



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;
- 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;
- IN/OUT compressors' valves;
- High efficiency Brushless EC condenser fans;
- Compressor housings for acoustic insulation (HE Version);
- Protection coating for condenser coils, 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.

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

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;
- 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.

Sales kit

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

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			
SEPR [3]		4,95	5,15	5,18	5,38	5,41	5,33	5,47	5,43	5,29	5,38	5,24	5,42	5,38	5,20	5,39	5,36	5,41	5,38	5,42	5,42	5,31	5,47	5,43	5,28	5,40	5,28	5,33			
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			
Nominal cooling capacity [5]	kW	451	432	414	474	457	438	528	507	483	601	571	539	675	635	595	685	660	634	738	710	679	792	761	725	865	825	781			
Total absorbed power [5]	kW	113	116	120	109	112	116	120	124	130	142	150	160	164	175	189	159	161	167	169	174	181	180	186	196	202	212	225			
EER [6]		3,98	3,74	3,46	4,33	4,09	3,77	4,40	4,10	3,71	4,22	3,82	3,37	4,11	3,63	3,14	4,32	4,09	3,80	4,36	4,09	3,75	4,39	4,09	3,70	4,27	3,90	3,47			
Max external air temp. [7]	°C	44	40	36	45	42	38	46	42	38	44	39	33	44	39	33	45	42	38	45	42	38	46	42	38	44	39	33			
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50																													
Circuits / Compressors	N°	2/4			2/6																		3/9								
Sound power [8]	dB(A)	97	88	84	97	88	84	96	88	84	96	88	85	97	88	85	98	89	86	98	89	86	97	88	85	98	90	85			
Sound pressure [9]	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			
SEPR [3]		5,41	5,26	5,30	5,40	5,21	5,39	5,42	5,41	5,29	5,45	5,42	5,29	5,41	5,32	5,33	5,38	5,25	5,43	5,36	5,20	5,37	5,38	5,18	5,37			
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			
Nominal cooling capacity [5]	kW	939	889	837	1013	954	893	1002	964	921	1055	1014	966	1129	1078	1022	1202	1142	1078	1275	1206	1133	1349	1270	1189			
Total absorbed power [5]	kW	224	237	254	246	262	283	230	236	247	241	248	261	263	274	290	285	299	320	307	325	349	329	351	379			
EER [6]		4,19	3,75	3,29	4,12	3,63	3,15	4,36	4,09	3,73	4,38	4,08	3,70	4,30	3,94	3,52	4,22	3,81	3,37	4,16	3,71	3,25	4,10	3,62	3,14			
Max external air temp. [7]	°C	44	38	33	44	38	33	45	42	38	46	42	38	44	39	33	44	39	33	44	39	33	44	39	33			
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50																										
Circuits / Compressors	N°	3/9									4/12																	
Sound power [8]	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 [9]	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) Data referred to nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
 - (2) 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) 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) Data declared referred to cooling mode and outlet water temperature 7 °C;
 - (5) Data referred to nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
 - (6) 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) Data declared referred to cooling mode and outlet water temperature 15 °C;
 - (8) Determined on the basis of measurements taken in accordance with the standard ISO 3744.
 - (9) 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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