

Galaxy Tech 359-1057kW

120-360



## ABOUT THE CHILLER

The ICS range of Galaxy chillers feature the latest energy-saving Maneurope Scroll Compressors (4,6,9 or 12 depending on the model), and offer a wide temperature range.

The chiller is manufactured to the latest environmental ISO14001 controls and is fully Eurovent Compliant with R410a refrigerant.

## ICS INDUSTRIAL COOLING SERVICE

ICS can also supply the following equipment:

- Air Cooled Chillers
- Water Cooled Chillers
- Heat Pump Chillers
- Cooling Towers
- Air Blast Coolers
- Heat Exchangers
- Heaters
- Bespoke Manufacturing
- Pumps & Condensers

## BENEFITS

The GalaxyTech provides a wide range of benefits including:

- Multi-scroll technology
- High EER/COP levels
- Lowest sound emissions on the market
- Advanced digital control technology
- Flexible modification availability for various applications

## TECHNICAL SPECIFICATIONS

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Cooling capacity kW	381.12	426.69	474.54	517.61	560.72	619.51	667.37	717.97	761.04	804.43	847.53	901.23	949.09	992.16	1035.26	1078.33	1121.44
Compressor absorbed power kW	99.12	113.03	128.21	138.68	149.2	162.18	177.35	192.77	203.24	213.8	224.32	241.24	256.41	266.89	277.41	287.88	298.40
Capacity control %	4 steps	6 steps				9 steps					12 steps						
Number of refrigerant circuits	2					3					4						
Number of compressors	4	6				9					12						
IPLV/ESEER	4.52/ 4.33	4.37/ 4.23	4.42/ 4.26	4.56/ 4.40	4.64/ 4.47	4.49/ 4.29	4.52/ 4.32	4.56/ 4.34	4.65/ 4.44	4.72/ 4.49	4.78/ 4.55	4.49/ 4.32	4.51/ 4.33	4.58/ 4.40	4.65/ 4.47	4.69/ 4.51	4.73/ 4.54
Refrigerant	R410A																

### Evaporator

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Evaporator Operating °C	12/7																
Evaporator or water flowrate m <sup>3</sup> /h	61.57	73.00	81.23	88.59	95.96	106.07	114.3	122.87	130.41	137.78	145.14	154.4	162.62	169.99	177.36	184.73	192.1
Fouling factor m <sup>2</sup> °C/kW	0.00																
Evaporator pressure drop kPa	40	56	53	59	54	49	49	48	52	53	51	59	60	63	64	64	62

### Fans

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Number of fans	8					12					16						
Total nominal airflow m <sup>3</sup> /h	50.7	49.6	48.4	49.6	46.2	74.9	73.8	72.7	71.6	70.4	63.9	98.0	96.9	95.8	94.7	93.6	92.4
Power absorbed kW	2																

### Electrical Data

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Main electrical supply	400/III/50Hz																
Maximum power kW	151	171	189	204	218	248	266	284	298	313	328	361	378	393	408	422	437
Maximum intensity (A)	255	297	329	348	366	428	461	494	512	531	549	626	659	677	695	714	732
Starting current (A)	519	507	540	612	630	639	672	705	777	795	813	836	869	942	960	978	996

### Dimensional Data

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
Length mm	4530					6510					8490						
Width mm	2190																
Height mm	2360																
Operating weight (kg)	3106	3407	3505	3711	3908	5040	5138	5240	5449	5651	5840	6787	6884	7091	7287	7495	7691

Maximum external air temperature, refer to cooled water inlet 12°C and outlet water temperature condition at 7°C, ambient temperature 35°C.

E&OE. All data is subject to change and continuous improvement without notice.  
Equipment designed to ISO 9001 and all relevant electrical, pressure and mechanical directives.  
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## Sound levels

	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
63Hz	58.7	58.1	57.4	57.2	57.0	59.5	59.0	58.5	58.3	58.0	57.8	59.5	59.1	59.0	58.9	58.8	58.6
125Hz	75.1	74.6	74.0	73.5	73.1	74.7	74.4	74.1	73.7	73.4	73.6	75.9	75.6	75.4	75.1	74.7	74.7
250Hz	86.1	85.6	85.0	84.5	84.0	85.1	84.9	84.6	84.3	84.0	84.6	87.0	86.7	86.4	86.1	85.8	85.3
500Hz	88.4	89.0	89.1	88.5	87.8	89.8	90.0	90.1	89.7	89.3	89.0	91.4	91.5	91.2	90.8	90.5	90.0
1000Hz	88.6	89.1	88.9	88.6	88.2	90.3	90.2	90.1	89.9	89.6	89.5	91.4	91.3	91.1	90.9	90.8	90.5
2000Hz	88.2	86.8	86.5	87.8	88.8	88.4	88.2	88.0	88.9	89.7	90.3	89.1	88.9	89.7	90.4	91.0	91.5
4000Hz	84.7	83.5	82.9	84.8	86.1	85.6	85.2	84.7	86.0	87.0	87.8	86.0	85.7	86.8	87.7	88.4	89.0
8000Hz	80.2	81.2	80.1	81.1	81.8	83.3	82.7	82.0	82.6	83.1	83.6	83.7	83.1	83.6	84.0	84.4	84.8
Global sound power level dB (A)	94.6	94.5	94.3	94.4	94.6	95.6	95.5	95.4	95.5	95.7	95.9	96.7	96.6	96.7	96.8	96.9	97.0
Global sound pressure 10.0m level 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

Measurements are taken in accordance with the standard ISO3744.

Sound pressure average value obtained in free field on a reflective surface at a distance of 10m from the condenser coils at a height of 1.6m +/-2 under full load in normal conditions.

Additional services: ICS can provide attenuated equipment and services to help further reduce the impact of our equipment to help meet your specific site requirements.

## Sub 5°C Water Applications

When installing a chiller and /or air handling piece of equipment, we would recommend the use of the following mix of Glycol for the systems total volume of fluid.

This will protect the equipment against internal freezing and failure (e.g. 200 litre volume @ 0°C food safe equals 30 litres of Glycol and 170 litres of water).

Weekly checks should be made by the site maintenance engineer/manager to ensure the correct mix is present in the system.

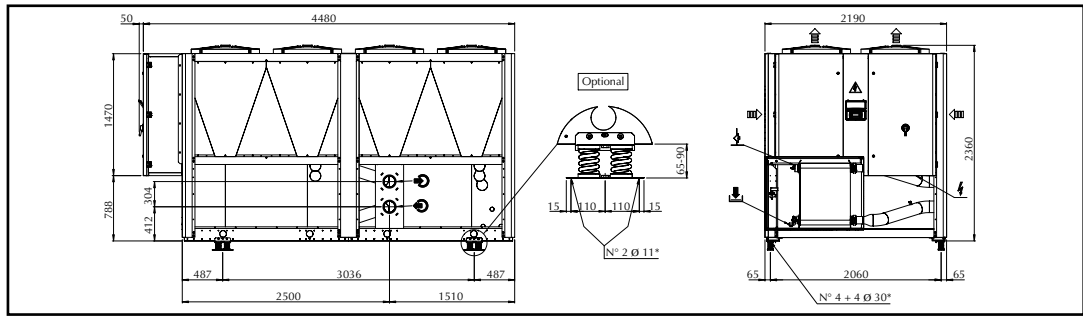
## Water/Glycol Recommendations and Guide:

Water temperature			5°C	0°C	-5°C	-10°C	-15°C
Industrial Grade	Mono Ethylene Glycol	% Mix	5	10	20	25	30
Food safe grade	Mono Propylene Glycol	% Mix	10	15	20	25	30
Bio food safe grade (made from vegetable extracts)	Biodegradable Glycol	% Mix	10	15	20	25	30

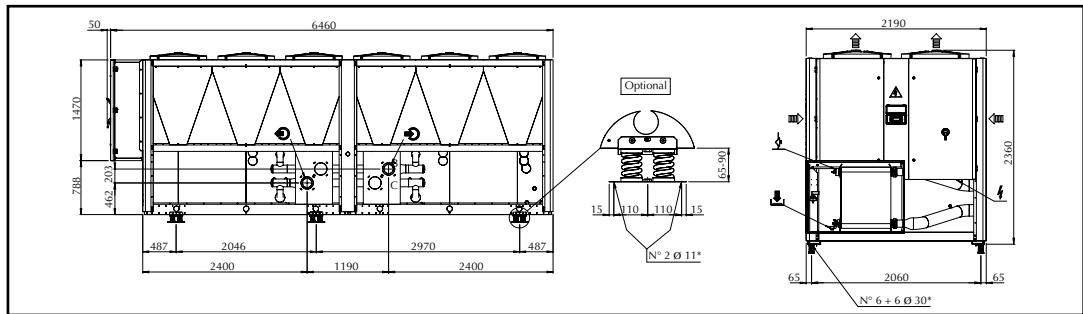
Glycol can be purchased from ICS in 25 litre, 205 litre and 1,000 litre drums.

# GA DRAWINGS

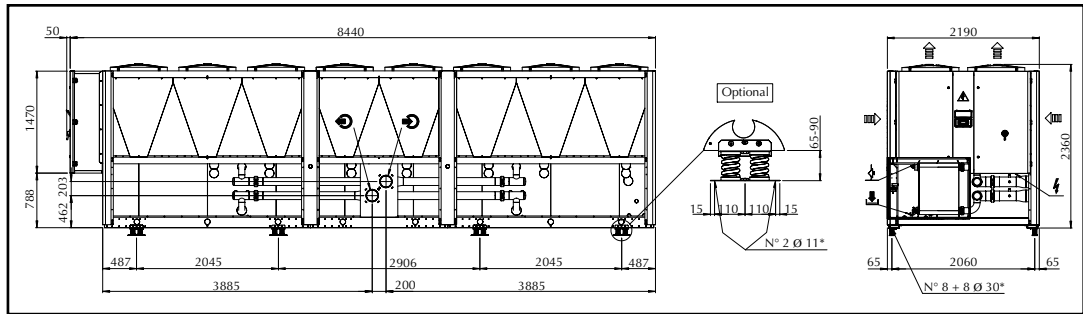
## 120 - 180



## 195 - 270



## 285 - 360



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