



# coolenergy

TEMPERATURE RENTAL

TAE Evo 031/051

10kW/14kW Rental Chillers



## ABOUT THE CHILLER

Cool Energy's 10kW/14kW TAE Evo chillers have integral thermal buffer tanks in order to give a controlled band of temperature control to your process or HVAC system.

This chiller offers a wide temperature range of -5 °C to 15 °C water leaving and can be modified to -15 °C where necessary. The unit is also supplied with an integral process pump together with quick-release water and power connections for a fast start-up.

With low noise operation and compact footprint, the TAE Evo chillers are fully packaged to simplify installation on site and easy set up and control.

## Cool Energy Product Range

Cool Energy can also supply the following equipment:

- Air-cooled rental chiller range from 0.3kW – 1,000kW units.
- Water-cooled rental chiller range from 7.5kW – 1,000kW units.
- Air handling units & fan coils from 5kW – 500kW duties.
- Air conditioning units from 1.3kW – 350kW units.
- Low temperature chillers (-30 °C) and fan coils (0 °C air off).
- Dehumidifiers (desiccant & electric) 200 - 10,000m<sup>3</sup>/hr.
- Generator Power with 20KVA – 800KVA fuel tanks and management.
- Air distribution (flexible ducting and perforated air socks).
- Hot water generators and boilers from 25kW – 500kW units.
- Heating (office/warehouse) from 3kW to 200kW electric/indirect/heat pump.

We also provide full installation, transportation, lifting and monitoring.



## TECHNICAL

### HVAC & Process Cooling Chiller: 10kW/14kW TAE Evo 031/051 Units

#### Performance data @ design conditions

		TAE Evo 031	TAE Evo 051
Cooling Capacity	kW	10	14
Operation Fluid Temperature IN/OUT	°C	12/7	12/7
Design Ambient Temperature	°C	30	30
Fluid Flow Min/Max	m <sup>3</sup> /hr	0.7/6.0	1.0/6.0
	l/s	0.19/1.6	0.28/1.6

#### Operating limits

Min/Max Ambient Temperature	°C	-18/43	18/43
Min/Max Leaving Fluid Temperature	°C	-5/15	-5/15
Evaporator Pressure Drop	kPa	41	41
Max Working Pressure	kPa	600	600
Evaporator Water Volume	l	115	115

#### Electrical data

Electrical Supply Voltage 3 phase	V	400	400
Chiller Power Connections		16amp C Fome Plug	16amp C Fome Plug
Cable Connection (240mm <sup>2</sup> per phase)	M12	3 core + earth, no neutral	3 core + earth, no neutral
Max Power Absorbed	kW	6.0	7.9
Max Current Absorbed	A	11.0	14.0
Starting Current (Max)	A	40.0	69
Pre-Heating Crankcase Supply	V	N/A	N/A
AUX Supply Connection		N/A	N/A
Recommended Generator Set	kVA	5	5
Control System		Dixell	Dixell

#### Refrigerant System

Maneurop Scroll Compressors (1 circuit)		1	1
(0 - 100% Capacity)			
Refrigerant (Zero ozone depletion potential)	HFC	R407c	R407c

#### Fans

Total Number	1.1kW each	1	1
Total Airflow	m <sup>3</sup> /hr	6.6	6.4

#### Sound Data

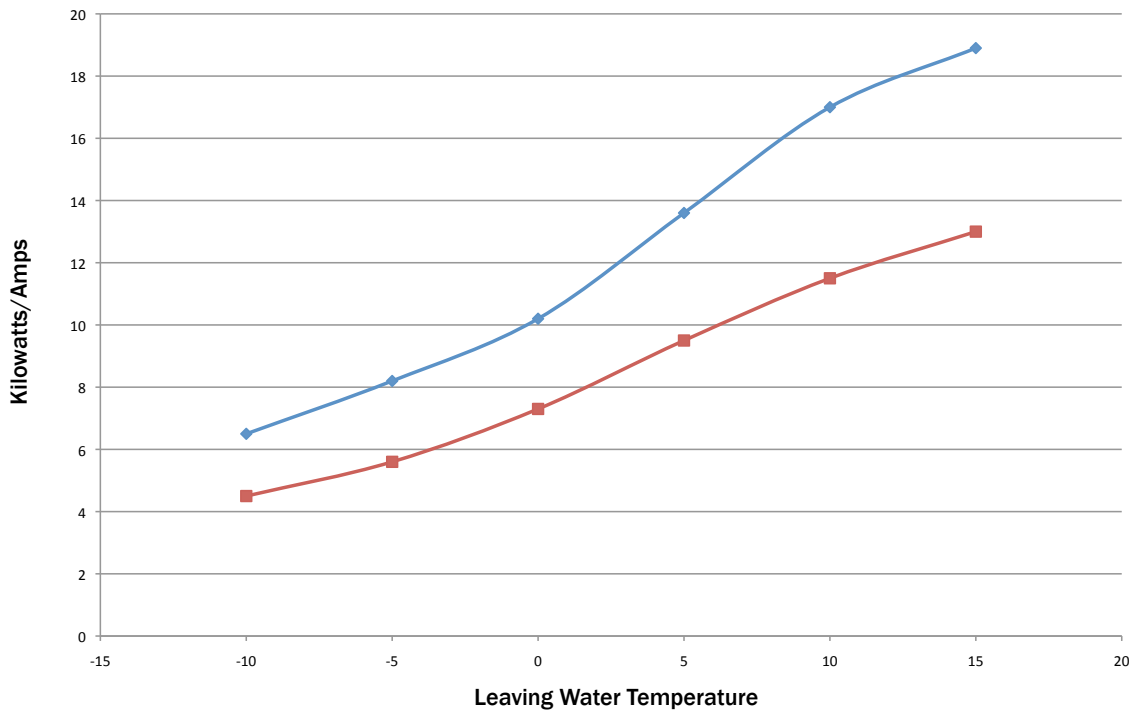
Sound Pressure Level at 10 metres (ISO3744)	dB(A)	53.1	53.1
(see separate guide attached for octave band detail)			

#### Physical Data

				With Frame
Overall Length	mm	1,310	1,310	1,700
Overall Width	mm	660	660	740
Overall Height	mm	1,400	1,400	1,680
Weight	kg	316	336	476/496
Fluid Coupling Size	mm/inch	25/1	25/1	
Fluid Coupling Type	choice	1" Camlock	1" Camlock	

## PERFORMANCE

### TAE Evo 031/051



TAE Evo 051

TAE Evo 031

## Sound Levels

Measurements are taken in accordance with the standard ISO 3744.

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

For measurements closer than 10m add the following: 5m +6, 3m +10 and 1m +15

Octave bands (H3)								Sound Pressure
63	125	250	500	1000	2000	4000	8000	
Sound Power Level dB(A)								dB(A) 10m
35.9	52.9	63.4	70.2	77.9	75.3	73.0	61.9	53.1

Additional Services: Cool Energy 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

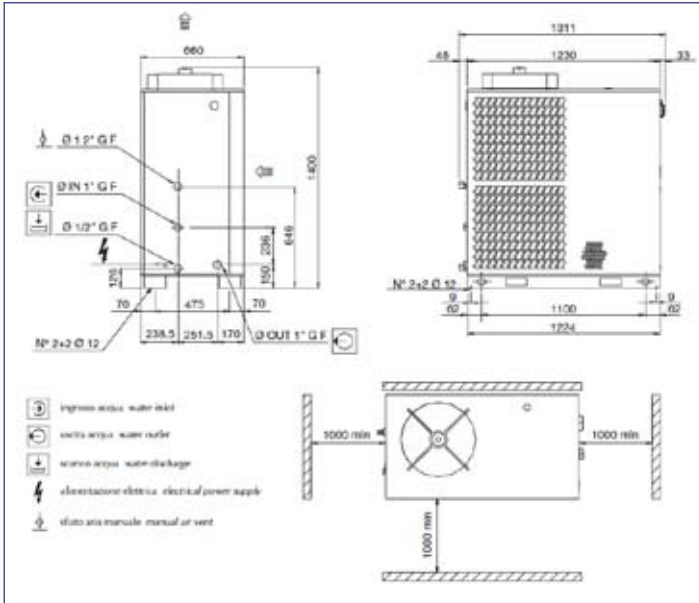
When installing a chiller and/or air handling piece of equipment, we would recommend the use of the following mix of Glycol for the systems total volume of fluid. This will protect the equipment against internal freezing and failure (e.g. 200 litre volume @ 0 °C foodsafe equals 30 litres of Glycol and 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
Foodsafe Grade	Mono Propylene Glycol	% Mix	10	15	20	25	30
Bio Foodsafe Grade (made from vegetable extracts)	Biodegradable Glycol	% Mix	10	15	20	25	30

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

## GA DRAWING



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We also have four locations in Germany, Holland and Switzerland.  
Further information on these locations can be found at [www.coolenergy.eu](http://www.coolenergy.eu)

[www.coolenergy.co.uk](http://www.coolenergy.co.uk)



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