



# airconditioning

HVAC TECHNOLOGY

Aries Tech - 162-331kW

070-140



## ABOUT THE CHILLER

The ICS range of Aries chillers feature the latest energy-saving Maneurope Scroll Compressors (4), 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 Taurus Tech provides a wide range of benefits including:

- Multi-scroll technology
- High EER/COP levels, especially at partial loads
- Advanced digital control technology
- Simplified installation and easy access to all components
- Flexible modification availability for various applications

## TECHNICAL SPECIFICATIONS

	070	080	090	100	110	120	130	140
Cooling capacity kW	161.6	195.8	212.6	225.2	250.1	272.2	311.5	330.8
Compressor absorbed power kW	42.63	61.62	65.7	72.03	85.04	99.73	100.71	111.41
Capacity control %	4 steps							
Number of refrigerant circuits	2							
Number of compressors	4							
IPLV/ESEER	4.08/3.87	4.53/4.18	4.58/4.33	4.58/4.36	4.49/4.15	4.46/4.18	4.38/4.10	4.36/4.13
Refrigerant	R410A							

### Evaporator

	070	080	090	100	110	120	130	140
Evaporator operating °C	12.0/7.0							
Evaporator water flowrate m <sup>3</sup> /h	27.59	33.42	36.33	38.56	42.84	46.61	53.29	56.55
Fouling factor M <sup>3</sup> °C/kW	0.00							
Evaporator pressure drop kPa	47	51	52	51	51	40	44	42

### Fans

	070	080	090	100	110	120	130	140
Number of fans	4						6	
Total nominal airflow m <sup>3</sup> /h	43125	39843			44438		59766	
Power absorbed kW	2							

### Electrical Data

	070	080	090	100	110	120	130	140
Main electrical supply	400/III/50Hz							
Maximum power kW	75	87	94	100	112	123	137	147
Maximum intensity (A)	135	153	161	170	192	214	234	247
Starting Current (A)	277	341	350	359	415	437	517	529

### Dimensional Data

	070	080	090	100	110	120	130	140
Length mm	3495				4595			
Width mm	2188							
Height mm	1989							
Operating weight kg	1765	1941	2005	2068	2296	2319	2504	2599

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

## Sound levels

	070	080	090	100	110	120	130	140
63Hz	58.1	57.2	57.2	57.2	57.2	57.2	57.8	57.8
125Hz	75.7	74.8	74.8	74.8	74.8	74.8	75.4	75.4
250Hz	87.2	86.3	86.3	86.3	86.3	86.3	86.9	86.9
500Hz	88.1	87.2	87.2	87.2	87.2	87.2	87.8	87.8
1000Hz	88.1	87.2	87.2	87.2	87.2	87.2	87.8	87.8
2000Hz	85.2	84.3	84.3	84.3	84.3	84.3	84.9	84.9
4000Hz	77.3	76.4	76.4	76.4	76.4	76.4	77.0	77.0
8000Hz	66.9	66.0	66.0	66.0	66.0	66.0	66.6	66.6
Global sound power level dB	93.6	92.6					93.3	
Global sound pressure level 10.0m dB (A)	65.6	64.6					65.3	

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.

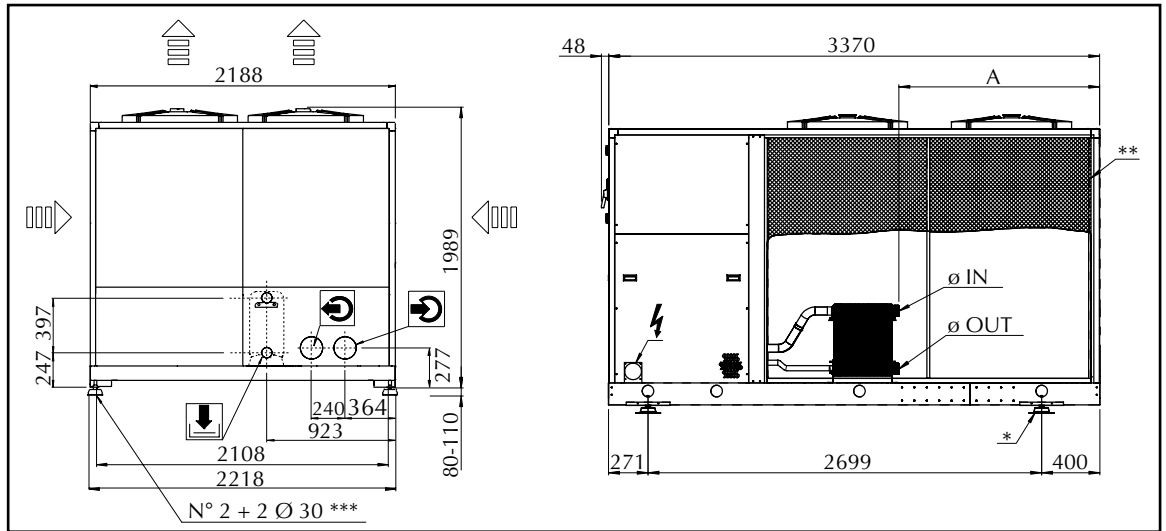
## Water/Glycol Recommendations and Guide:

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

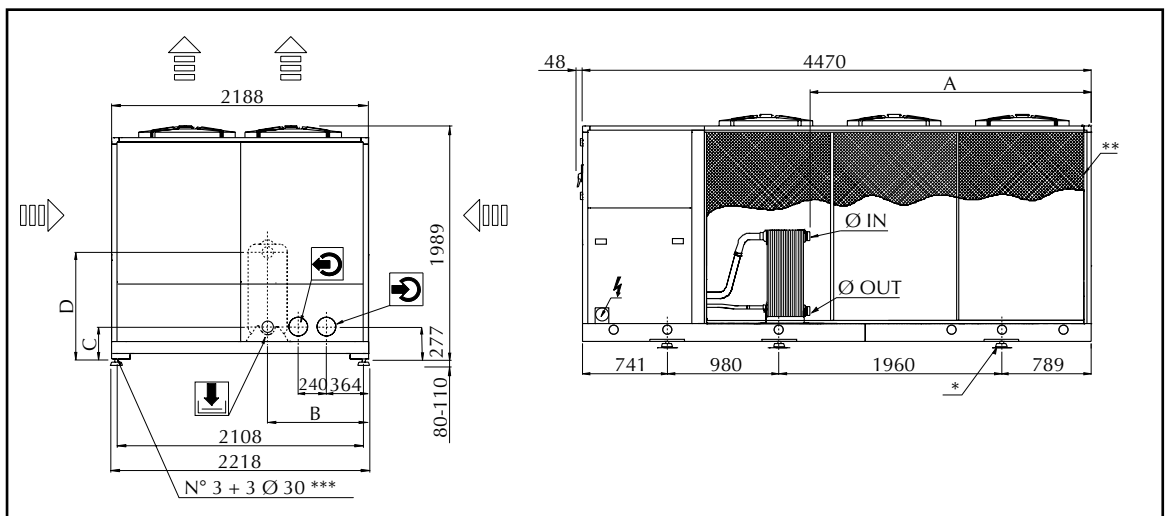
Glycol can be purchased from ICS in 25 litre, 205 litre and 1,000 litre drums.

# GA DRAWINGS

## 070 - 100



## 090 - 140



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[www.icstemp.com](http://www.icstemp.com)

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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