

TECHNICAL DESCRIPTION
CRANEFRIGOR™ CK22

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Figure

CRANEFRIGOR™ CK22

The CRANEFRIGOR™ CK22 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 Bizer) • Semi-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 • Norm motors in industrial construction with coupled fan wheel	• Powerful • Long runtimes • Very good availability of spare parts worldwide
Evaporator • Zinc-plated steel housing with epoxy-coated aluminum 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 • EC radial fan, industrial construction	• Powerful • Long runtimes • Energy-efficient
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 • Temperature control by thermostat • Operational and fault signal outputs • Powder-coated RAL 7035 • Optional stainless-steel version	• The CRANEFRIGOR™ is ready for connection; at the site, you only have to connect the power supply • Color scheme with high corrosion protection
Casing • Robust, welded construction • Primed and powder-coated in RAL 7035 • Other colors or stainless-steel version optional	• Long service life • Attractive colour 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!
807 612	Option package “Heater” Air heater with temperature monitor and safety temperature limiter	- Comfortable room temperature - Frost protection even at standstill or during maintenance work
807 616 807 620	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
807 783	Option package “Air duct” Air duct primed and powder coated RAL7035 incl. filter, filter class COARSE 80%	Simple and fast connection to the cooling room
807 624	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
807 629 807 634	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!
807 636	Plant package “Overpressure / Fresh air” Filter/Overpressure unit FT30	- Filtered fresh air supply, adjustable air volume - Creation of overpressure in the room to be cooled; less dust comes in
807 565	Plant package “Condensation evaporator” Condensation evaporator KVV	- No damage due to dripping condensation - No additional power supply necessary - Overload protection
807 566	Plant package “SMART Control” Superordinate controller FrigorTec Smart Control FSC	- Cyclic switching over for redundant systems - Digital display of pressures and temperatures - Optional regulation of the room pressure by filter/overpressure unit - Optional display of the relative room humidity

Technical specifications CK22:

Performance data

Cooling performance is included customized in the offer

Nominal cooling performance: 31.4 kW | 107,140 btu/h

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

Heating power

6.2 to 12.3 kW | 21,155 btu/h to 41,970 btu/h

Wide heating capacity on request

Air flow volume:

6,800 m³/h | 4,000 cfm

Cooling mode

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

Temperature range R134a -25 °C to +70 °C | -15 °F to + 160 °F

Temperature range R513A -25 °C to +70 °C | -15 °F to + 160 °F

Temperature range R450A -25 °C to +85 °C | -15 °F to + 185 °F

- More extreme temperatures upon request

Heating mode

Temperature range -25 °C to +30 °C | -15 °F to +85 °F

Sizes and weight

Weight approx. 620 kg | 1,370 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.