

GALAXY *tech*

Air cooled water chillers with R410A
with tandem/trio scroll compressors.



pure ENERGY



Operation at partial loads corresponds to the largest portion of the working life of a unit dedicated to air conditioning applications: typically thermal loads vary widely both during the year and throughout each 24 hour period. The subdivision of the total cooling capacity over a large number of capacity steps, rendered possible thanks to the implementation of multi-scroll technology and environmentally friendly refrigerant R410A, ensure maximised performance at partial loads, resulting in seasonal energy savings of more than 16% with respect to conventional solutions. The multi-scroll configuration offers a lightweight solution, and permits the volume reduction of the storage tank with the associated dispersal of cooling energy, thus further reducing the static loading on the unit supports. Progressive stopping of the compressors and fans means that Galaxytech is extremely quiet in operation, rendering it ideal for installation in noise-sensitive surroundings.



Cooling, conditioning, purifying.

BENEFITS

- Reduced noise levels, thanks also to the availability of three differing acoustic versions;
- High EER levels, especially at partial loads;
- Ideal for large hydronic air conditioning installations in public and private surroundings;
- Allows start-up and operation in even the most severe conditions;
- Easy to installation thanks to direct access water connections and the presence of headers (victaulic connections);
- Simple to install and maintain, easily accessible components.

STANDARD FEATURES

- 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" or shell and tube;
- Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit;
- Main switch;
- Axial fans with progressive starting for condensing pressure control;
- High and low pressure transducer; Compressor crankcase heater;
- Water differential pressure switch, air bleed valve and water drain valve;
- Water collectors for twin evaporator models;
- Factory tested and supplied with refrigerant charge and antifreeze oil;
- Environmentally friendly refrigerant R410A with zero ozone depletion potential;
- 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

- 1 or 2 pumps and water pressure gauge;
- Storage tank;
- Condenser coils designed for aggressive atmospheres;
- Metal mesh filters for condenser coil protection;
- Electronic fan speed control;
- Compressor suction and discharge valves;
- Electronic thermostatic expansion valve;
- Antifreeze heater on evaporator, pumps and tank;
- Compressor crankcase heater;
- Antivibration dampers;
- Serial connection to supervisor systems;
- Replicated remote user terminal.

VERSIONS

- Chiller;
- Low ambient air temperature in cooling mode (down to -20 °C);
- Version with recovery desuperheaters (special execution);
- Version with total recovery condensers (special execution);
- Special applications for water temperatures down to -10 °C;
- Acoustic configurations: N (standard), SN (low noise), SSN (very low noise), HE (high efficiency), SHE (low noise high efficiency).

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



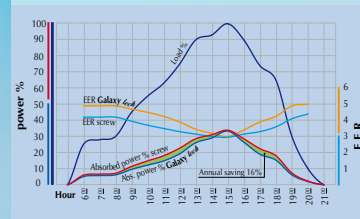
Pump section with or without storage tank.



Optimisation of performance thanks to the multiscroll logic.



Multiscroll chiller vs screw chiller.



Model GLT		120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Cooling capacity	kW	359	402	447	488	529	584	629	676	717	758	799	850	894	935	976	1017	1057
Absorbed power	kW	109	125	141	153	164	180	196	212	224	235	247	266	283	294	305	317	328
ESEER (N)	-	4,33	4,23	4,26	4,40	4,47	4,29	4,32	4,34	4,44	4,49	4,55	4,32	4,33	4,40	4,47	4,51	4,54
ESEER (HE)	-	4,72	4,51	4,51	4,51	4,52	4,58	4,57	4,57	4,67	4,56	4,57	4,57	4,56	4,55	4,55	4,64	4,51
ESEER (SHE)	-	4,99	4,77	4,74	4,85	4,88	4,88	4,84	4,81	4,96	4,90	4,94	4,88	4,84	4,89	4,92	5,03	4,83
Max external air temperature (N)	°C	46	46	46	46	46	46	46	45	45	46	46	46	46	46	46	46	46
Max external air temperature (HE)	°C	51	48	48	48	51	48	48	48	48	48	51	48	48	48	48	48	46

Power supply	V/Ph/Hz	400±10%/3/50																	
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	3/9	4/12	4/12	4/12	4/12	4/12	4/12
Sound pressure version (N)	dB(A)	66,6	66,5	66,3	66,4	66,6	67,6	67,5	67,4	67,5	67,7	67,9	68,7	68,6	68,7	68,8	68,9	69,0	
Sound pressure version (SN)	dB(A)	59,2	59,1	58,9	59,0	59,1	60,1	60,0	60,1	60,0	60,1	60,3	61,2	61,1	61,2	61,3	61,3	61,4	
Sound pressure version (SSN)	dB(A)	52,9	53,0	53,1	53,9	54,1	54,7	54,6	54,8	55,4	55,9	56,4	56,0	56,1	56,5	56,9	57,2	57,5	
Sound pressure version (HE)	dB(A)	65,6	65,8	65,8	66,6	67,3	67,5	67,6	67,6	68,1	68,6	69,1	68,8	68,8	69,3	69,6	70,0	70,2	
Sound pressure version (SHE)	dB(A)	58,2	58,5	58,6	60,0	60,2	60,3	60,3	60,8	61,3	61,7	61,5	61,6	62,0	62,3	62,7	62,7	62,8	
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	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	
Installed weight	Kg	3106	3407	3505	3711	3908	5040	5138	5240	5449	5651	5840	6787	6884	7091	7287	7495	7691	

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

Chiller: evaporator water inlet-outlet temperature 12-7 °C, external air temperature 35 °C.

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 and with circulation pump.

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



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

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



Cooling, conditioning, purifying.



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.