

TECHNICAL DESCRIPTION
CRANEFRIGOR™ TX2

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Figure

CRANEFRIGOR™ TX2

The CRANEFRIGOR™ TX2 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

<i>Scope of delivery</i>	<i>Your benefits!</i>
Refrigerant - Ecological refrigerant - Low greenhouse warming potential	Sustainable operation
Compressor (made by Copeland) - Hermetically sealed construction - Suction-gas-cooled motor - Self-regulating oil sump heater	- Low maintenance - No risk of overheating - Ensures lubrication during the start - Very good availability of spare parts worldwide
Liquefier Cathodic dip coating	- High corrosion resistance - Shorter maintenance intervals due to special adapted spacing between blades even with extreme dust load - Shorter maintenance intervals due to smooth surface
Liquefier fan Speed-controlled EC axial fan in industrial construction for high ambient temperatures	- Powerful - Long runtimes - Energy-efficient
Evaporator - Zinc-plated steel housing with epoxy-coated aluminium blades - Cleaning opening / Inspection opening	- Excellent heat transfer - Shorter maintenance intervals due to special adapted spacing between blades even with extreme dust load - Shorter maintenance interval due to smooth surface. Soiling is easily recognized and simple to clean through the opening
Circulating air fan Speed-controlled EC radial fan, industrial construction	- Powerful - Long runtimes - Energy-efficient and quiet
Heater Air heater with temperature monitor and safety temperature limiter	- Comfortable room temperature - Frost protection even at standstill or during maintenance work
Output adjustment Regulation of cooling performance by hot-gas bypass	Minimal temperature fluctuations in the cabin
Air filter - Large-area frame filter - Filter class COARSE 90%	- Effective filter with long service life - Easy to replace and clean
Condensation water separation - Drip tray primed and powder-coated in RAL 7035 - Hose connection for condensation - Siphon in condensate line	- No corrosion of the tray - Defined condensation drainage - Avoids the drawing in of contaminated ambient air
Control and power cabinet - Completely wired, according to VDE - Operational and fault signal outputs - Powder-coated RAL 7035 - Climate control box K6 <u>Note:</u> Climate control box can be installed anywhere in the cabin	- The CRANEFRIGOR™ is ready for connection; at the site, you only have to connect the power supply - Colour scheme with high corrosion protection Functions climate control box: - Switch on air-conditioning mode - Switch on heating mode - Switch on dehumidification mode (simultaneously cooling and heating) - Digital actual and setpoint display at the regulator - Switch between manual and automatic blower modes

Casing • Robust, welded construction • Primed and powder-coated in RAL 7035 • Other colors or stainless-steel version optional	• Long service life • Attractive color scheme with high corrosion protection
Quality assurance • Leakage test • Function test in our plant's test facility	• Operational reliability • Easy commissioning on site

Options packages:

Material order no.	Scope of delivery	Your benefits!
807 473	Option package “Compressor (made by Bizer)” Semi-hermetically sealed construction Suction-gas-cooled motor Self-regulating oil sump heater	• Secure operation at higher ambient temperatures • Low maintenance • No risk of overheating • Ensures lubrication during the start • Very good availability of spare parts worldwide
807 569	Option package “Operational reliability” Low outside temperature	• Cooling during outside temperature +60 °F (<15 °C)
807 585 807 608	Options packages “Corrosion protection” Corrosion protection package 1 Corrosion protection package 2	• Multiple-coated pipes • Housing / Plate parts made of high-quality stainless steel 1.4571 / AISI 316Ti • Multiple-coated pipes
807 788	Option package “Suction channel” Soundproofed intake duct incl. filter, filter class COARSE 80%	• Reduction of sound emission in 1m distance from air inlet by: ◦ Max. speed 12db(A) ± 3dB(A) ◦ Average speed 11dB(A) ± 3dB(A) ◦ Min. speed 11dB(A) ± 3dB(A) • Design according to dimension sheet 207.324/3
807 669	Option package “Custom” Customer-specific version	Special requirements of a company can be realized, such as: • Custom voltages / Network configurations • Heat exchanger version (fully copper, blade spacing and thickness) • Conductor identification • Special coatings • Protection class
807 673 807 677	Options packages “Accessories” Assembly accessories according to specification Spare parts according to specification	• Air duct, holding devices, refrigerating accessories • Spare part package

Plant packages:

Material order no.	Scope of delivery	Your benefits!
807 680	Plant packages “Overpressure / Fresh air” Fresh air supply on the device	• Filtered fresh air supply, air volume not adjustable • Filtered fresh air supply, adjustable air volume • Creation of overpressure in the room to be cooled; less dust comes in
807 562	Filter/Overpressure unit FT15	
807 565	Plant package “Condensation evaporator” Condensation evaporator KVV	• No damage due to dripping condensation • No additional power supply necessary • Overload protection

Technical specifications TX2:

Performance data

Cooling performance is included customized in the offer

Nominal cooling performance:

6.4 kW | 21,840 btu/h

- At 80 °F (27 °C) room temperature, 52 % rel. room air humidity
95 °F (35 °C) ambient temperature
- Refrigerant R134a / R513A

Heating capacity

3,5 kW | 11,945 btu/h

Wide heating power on request

Air flow volume:

1,000 m³/h | 590 cfm

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 | +25 °F to +160 °F

With option package "low outside temperature"

-25 °C to +70 °C | -15 °F to +160 °F

Temperature range R513A

-5 °C to +70 °C | +25 °F to +160 °F

With option package "low outside temperature"

-25 °C to +70 °C | -15 °F to +160 °F

Temperature range R450A

-5 °C to +80 °C | +25 °F to +175 °F

With option package "low outside temperature"

-25 °C to +80 °C | -15 °F to +175 °F

Heating mode

Temperature range

-25 °C to +30 °C | -15 °F to +85 °F

Sizes and weight

Weight

approx. 180 kg | 400 lb

Dimensions

type, see dimension sheet

Operating voltage

Further operating voltages upon request

3 ph / 400 V / 50 Hz

3 ph / 460 V / 60 Hz

Refrigerant

GWP (global warming potential)

R134a / R513A / R450A

1430 / 631 / 605

Filling quantity / CO2 equivalent

depends on the unit version

Subject to technical change.