



FRIGOR TEC
Cooling to the point

Genuine for over 60 years!



CRANEFRIGOR™ – Cooling of crane cabins and crane electronics

www.frigortec.com





CRANEFRIOR™ Compact devices		TX / TY	TB	TC
Dimensions [mm] L x W x H	vertical	670 x 530 x 1.600	600 x 910 x 1.270	660 x 960 x 1.430
	horizontal	–	680 x 1.765 x 640	750 x 1.870 x 720
Weight approx. [kg]	vertical / horizontal	180 / –	270 / 287	380 / 395
Nominal cooling capacity [kW] with R134a / R513A ¹⁾²⁾		6,4	7	12,5
Heating capacity [kW] ²⁾		4	3,5	2,3 – 4,5
CO₂-equivalent [kg] ³⁾	R134a	3.289	6.006	5.720
	R513A	1.451	2.650	2.524
	R450A	1.391	2.541	2.118
Air flow rate, free blowing [m ³ /h]		1.000 ⁴⁾	1.200 ⁴⁾	2.000 ⁴⁾



CRANEFRIOR™ Split devices ²⁾		VX	VB	VC
Dimensions [mm] L x W x H	Condenser unit	630 x 530 x 910	600 x 880 x 825	660 x 930 x 905
	Weight (Condenser unit) approx. [kg]	70	150	250
Nominal cooling capacity [kW] with R134a / R513A ¹⁾²⁾		6,4	7	12,5
Heating capacity [kW] ²⁾		–	–	–
CO₂-equivalent [kg] ³⁾	R134a	6.006	7.436	15.444
	R513A	2.650	3.281	6.878
	R450A	2.360	2.904	6.111
Air flow rate, free blowing [m ³ /h]		–	–	–

¹⁾ With 27 °C indoor temperature, 52 % relative indoor air humidity and 35 °C ambient temperature

²⁾ 400 V / 50 Hz (additional operating voltages available)

³⁾ Standard version

⁴⁾ adjustable

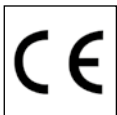
Refrigerant Type:	GWP value:	Area of application:
R134 a	1.430	Up to 70°C
R513A	631	Up to 70°C
R450A	605	Up to 85°C



TD	TF	TH	Self-cleaning filter/ overpressure unit FS10	Condensate evaporator KVV wall mounting
930 x 1.160 x 1.900	1.070 x 1.430 x 2.200	1.260 x 1.760 x 2.520	760 x 570 x 1.310	–
1.020 x 2.270 x 995	1.160 x 2.790 x 1.180	1.360 x 3.420 x 1.400	–	605 x 152 x 217
628 / 660	1.140 / 1.260	1.360 / 1.475	150	20
24,5	36,5	55,5	–	–
3 – 9	3 – 9	3 – 9	–	2,3 – 3,5
7.865	14.300	21.450	–	–
3.471	6.310	9.465	–	–
3.328	6.050	9.075	–	–
2.500 ⁴⁾	4.800	7.000	1.500	–



VD	VF	VH	WDV	DV
930 x 1.130 x 1.100	1.380 x 1.070 x 1.240	1.680 x 1.260 x 1.440	935 x 670 x 355	916 - 2.116 x 908 x 270
400	700	950	78	35 – 91
24,5	36,5	55,5	2,5 – 6,5	10 – 30
–	–	–	2,3 – 3,1	3 – 6
34.320	45.617	94.257	–	–
15.270	20.255	41.962	–	–
13.613	18.029	37.268	–	–
–	–	–	750 – 1.400 ⁴⁾	1.850 – 6.420



The FrigorTec GmbH is certified with DIN EN ISO 9001 : 2015.

TÜV acceptance testing in our plant.

An additional check at the installation site is not usually necessary for the compact device CRANEFRIGOR™.



CRANEFRIGOR™ – Crane air conditioning units, custom-made and serial production

The model T – Compact air conditioning units

Compact air-conditioners of the series T consist of two modules: the condenser unit and the air-conditioning part. Both modules can be configured in various ways. This construction unit system allows for simple layout and accommodation to their needs.

The cooled air is guided through channels to the crane bridge or cabin and then, supplemented with fresh air, drawn back by air circulation (fig. 1). The heat absorbed into the air conditioning unit is drawn off with the surrounding air in the condenser unit.

Fig. 1 Procedural principle: T series crane air-conditioning unit

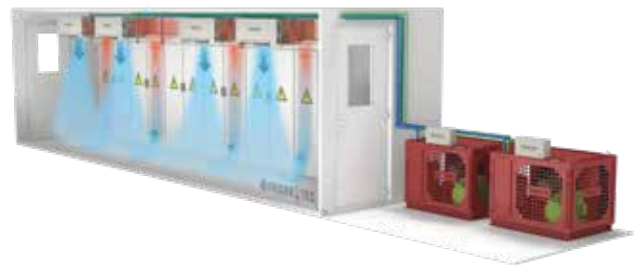


The V model – Custom-made split devices

V model air conditioning units are split devices: Condenser unit (condenser) and air conditioning part (evaporator) are set up separately. The air conditioning part is connected to the condenser unit with refrigerant lines (see fig. 2).

The air conditioning part is situated directly next to the heat source and works most effectively here. A wide range of individual component combinations allow for an exact output adjustment. The heat absorbed into the air conditioning unit is dissipated with ambient air.

Fig. 2 Procedural principle: V series crane air-conditioning unit



Technical features of the T and V models

- Long-lasting condenser made of copper, or on request made with different materials or coated
- Corrosion-resistant housing available for installation in aggressive atmospheres
- Robust sheet-steel construction, designed for extreme shock-loads
- Robust refrigerant compressor in various constructions
- Separate electrical control cabinet in the cooling space (V model) or integrated and air conditioned airconditioning part (T model)
- Painted with acid- and alkaline-resistant paint

CRANEFRIGOR™ Crane air conditioning for the V and T model – for a higher production safety

In high-heat operating conditions work is done under extreme conditions:

- Very high air temperature
- High thermal radiation and movement of air
- Extreme exposure to dust, odours, and gases
- High noise level
- Vibrations

Air-conditioning devices from FrigorTec achieve a good working environment for their employees even under these extreme conditions. A safe and efficient production process can be guaranteed.

Cooled air for man and machine

By air-conditioning the crane cabin, guidelines for workplace regulations are met. Your colleagues work under comfortable, performance-enhancing conditions. Likewise, the crane control unit has to be reliably cooled – operation reliability depends on it.

High performance and variable installation for their application

With a wide product range and concise differentiation of specific performance features air-conditioning devices can be selected to suit their specific on-site requirements.

This guarantees:

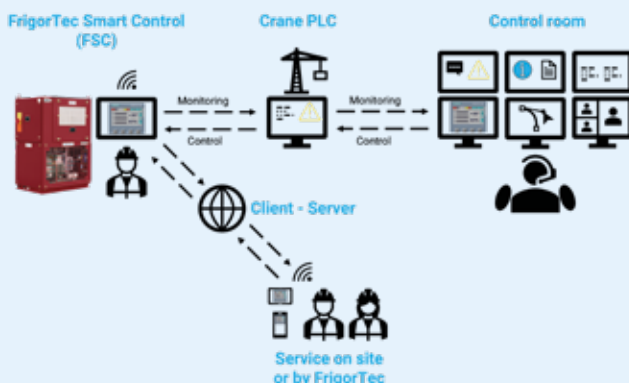
- Reliable cooling at ambient temperatures of up to +90 °C
- Compact construction with precise machine and air-conditioning unit measurements
- Split construction (V model) allows for a variety of installation options
- Versatile electrical arrangements related with voltage, frequency, and current type

Tried and tested

The calculated machine performance data is checked by our technicians. Where the temperature conditions of high-heat operations are simulated and the machine is operated at the required connected wattage.



The air conditioning units for high heat operators can be used in steel works, smelting works, found-ries, and mills and many other places.



The FrigorTec Smart Control FSC allows monitoring and management of the crane air-conditioning units and can be easily integrated into the respective control systems.



Advantages of the FrigorTec Smart Control system:

- Remote control
- Monitoring and remote maintenance
- Temperature regulation
- Humidity regulation
- Comfort mode
- Pressure monitoring
- Redundant operation
- Network connection
- Predictive maintenance

We pass on only what we have produced by our own hands.



In the main plant in Amtzell, Germany all products made by FrigorTec GmbH are developed, constructed and produced. Every device passes a quality inspection with test runs before delivery. FrigorTec solutions are sold in over 100 countries through our worldwide distribution network.

SERVICE
(24/7)



Our service keeps the units maintained and ensures the spare parts supply - worldwide.
service@frigortec.com

Grain cooling
GRANIFRIGOR™

Crane air conditioning
CRANEFRIGOR™

Standard cooling
STANDARDFRIGOR

FrigorTec
SERVICES

Insect heat treatment
DEBUGGER

Hay dryer
AGRIFRIGOR™

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