

# GALAXY

GALAXY  
GALAXYtech

Air cooled water chillers with R410A and R407C featuring tandem/triple scroll compressors. Cooling capacity 366 - 1079 kW.



## TECHNICAL DATA

Model GLT - GL		
R410A (Leak)	Cooling capacity	kW
	Absorbed power	kW
	ESEER	-
	IPLV	-
	Max external air temp.	°C
R407C	Cooling capacity	kW
	Absorbed power	kW
	Max external air temp.	°C
	Power supply	V/Ph/Hz
	Noise level	dB(A)
	Depth	mm
	Width	mm
	Height	mm
	Installed weight	Kg

## BENEFITS

- Reduced noise levels, thanks also to the availability of three differing acoustic versions;
- High EER/COP levels, especially at partial loads;
- Allows start-up and operation in even the most severe conditions thanks to the unloading function;
- Easy to installation thanks to direct access water connections and the presence of headers (victaulic connections);
- Simple to install and maintain, easily accessible components;
- Compatible with the latest BMS supervision and interface systems.

## MAIN OPTIONS

- Add-on external pumping unit with 1 or 2 pumps;
- Storage tank;
- Condenser coils designed for aggressive atmospheres;
- Metal mesh filters for condenser coil protection;
- Fan step regulation
- Compressor suction and discharge valves;
- Electronic expansion valve;
- Antifreeze heater on evaporator, pumps and tank.
- Compressor crankcase heater;
- Antivibration springs kit;
- Serial connection to supervisor system;
- Master-slave configuration allowing the interconnection and control of up to 4 units in parallel.
- Replicated remote control interface.

## 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";
- Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit;
- Main switch;
- Phase monitor;
- Axial fans with progressive starting for condensing pressure control, arranged in two independent aeraulic sections;
- High and low pressure transducer;
- Thermostatic expansion valves, refrigerant fitters, sight glasses, solenoid valve on liquid line;
- Water differential pressureswitch, 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 refrigerants with R410A and R407C zero ozone depletion potential.

## VERSIONS

- Chiller;
- Low ambient air temperature in cooling mode (down to -20 °C);
- Version with recovery desuperheaters;
- Version with total recovery condensers;
- Applications for water temperatures down to -10 °C;
- Special applications with dual set-point operation;
- Acoustic configurations:
  - N (standard);
  - SN (low noise);
  - SSN (very low noise).

120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
359	402	447	488	529	584	629	676	717	758	799	850	894	935	976	1017	1057
109	125	141	153	164	180	196	212	224	235	247	266	283	294	305	317	328
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
4,52	4,37	4,42	4,56	4,64	4,49	4,52	4,56	4,65	4,72	4,78	4,49	4,51	4,58	4,65	4,69	4,73
46	46	46	46	46	46	46	45	45	46	46	46	46	46	46	46	46
361	398	440	488	535	577	618	660	709	756	805	838	879	928	975	1023	1070
117	130	142	160	177	188	201	214	231	248	266	272	285	302	319	337	354
46	46	46	45	45	46	46	46	46	45	45	46	46	46	45	45	45
400±10%/3/50																
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
4530	4530	4530	4530	4530	6510	6510	6510	6510	6510	6510	8490	8490	8490	8490	8490	8490
2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190
2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360	2360
3106	3407	3505	3711	3908	5040	5138	5240	5449	5651	5840	6787	6884	7091	7287	7495	7691

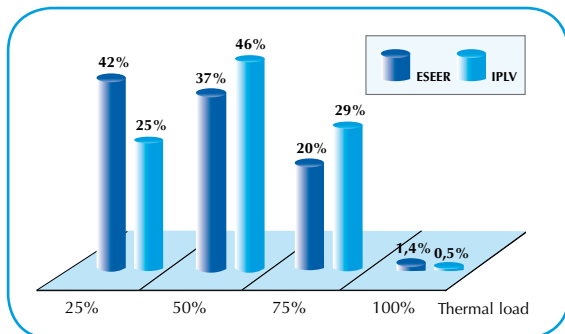
All data refers to standard units at the following nominal conditions:

- Chiller: evaporator water inlet-outlet 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.

## PARTIAL LOADS

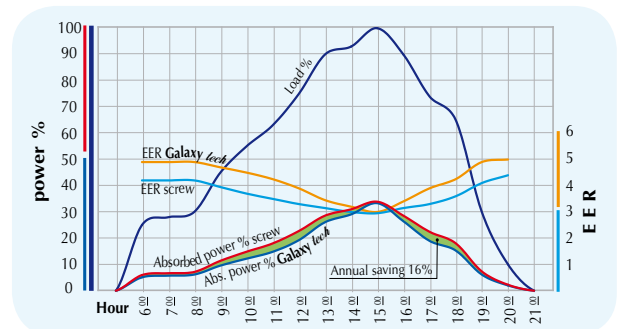
ESEER and IPLV operating time percentages



The standardised IPLV and ESEER indices establish the average weighted efficiency of a chiller and provides insight – in a more accurate manner than the EER value – into the relationship between the useful effect (energy removed from the rooms) and the energy expended (electrical power consumption) of an air conditioning unit throughout an entire season of operation.

The graphs show the importance of operation at partial load from the energy standpoint.

## MULTISCROLL SOLUTION



City: Milan - Application: offices air conditioning

Comparison of absorbed power during a hot summer day; the chart refers to the worst situation among the possible ones during the whole year, as the multiscroll chiller maximizes the EER at partial loads.

6-key semi-graphic backlit PGD terminal.

Optimisation of performance in the most frequent duty conditions thanks to the multiscroll logic.

Pump section with or without storage tank.

