

# CRANEFRIGOR™

Industrial Cooling since 1961

Made in Germany

# TECHNICAL DESCRIPTION CRANEFRIGOR<sup>™</sup> CC02

Contact: e-mail: info@frigortec.de / phone: +49 7520 91482 - 0

Date: 16/01/2020 QVO 0459 Rev. 01



# **CRANEFRIGOR™ CC02**

The CRANEFRIGOR<sup>™</sup> CC02 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<sup>™</sup> series of crane air conditioning units ensure a reliable and efficient production process.

#### TECHNICAL DESCRIPTION CRANEFRIGOR<sup>™</sup> CC02 Page 2 of 5



## **General description**

Scope of delivery		Your benefits!	
Ref	frigerant		
•	Ecological refrigerant	<ul> <li>Long-term safe usage in accordance with legal regulations (EU) no. 517/2014</li> </ul>	
•	Low greenhouse warming potential	Sustainable operation	
Со	mpressor		
•	Hermetically sealed construction	Low maintenance	
•	Suction-gas-cooled motor	No risk of overheating	
•	Self-regulating oil sump heater	Ensures lubrication during the start	
Liq	uefier		
•	Zinc-plated steel housing with epoxy-	Excellent heat transfer	
	coated aluminium blades	• Shorter maintenance intervals due to special adapted	
		spacing between blades even with extreme dust load	
		Shorter maintenance intervals due to smooth surface	
Liq •	uefier fan Speed-controlled EC axial fan in industrial	Powerful	
•	construction for high ambient temperatures	Long runtimes	
	construction for high ambient temperatures	Energy-efficient	
Eva	aporator		
•	Zinc-plated steel housing with epoxy-	Excellent heat transfer	
	coated aluminium blades	• Shorter maintenance intervals due to special adapted	
•	Cleaning opening / Inspection opening	spacing between blades even with extreme dust load	
		<ul> <li>Shorter maintenance interval due to smooth surface.</li> </ul>	
		Soiling is easily recognised and simple to clean through	
		the opening	
Cir	culating air fan	Powerful	
•	EC radial fan, industrial construction	Powerful     Long runtimes	
		Energy-efficient and quiet	
Air	filter		
•	Large-surface frame filter	Effective filter with long service life	
•	Filter class COARSE 65%	Easy to replace and clean	
Condensation water separation			
•	Drip tray primed and powder-coated in RAL 7035	No corrosion of the tray     Defined condenaction drainage	
•	Hose connection for condensation	<ul> <li>Defined condensation drainage</li> <li>Avoids the drawing in of contaminated ambient air</li> </ul>	
•	Siphon in condensate line		
Со	ntrol and power cabinet		
•	Completely wired, according to VDE	• The CRANEFRIGOR <sup>™</sup> is ready for connection; at the	
•	Temperature control by thermostat	site, you only have to connect the power supply	
•	Operational and fault signal outputs	Colour scheme with high corrosion protection	
•	Powder-coated RAL 7035		
•	Optional stainless steel version		
	sing	Louis com inc. Ma	
•	Robust, welded construction	Long service life     Attractive selectrophyme with high correction protection	
•	Primed and powder-coated in RAL 7035 Other colours or stainless steel version	Attractive colour scheme with high corrosion protection	
•	optional		
Qu	ality assurance		
Qua •	-	Operational reliability	



#### **Options packages:**

Material order no.	Scope of delivery	Your benefits!
807 645 807 649	Optionspackages"Corrosionprotection"Corrosion protection package 1Corrosion protection package 2	<ul> <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>
807 653	<b>Option package "Custom"</b> Customer-specific version	<ul> <li>Special requirements of a company can be realised, such as:</li> <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>
807 657	Options packages "Accessories" Assembly accessories according to specification	<ul> <li>Air duct, holding devices, refrigerating accessories</li> </ul>
807 661	Spare parts according to specification	Spare part package

### Plant packages:

Material order no.	Scope of delivery	Your benefits!
807 562	Plant package "Overpressure / Fresh air" Filter/Overpressure unit FT15	<ul> <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>
807 579	Plant package "Condensation evaporator" Condensation evaporator KV1	<ul> <li>No damage due to dripping condensation</li> <li>No additional power supply necessary</li> <li>Overload protection</li> </ul>



Technical specifications CC02:	
<b>Performance data</b> Cooling performance is included customised in the offer Heat output is included customised in the offer	
<ul> <li>Nominal cooling performance:</li> <li>At 27 °C room temperature, 52 % rel. room air humidity 35 °C ambient temperature</li> <li>Refrigerant R134a / R513A</li> </ul>	3.4 kW
Air flow volume:	1,500 m³/h
<ul> <li>Cooling mode</li> <li>Depends on the compressor model size and version</li> <li>Depends on the option packages and version of heat exchanger</li> </ul>	
Temperature range R134a	-5 °C to +70 °C
Temperature range R513A	-5 °C to +70 °C
<b>Sizes and weight</b> Weight Dimensions	approx. 90 kg type, see dimension sheet
<b>Operating voltage</b> Further operating voltages upon request	3 ph / 400 V / 50 Hz 3 ph / 460 V / 60 Hz
Protection category	IP54
Network type	TN-S
<b>Refrigerant</b> GWP (global warming potential)	R134a / R513A 1430 / 631
Filling quantity / CO2 equivalent	depends on the unit version
The performance description is a quality in the sense	of sections 434 and/or 633 BGB

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

Cooling to the point  $\Box$ 

FRIGOR

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.

Refrigerant	Minimum conditioned space before detector is required
R134a	6,4 m <sup>3</sup>
R513A	5,0 m <sup>3</sup>

ATEL: Exposure limit value for acute toxicity

ODL: Limit value for oxygen deficiency