) **Nominal cooling capacity and Nominal absorbed power:** data referred to nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (2) **EER:** data referred to the full load functioning and nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (3) **SEPR:** 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) **Maximum external air temperature:** data declared referred to cooling mode and outlet water temperature 7 °C;
- (5) **Nominal cooling capacity and Nominal absorbed power:** data referred to nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
- (6) **EER:** data referred to the full load functioning and nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
- (7) **Maximum external air temperature:** data declared referred to cooling mode and outlet water temperature 15 °C;
- (8) **Sound power:** determined on the basis of measurements taken in accordance with the standard ISO 3744.
- (9) **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 recognised 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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