There are many benefits to renting refrigeration

In light of increasing flexibility, mobility and range of demands, having a cooling system available exactly when it is actually required is becoming ever more important.

If the present cooling capacity is no longer sufficient to cover seasonal demand, if the outside temperature rises for example, production peaks, or if the system fails, rapid assistance is required. Increasing the cooling capacity by expanding the current system is often not worthwhile. The air-cooled hireable chiller QUANTUM, the air-cooled hireable chiller Pensum SPL and the hireable cooling tower VENTUM Compact-D 930 MC are the ideal solutions. The hireable refrigeration systems are ready to use within a few days or even hours.

All about our rental refrigeration service

The following services are included in your rental refrigeration package. We are also happy to offer them as optional add-ons:

Included

- consulting service
- dimensioning
- technical design and preparation of the required equipment

Optional

- delivery and removal of the rented devices
- installation (with a crane if needed)
- installation services
- initial operation

- water pressure hose, length: 10m
- water pressure hose, length: 20m

heat pumps and modular re-cooling systems to turnkey solutions such as refrigeration containers or modules. Efficiency, sustainability, cost effectiveness and first-class expertise in technical solutions are hallmarks of every ENGLE Refrigeration project. Our individualised advice and comprehensive services are centred around our customers and their requirements. As a member of the worldwide ENGIE Group, we have a global network of specialists at our disposal and can realise our refrigeration solutions both at home and abroad.

ENGLE Refrigeration GmbH

Josephine-Hirner-Strasse 1&3 D-88131 Lindau T + 49 8382 706-1 F + 49 8382 706-410 refrigeration@de.engie.com engie-refrigeration.de

Sales International

sales.refrigeration@de.engie.com

Service International

service.international@de.engie.com

© 2018 ENGIE Refrigeration GmbH

Accessories

- mixing/control valve
- pumping station 4 bar/8 bar
- overflow valve
- expansion tank
- shut-off valve
- plate heat exchanger
- tanks/basins

- - 1 Interior water distribution pipe
 - 2 Water distribution nozzle
 - 3 Droplet separator
 - 4 Cooling tower housing
 - **5** Radial ventilator
 - 6 Connection for water inlet
 - Inspection chamber
 - 8 Packing
 - 9 Draining

Figure 4

Schematic diagram of the hireable cooling tower VENTUM Compact-D 930 MC





- 2345 9 8 6

- - Flange reductions
 - Connection material
- water suction hose, length: 1.6m
 - power supply cables

ENGLE Refrigeration supplies the right cooling for every process: from efficient chillers, environmentally friendly



ENGLE Refrigeration rents out refrigeration for when it gets ho

QUANTUM chiller | PENSUM chill coolir



Air-cooled **QUANTUM chiller**

The portable, air-cooled QUANTUM is an adept chiller with a cooling capacity of up to 300 kW or 600 kW. It is mounted on a steel frame making it easy to relocate. Along with the usual benefits you would normally expect, it stands out due to its minimal maintenance requirements, low acoustic sound emissions and a low starting current. No particular precautions to protect against oil leakages in accordance with the Water Resources Act (Wasserhaushaltsgesetz) are necessary due to the oil-free compressor technology. Supplementary equipment such as pump units, cables and connectors can be integrated into the complete rental package, supplied and dismantled after use. All performance data can be read and transferred by utilising a Siemens S7 universal controller.



echnical data for the QUANTUM chiller (according to ARI)

	Unit	A030 Chilled water operation 12/6 °C	Chilled water operation 12/6 °C (30% Antifrogen N)	Chilled water operation 12/6 °C	Chilled water operation 12/6 °C (30% Antifrogen N)		
Cooling capacity Q_0	kW	270	270	530	530		
Total electrical power consumption	kW	86	89	170	174		
EER in accordance with ARI	-	3.1	3	2.9	2,9		
Heat capacity (condenser) Q _k	kW	345	348	655	659		
Unit dimensions	L x W x H	5,000 x 2,400 x 2,500	5,000 x 2,400 x 2,500	6,200 x 2,400 x 2,450	6,200 x 2,400 x 2,450		
Unit weight empty/in operation	kg	approx. 3,350/3,500	approx. 3,350/3,500	approx. 5,350/6,000	approx. 5,350/6,000		
evaporator: Volumetric flow rate	m³/h	39	44	76	85		
condenser: Heat-transfer medium	-	Air	Air	Air	Air		
Entry temperature	°C	35	35	35	35		
Number of ventilators	qty.	6	6	8	8		
Power per ventilator	kW	3.6	3.6	3.6	3.6		
Power consumption per ventilator	А	10	10	10	10		
Electrical data							
Number of compressors	qty.	1	1	2	2		
Max. electrical compressor power consumption	kW	86	86	172	172		
Voltage/frequency	V/Hz	400V/50Hz	400V/50Hz	400V/50Hz	400V/50Hz		
Switch-on mode	-	immediate	immediate	immediate	immediate		
Starting current	A	5	5	5	5		
maximum power consumption	A	140	140	280	280		

PENSUM is a very versatile hireable chiller and offers a capacity of 360 kW. PENSUM chillers use R-410A as a refrigerant, have the latest generation and very reliable scroll compressors and can be supplemented by adding pump modules and buffer tanks. The installation is simplified with an additional steel frame which allows it to be relocated with a forklift.

Technical data for the PENSUM chiller

	Unit	Type SPL104CL
Water inlet/outlet temperature	°C	12/7
Air temperature	°C	35
Cooling capacity	kW	102.29
Total input power	kW	37.09
Total power consumption	A	62.88
Volumetric water flow evaporator	l/h	17,566.0 (17.6 m³/h)
Water flow pressure drop evaporator	kPa	38.0 (0.38 bar)
Available pressure head – pump Evaporator	kPa	181.0 (1.81 bar)
Max. power consumption	А	87.0
Acoustic power level Lw (interior)	db(A)	73.0
Sound pressure Lp (interior) @10m Q=2	db(A)	45.0
Distance in free field	m	10.0
Directional factor		2.0
Number of ventilators		8.0
Compressors/Refrigeration cycles		4/2
Buffer tank	I	340.0 Power
supply		400/3+N/50
Refrigerant		R-410A
Dimensions [L x D x H]	mm	4,100 x 1,185 x 1,900
Weight	kg	1,590
Water connection		Flansch DN50/PN16
Power supply connection		125A CEE

Air-cooled **PENSUM chiller**



Cooling tower VENTUM Compact-D 930 MC

The VENTUM Compact-D 930 MC is a ready-to-install cooling tower, which is built into a robust container frame. This design allows for easy transportation and ensures flexible use. The hireable cooling tower complies with all the current requirements of the industrial sector. It is equipped with a conventional control that regulates the cold water temperature of the cooling tower basin. The control also provides a signal to activate the protection against dry running for an external pump module. Each screen displays a water inlet and outlet temperature. For winter use, the device is equipped with a heater. The cooling tower is well suited for use as a stand-alone recooling plant due to automated backfeed and blowdown.



Cooling tower module VENTUM Compact-D 930 MC

Product characteristics

- non-corrosive, solid plastic cooling tower
- robust industrial quality design
- high serviceability and userfriendliness

Options

- biocide dosing
- pump module
- customised connectors/adaptors

Dimensions

- L×W×H: 6,058×2,438×2,896 mm
- transport weight 4,000 kg
- operating weight 8,500 kg

Water hook-up

- cooling tower flow 2x Storz A according to DIN 14309; 100 mm diameter
- integrated blowdown and backfeeding
 cooling tower return 4 x Storz A according to DIN 14309; 100 mm diameter
 - GEKA fresh water supply

Electrical connections

- 1 × CECON 400V/63A
- starting current 80/380A
- consumption in operation 13/49 A

Sound insulation

Sound power level (depending on operating point) at full ventilator speed approx. 90 dB(A) and at half ventilator speed approx. 88 dB(A) according to DIN 45635/46 and DIN 3734/2

Technical data for Cooling tower VENTUM Compact-D 930 MC

Cooling capacity [kW]	1,260	1,400	1,510	1,190	1,310	1,400	1,120	1,220	1,280	1,330	1,480	1,630	1,260	1,400	1,510	1,190	1,310	1,400
Water throughput [m ³ /h]	120	150	200	120	150	200	120	150	200	120	150	200	120	150	200	120	150	200
Inlet water temperature [°C]	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Outlet water temperature [°C]	23.0	24.0	25.5	23.5	24.5	26.0	24.0	25.0	26.5	23.5	24.5	26.0	24.0	25.0	26.5	24.5	25.5	27.0
Max. cooling temperature [°C]	19.0	19.0	19.0	20.0	20.0	20.0	21.0	21.0	21.0	19.0	19.0	19.0	20.0	20.0	20.0	21.0	21.0	21.0
Motor power [kW]	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

Values are maximum values. Technical changes reserved. You will receive precise technical data once condition testing has been.