GALAXY TECH

ErP

Air cooled water chillers featuring hermetic scroll compressors with R410A.
Nominal cooling capacity 329 – 985 kW

Commercial air conditioning, flexible and efficient.

The GALAXY TECH range is the MTA product designed to meet the requirements for the commercial air conditioning application. Operation at partial loads corresponds to the largest portion of the working life of a unit dedicated to air conditioning application. For a typical comfort system, in fact, the thermal loads vary widely both during the year and throughout each 24 hour period.
The multi-scroll solution, allowing the division of total cooling capacity on a large number of steps, maximizes performance at partial loads, thus ensuring high levels of comfort and reducing the operating costs of the air conditioning system.
Compared to the technologies currently available on the market, this particular solution allows to limit the minimum volume of water required for the system and therefore to make easie installations. Flexibility and efficiency designed for the latest generation systems.

MTA®
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 SEER efficiency, compliant with requirements of Regulation ERP EcoDesign;
- Wide operating limits for staring 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;
- 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.

Sales kit

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

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 panel protection rating IP54;
- High and low pressure transducer;
- Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit;
- Electronic expansion valves;
- 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.

Versions

- HE - High energy efficiency and basic acoustic configuration;
- SHE - High energy efficiency and low noise acoustic configuration;
- SSN - Standard energy efficiency and very low noise acoustic configuration.

Models GLT		120			135			150			165			180			195			210			225			240		
Versions		**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**
Nominal cooling capacity (1)	kW	329	315	301	350	337	322	391	375	357	442	419	394	492	463	432	505	486	466	546	524	500	587	563	535	638	607	573
Total absorbed power (1)	kW	125	127	131	122	124	128	134	137	144	157	165	175	181	192	207	176	179	184	188	192	200	201	206	216	224	234	247
EER (2)		2,64	2,48	2,29	2,88	2,72	2,52	2,92	2,73	2,48	2,80	2,54	2,25	2,72	2,40	2,09	2,87	2,72	2,53	2,89	2,72	2,50	2,92	2,73	2,48	2,84	2,59	2,32
SEER (3)		4,97	4,92	4,83	5,21	5,15	4,91	5,27	5,15	4,85	5,22	4,90	4,85	5,18	4,81	4,96	5,20	5,16	4,96	5,24	5,16	4,88	5,26	5,16	4,85	5,26	4,96	4,80
Max external air temp. (4)	°C	47	44	41	48	45	42	49	46	42	47	43	38	47	43	38	48	45	42	48	46	42	49	46	42	47	43	38
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50																										
Circuits / Compressors	N°	2/4			2/6												3/9											
Sound power (5)	dB(A)	97	88	84	97	88	84	96	88	84	96	88	85	97	88	85	98	89	86	98	89	86	97	90	85	98	90	85
Sound pressure (6)	dB(A)	69	60	56	69	60	56	68	60	56	68	60	57	69	60	57	70	61	58	70	61	58	69	62	57	70	62	57
Depth	mm	4530			4530			4530			4530			4530			6510			6510			6510			6510		
Width	mm	2190			2190			2190			2190			2190			2190			2190			2190			2190		
Height	mm	2425			2425			2425			2425			2425			2425			2425			2425			2425		
Installed weight	kg	3172			3516			3533			3758			4001			5235			5254			5281			5521		

Models GLT		255			270			285			300			315			330			345			360		
Versions		**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**	**HE**	**SHE**	**SSN**
Nominal cooling capacity (1)	kW	688	651	611	739	695	649	741	712	679	782	750	713	832	794	751	883	837	788	934	881	826	985	925	864
Total absorbed power (1)	kW	248	261	279	271	288	310	256	261	272	268	275	288	291	303	319	315	330	351	339	357	382	362	385	413
EER (2)		2,78	2,49	2,19	2,73	2,41	2,09	2,90	2,72	2,50	2,92	2,72	2,48	2,86	2,62	2,35	2,80	2,54	2,25	2,76	2,47	2,16	2,72	2,40	2,09
SEER (3)		5,23	4,90	4,93	5,20	4,82	4,95	5,19	5,14	4,86	5,22	5,15	4,85	5,27	5,01	4,80	5,22	4,91	4,86	5,18	4,85	4,95	5,17	4,80	4,94
Max external air temp. (4)	°C	47	43	38	47	43	38	48	45	42	49	46	42	47	43	38	47	43	38	47	43	38	47	43	38
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50																							
Circuits / Compressors	N°	3/9						4/12																	
Sound power (5)	dB(A)	98	90	86	98	90	86	99	91	86	99	91	86	99	91	86	99	91	87	99	91	87	99	91	87
Sound pressure (6)	dB(A)	70	62	58	70	62	58	71	63	58	71	63	58	71	63	58	71	63	59	71	63	59	71	63	59
Depth	mm	6510			6510			8490			8490			8490			8490			8490			8490		
Width	mm	2190			2190			2190			2190			2190			2190			2190			2190		
Height	mm	2425			2425			2425			2425			2425			2425			2425			2425		
Installed weight	kg	5751			5972			6907			6923			7177			7393			7636			7868		

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) **SEER:** 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) **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 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

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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