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### **CRANEFRIGOR™ OC07**

The CRANEFRIGOR™ OC07 cooling unit was developed for reliable and long-term operation under extreme ambient conditions as in steel works, paper factories and foundries. Thanks to its robust structure, a reliable operation is ensured even with heavy shocks.

The CRANEFRIGOR™ series of crane air conditioning units ensure a reliable and efficient production process.

**General description**

<b>Scope of delivery</b>	<b>Your benefits!</b>
<b>Refrigerant</b> <ul style="list-style-type: none"> <li>Ecological refrigerant</li> <li>Low greenhouse warming potential</li> </ul>	<ul style="list-style-type: none"> <li>Long-term safe usage in accordance with legal regulations (EU) no. 517/2014</li> <li>Sustainable operation</li> </ul>
<b>Compressor</b> (made by Copeland) <ul style="list-style-type: none"> <li>Semi-hermetically sealed construction</li> <li>Suction-gas-cooled motor</li> <li>Self-regulating oil sump heater</li> </ul>	<ul style="list-style-type: none"> <li>Low maintenance</li> <li>No risk of overheating</li> <li>Ensures lubrication during the start</li> <li>Very good availability of spare parts worldwide</li> </ul>
<b>Liquefier</b> <ul style="list-style-type: none"> <li>Zinc-plated steel housing with epoxy-coated aluminium blades</li> </ul>	<ul style="list-style-type: none"> <li>Excellent heat transfer</li> <li>Shorter maintenance intervals due to special adapted spacing between blades even with extreme dust load</li> <li>Shorter maintenance intervals due to smooth surface</li> </ul>
<b>Liquefier fan</b> <ul style="list-style-type: none"> <li>Speed-controlled EC axial fan in industrial construction for high ambient temperatures</li> </ul>	<ul style="list-style-type: none"> <li>Powerful</li> <li>Long runtimes</li> <li>Energy-efficient</li> </ul>
<b>Evaporator</b> <ul style="list-style-type: none"> <li>Zinc-plated steel housing with epoxy-coated aluminium blades</li> <li>Cleaning opening / Inspection opening</li> </ul>	<ul style="list-style-type: none"> <li>Excellent heat transfer</li> <li>Shorter maintenance intervals due to special adapted spacing between blades even with extreme dust load</li> <li>Shorter maintenance interval due to smooth surface. Soiling is easily recognised and simple to clean through the opening</li> </ul>
<b>Circulating air fan</b> <ul style="list-style-type: none"> <li>Speed-controlled EC radial fan, industrial construction</li> </ul>	<ul style="list-style-type: none"> <li>Powerful</li> <li>Long runtimes</li> <li>Energy-efficient and quiet</li> </ul>
<b>Heater</b> <ul style="list-style-type: none"> <li>Air heater with temperature monitor and safety temperature limiter</li> </ul>	<ul style="list-style-type: none"> <li>Comfortable room temperature</li> <li>Frost protection even at standstill or during maintenance work</li> </ul>
<b>Output adjustment</b> <ul style="list-style-type: none"> <li>Regulation of cooling performance by hot-gas bypass</li> </ul>	<ul style="list-style-type: none"> <li>Minimal temperature fluctuations in the cabin</li> </ul>
<b>Air filter</b> <ul style="list-style-type: none"> <li>Large-area frame filter</li> <li>Filter class COARSE 80%</li> </ul>	<ul style="list-style-type: none"> <li>Effective filter with long service life</li> <li>Easy to replace and clean</li> </ul>
<b>Condensation water separation</b> <ul style="list-style-type: none"> <li>Drip tray primed and powder-coated in RAL 7015</li> <li>Hose connection for condensation</li> <li>Siphon in condensate line</li> </ul>	<ul style="list-style-type: none"> <li>No corrosion of the tray</li> <li>Defined condensation drainage</li> <li>Avoids the drawing in of contaminated ambient air</li> </ul>
<b>Control and power cabinet</b> <ul style="list-style-type: none"> <li>Completely wired, according to VDE</li> <li>Operational and fault signal outputs</li> <li>Powder-coated RAL 7015</li> <li>Climate control box K6 integrated in control cabinet on operating side <u>Note:</u> Climate control box can also be installed elsewhere in the cabin</li> </ul>	<ul style="list-style-type: none"> <li>The CRANFRIGOR™ is ready for connection; at the site, you only have to connect the power supply</li> <li>Colour scheme with high corrosion protection</li> </ul> <p>Functions climate control box:</p> <ul style="list-style-type: none"> <li>Switch on air-conditioning mode</li> <li>Switch on heating mode</li> <li>Switch on dehumidification mode (simultaneously cooling and heating)</li> <li>Digital actual and setpoint display at the regulator</li> <li>Switch between manual and automatic blower modes</li> <li>Switch between circulating air mode and fresh air mode</li> </ul>

<b>Casing</b> <ul style="list-style-type: none"> <li>• Robust, welded construction</li> <li>• Primed and powder-coated in RAL 7015</li> <li>• Other colours or stainless steel version optional</li> </ul>	<ul style="list-style-type: none"> <li>• Long service life</li> <li>• Attractive colour scheme with high corrosion protection</li> </ul>
<b>Quality assurance</b> <ul style="list-style-type: none"> <li>• Leakage test</li> <li>• Function test in our plant's test facility</li> </ul>	<ul style="list-style-type: none"> <li>• Operational reliability</li> <li>• Easy commissioning on site</li> </ul>

**Options packages:**

<b>Material order no.</b>	<b>Scope of delivery</b>	<b>Your benefits!</b>
807 470	<b>Option package “Compressor (made by Bizer)”</b> Semi-hermetically sealed construction Suction-gas-cooled motor Self-regulating oil sump heater	<ul style="list-style-type: none"> <li>• Secure operation at higher ambient temperatures</li> <li>• Low maintenance</li> <li>• No risk of overheating</li> <li>• Ensures lubrication during the start</li> <li>• Very good availability of spare parts worldwide</li> </ul>
807 476	<b>Option package “Comfort”</b> Sound insulation hood for compressor for “Compressor hermetically sealed” version	<ul style="list-style-type: none"> <li>• Digital actual and setpoint display at the regulator</li> <li>• Mode selector switch On / Off / Ventilation</li> <li>• Air volume can be set in 3 stages</li> <li>• Minimal temperature fluctuations in the cabin</li> </ul>
807 582 807 607	<b>Options packages “Corrosion protection”</b> Corrosion protection package 1 Corrosion protection package 2	<ul style="list-style-type: none"> <li>• Multiple-coated pipes</li> <li>• Housing / Plate parts made of high-quality stainless steel 1.4571 / AISI 316Ti</li> <li>• Multiple-coated pipes</li> </ul>
807 667	<b>Option package “Custom”</b> Customer-specific version	Special requirements of a company can be realised, such as: <ul style="list-style-type: none"> <li>• Custom voltages / Network configurations</li> <li>• Heat exchanger version (fully copper, blade spacing and thickness)</li> <li>• Conductor identification</li> <li>• Special coatings</li> <li>• Protection class</li> </ul>
807 672 807 676	<b>Options packages “Accessories”</b> Assembly accessories according to specification Spare parts according to specification	<ul style="list-style-type: none"> <li>• Air duct, holding devices, refrigerating accessories</li> <li>• Spare part package</li> </ul>

**Plant packages:**

<b>Material order no.</b>	<b>Scope of delivery</b>	<b>Your benefits!</b>
807 679 807 562	<b>Plant packages “Overpressure / Fresh air”</b> Fresh air supply on the device Filter/Overpressure unit FT15	<ul style="list-style-type: none"> <li>• Filtered fresh air supply, air volume not adjustable</li> <li>• Filtered fresh air supply, adjustable air volume</li> <li>• Creation of overpressure in the room to be cooled; less dust comes in</li> </ul>
	<b>Plant package “Condensation evaporator”</b>	

807 565	Condensation evaporator KVW	<ul style="list-style-type: none"><li>• No damage due to dripping condensation</li><li>• No additional power supply necessary</li><li>• Overload protection</li></ul>
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## Technical specifications OC07:

### Performance data

Cooling performance is included customised in the offer  
Heat output is included customised in the offer

### Nominal cooling performance:

6.6 kW

- At 27 °C room temperature, 52 % rel. room air humidity
- 35 °C ambient temperature
- Refrigerant R134a / R513A

### Air flow volume:

1,000 m<sup>3</sup>/h

### Cooling mode

- Depends on the compressor model size and version
- Depends on the option packages and version of heat exchanger

Temperature range R134a

-5 °C to +70 °C

Temperature range R513A

-5 °C to +70 °C

Temperature range R450A

-5 °C to +75 °C

### Heating mode

Temperature range

-25 °C to +30 °C

### Sizes and weight

Weight

approx. 230 kg

Dimensions

type, see dimension sheet

### Operating voltage

Further operating voltages upon request

3 ph / 400 V / 50 Hz

3 ph / 460 V / 60 Hz

### Protection category

IP54

### Network type

TN-S

### Refrigerant

GWP (global warming potential)

R134a / R513A / R450A

1430 / 631 / 605

Filling quantity / CO<sub>2</sub> equivalent

depends on the unit version

The performance description is a quality in the sense of sections 434 and/or 633 BGB (German Civil Code).

Subject to technical change.

According to (EN) 378-3 „Refrigeration units and Heat pumps – safety and environment regulations – Location and protection for persons” detectors needs to installed if concentration exceeds the practical limits (ATEL/ODL- EN 378-1, Appendix C) in a working and staying area.

The table is showing the minimum space dependent from the used Freon, air-conditioner and options.

Detectors are required if the conditioned space is smaller as mentioned in the table below.

Local restrictions and regulations need to be considered first.

<b>Refrigerant</b>	<b>Minimum conditioned space before detector is required</b>
R134a	8,0 m <sup>3</sup>
R513A	6,9 m <sup>3</sup>
R450A	6,9 m <sup>3</sup>

ATEL: Exposure limit value for acute toxicity

ODL: Limit value for oxygen deficiency