



# coolenergy

TEMPERATURE RENTAL

Dry Air Blast Cooler

775kW Unit



## ABOUT THE DRY AIR COOLER

Cool Energy's 775kW Dry Air Cooler is designed to be sited vertically or horizontally on site. The unit requires a water source to the integral coil and has quick-release water connections, together with a 32amp 3-phase power connection.

The unit can be supplied with a separate controller to manage the fan speed, temperature record and isolation. This can be modified to link remotely with a local control room.

The unit is also supplied with 2 x 4" Flange connectons on flow and return.

## Cool Energy Service

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 (-30oC) and fan coils (0oC air off).
- Dehumidifiers (desiccant & electric) 200-10,000m3/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

### Low temperature 775kW Dry Air Cooler

#### Performance data @ design conditions

Cooling Capacity	kW	775
Air Off Temperature	°C	42
Air On Temperature	°C	30
Water/Glycol mix in	°C	55
Water/Glycol mix out	°C	35

#### Cooling Operating limits

Min/Max Duty	kW	775
Min/Max Air Off Temperature	°C	-20/60
Fluid Pressure Drop	kPa	47
Max Working Pressure	kPa	2,000
Evaporator Water Volume	l	200

#### Air Limits

Total Number Fans	1.2kW each	8
Fan	mm	893
Total Airflow	m <sup>3</sup> /hr	184,800
	m <sup>3</sup> /s	51.3

#### Electrical data

Electrical Supply Voltage 3 phase	V	400
Power Connections	A	32 C forme plug
Cable Connection (35mm <sup>2</sup> per phase)		3 core + earth, no neutral
Max Power Absorbed	kW	18
Max Current Absorbed	A	24
Starting Current (Max)	A	8
Recommended Generator Set	kVA	5
Control System		Carel pCO <sup>3</sup>

#### Sound Data

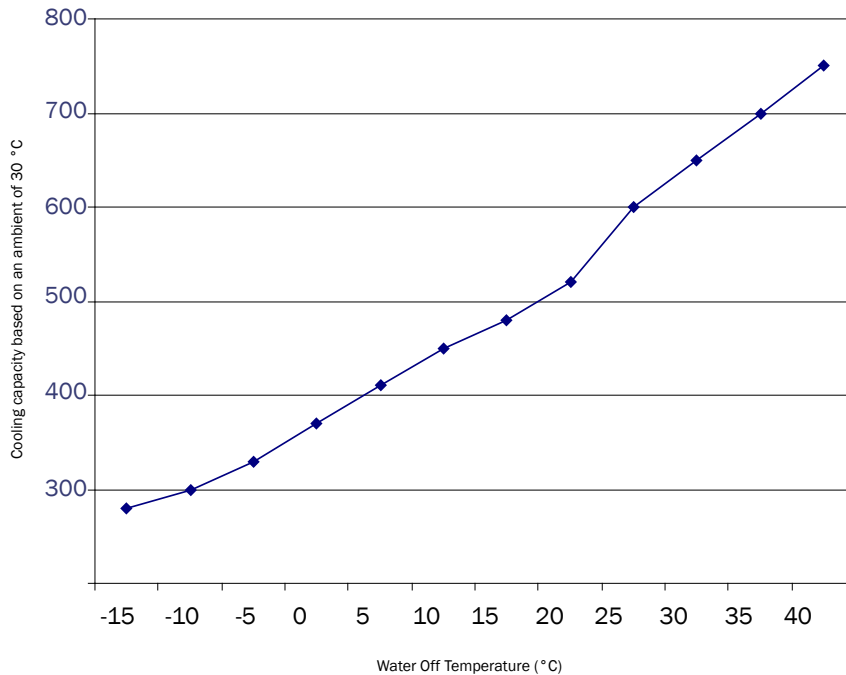
Sound Pressure Level at 10 metres (ISO3744)	dB(A)	65
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#### Physical Data

		No Frame	With Frame
Overall Length	mm	6,060	6,300
Overall Width	mm	2,400	15,00
Overall Height	mm	1,376	2,600
Weight Dry	kg	1,418	2,000
Weight + Water/Glycol mix	kg	1,618	2,200
Fluid Coupling Size	mm/inch	2 x 100/4	
Fluid Coupling Type	choice	PN16 Flange/bauer	

## PERFORMANCE

### 775kW Dry Air Cooler



### 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
55.6	72.4	84.8	85.7	85.7	82.0	74.0	66.6	65.0

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



### Head Office South

ICS House, Stephenson Road, Calmore Industrial Estate, Totton, SO40 3RY  
T (+44) 23 8052 7300 F (+44) 23 8042 8366

### Midlands

Unit 82 Plume Industrial Estate, Holburn Hill, Aston, Birmingham B6 7RT  
T (+44) 121 326 7771 F (+44) 121 327 4114

### North

Floor 2, Caspian House, East Parade, Little Germany, Bradford BD1 5EP  
T (+44) 1274 740 877 F (+44) 1274 391 708

### Scotland

Unit 5, 53/58 South Avenue, Blantyre Industrial Estate, Blantyre, G72 OXB  
T (+44) 1698 723308 F (+44) 1698 723309

### Ireland

Unit 2, Kells Enterprise Centre, Cavan Road, Kells, County Meath, Ireland  
T (+353) 46 925 2934 F (+353) 46 925 2936

We also have four locations in Germany in Munich, Guglingen, Hagen and Leipzig. Further information on these locations can be found at [www.coolenergy.de](http://www.coolenergy.de)

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



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Equipment designed to ISO-9001 and all relevant directives. Product improvement is a continual process at Cool Energy and we reserve the right to change the design and specifications without notice or obligation. Availability is subject to change without notice. Contact your local Cool Energy depot for availability. © 2010 Cool Energy. All rights reserved.