



# coolenergy

TEMPERATURE RENTAL

VLT60

-40°C Rental Chiller



6642

## ABOUT THE CHILLER

Cool Energy's -40°C rental chiller has the latest energy-saving 50HP Frascold screw compressors (2), offering a wide temperature range of -10°C to -40°C water leaving temperature and 10% - 100% capacity control.

The chiller is fully Eurovent Compliant and offers the zero ozone depleting HFC refrigerant R507a and manufactured to the latest environmental ISO14001 controls.

With low noise (63dB(a)) operation and compact footprint, the VLT60 unit is British-built in Southampton and manufactured to exacting ISO9001 controls.

## 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 (-40°C) and fan coils (0°Cair 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

### Process Cooling Chiller: VLT60 - 40°C RENTAL CHILLER

#### Performance data @ design conditions

Cooling Capacity		kW	60
Operation Fluid Temperature IN/OUT		°C	-35/-40
Design Ambient Temperature		°C	30
Fluid Flow Min/Max	Evaporator	m <sup>3</sup> /hr	10/26.4
		l/s	2.8/7.3
Fluid Flow Min/Max	Condenser	m <sup>3</sup> /hr	12/30.0
		l/s	4/8.3

#### Operating limits

Min/Max Ambient Temperature		°C	-18/43
Min/Max Leaving Fluid Temperature		°C	-40/-10
Evaporator Pressure Drop		kPa	37 (90 cond)
Braze Plate Evaporator with 316 stainless steel plates and copper braze			
Max Working Pressure		kPa	1,000
Evaporator Water Volume		Litres	50

#### Electrical data

Electrical Supply Voltage 3 phase		V	400
Chiller Power Connections			12mm lugs
Cable Connection (120mm <sup>2</sup> per phase)	M12		4 core + earth with neutral
Max Power Absorbed		kW	62.5
Max Current Absorbed (-40°C)		A	103
Starting Current (Max)		A	175
Pre-Heating Crankcase Supply		V	230
AUX Supply Connection			32A Ceeform
Recommended Generator Set		kVA	200
Control System			Carel

#### Refrigerant System

Fracold Screw Compressors (1 circuit) slide valve capacity control (10 - 100% Variable Capacity)			2
Refrigerant (Zero ozone depletion potential)	HFC		R507A

#### Sound Data

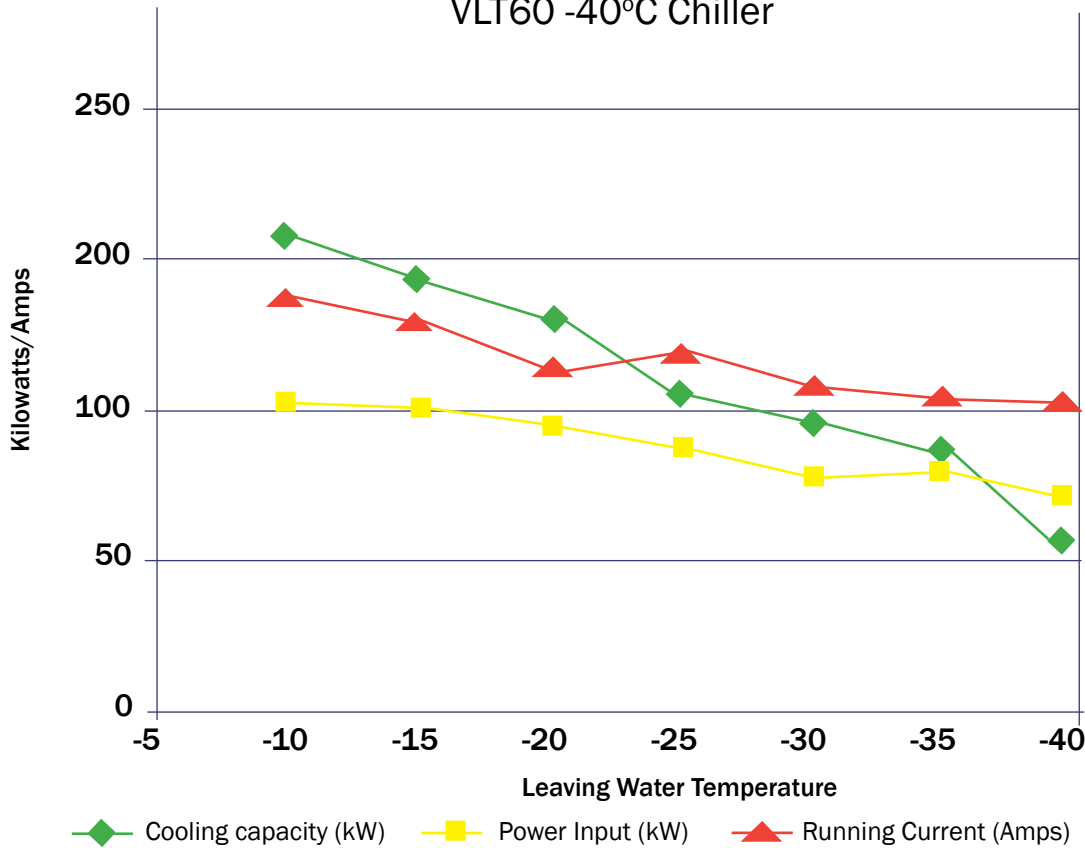
Sound Pressure Level at 10 metres (ISO3744)		dB(A)	63
(see separate guide attached for octave band detail)			

#### Physical Data

Overall Length		mm	3,030
Overall Width		mm	2,440
Overall Height		mm	2,595
Weight		kg	5,000
Fluid Coupling Size		mm/inch	100/4
Fluid Coupling Type		choice	PN16 Flange/bauer

## PERFORMANCE

### VLT60 -40°C Chiller



## 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	63.6	63.0

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.

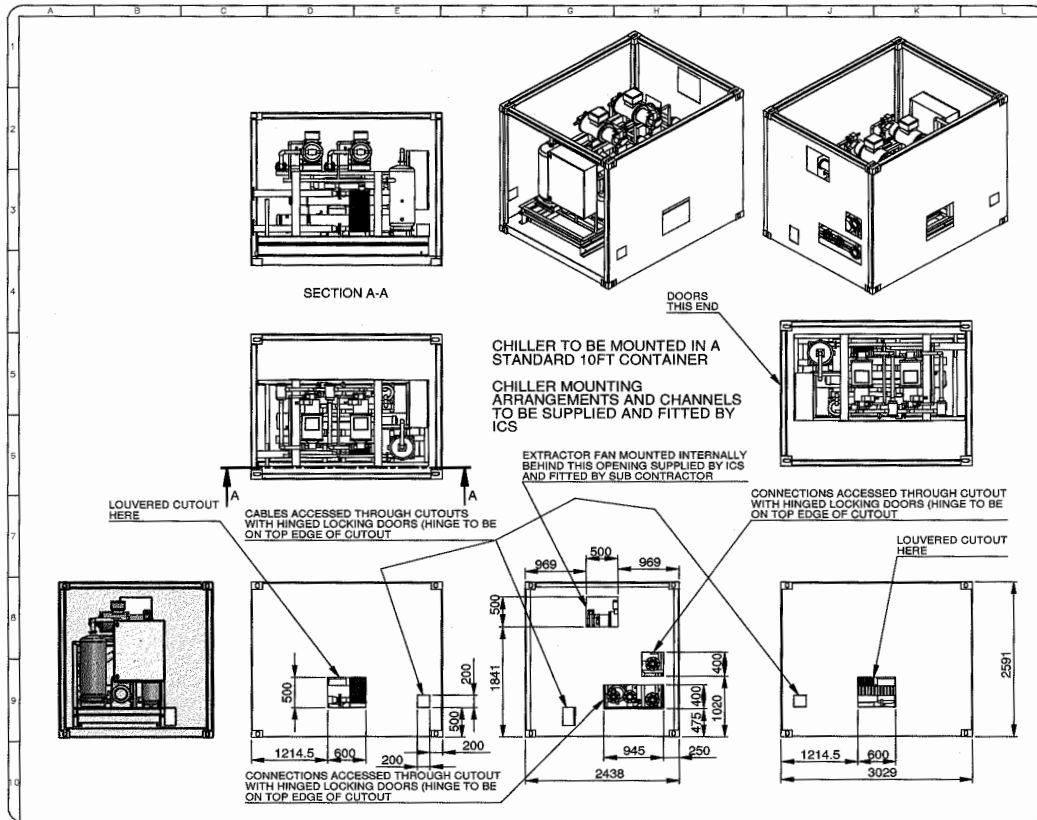
## Sub 5°C Water Applications

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 Temperature			-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
Industrial Grade	Mono Ethylene Glycol	% Mix	25%	30%	35%	40%	45%	50%	N/A
Foodsafe Grade	Mono Propylene Glycol	% Mix	30%	35%	40%	45%	50%	55%	N/A
Bio Foodsafe Grade (made from vegetable extracts)	Biodegradable Glycol	% Mix	30%	35%	40%	45%	50%	55%	N/A
Tyfoxit F60	Potassium Formate Brine	% Mix	LVF20	LVF20	LVF20	LVF30	LVF30	LVF40	LVF40

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 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.