



FRIGOR TEC
Cooling to the point

FrigorTec LP • USA



CRANEFRIGOR™ – Cooling of crane cabins and crane electronics

frigortecamericas.com





CRANEFRIGOR™ Compact devices		TX / TY	TB	TC
Dimensions [in] L x W x H				
vertical		26.5 x 20.9 x 63.0	23.6 x 35.8 x 50.0	26.0 x 38.0 x 56.0
horizontal		–	26.8 x 69.5 x 25.2	29.5 x 73.6 x 28.4
Weight approx. [lb]				
vertical / horizontal		397 / –	595 / 633	838 / 871
Nominal cooling capacity [btu/h] with R513A ^{1) 2)}		22,000	24,000	42,000
Heating capacity [btu/h] ²⁾		13,650	11,945	7,850 - 15,355
CO₂-equivalent [lb] ³⁾	R134a	7,251	13,241	12,610
	R513A	3,199	5,842	5,565
	R450A	3,067	5,602	4,669
Air flow rate, free blowing [cfm]		589 ⁴⁾	706 ⁴⁾	1,177 ⁴⁾



CRANEFRIGOR™ Split devices ²⁾		VX	VB	VC
Dimensions [in] L x W x H				
Condenser unit		24.8 x 20.9 x 35.8	23.6 x 34.7 x 32.5	26.0 x 36.6 x 35.6
Weight (Condenser unit) approx. [lb]		154	331	551
Nominal cooling capacity [btu/h] with R513A ^{1) 2)}		22,000	24,000	42,000
Heating capacity [btu/h] ²⁾		–	–	–
CO₂-equivalent [lb] ³⁾	R134a	13,241	16,394	34,048
	R513A	5,842	7,233	15,163
	R450A	5,203	6,402	13,473
Air flow rate, free blowing [cfm]		–	–	–

¹⁾ With 80 °F (27 °C) indoor temperature, 52 % relative indoor air humidity and 35 °C ambient temperature

²⁾ 460 V / 60 Hz (additional operating voltages available)

³⁾ Standard version

⁴⁾ adjustable

Refrigerant

Type:	GWP value:	Area of application:
R134a	1,430	Up to 160 °F
R513A	631	Up to 160 °F
R450A	605	Up to 185 °F

Other refrigerants on request



TD	TF	TH	Filter device FT15	Condensate evaporator KVV wall mounting
36.6 x 45.7 x 74.8	42.1 x 56.3 x 86.6	49.6 x 69.3 x 99.2	14.6 x 14.6 x 18.9 - 46.1	-
40.2 x 89.4 x 39.2	45.7 x 109.8 x 46.5	53.5 x 134.7 x 55.1	-	23.8 x 6.0 x 8.5
1,385 / 1,455	2,513 / 2,778	2,998 / 3,252	Voltages: 24 V DC, 115 V, 230 V	44
84,000	120,000	180,000	-	-
10,240 - 30,710	10,240 - 30,710	10,240 - 30,710	-	7,850 - 11,950
17,339	31,526	47,289	Possible filter class: G2/G3, M5/F7, chemical filters, activated charcoal filter	-
7,652	13,911	20,867		
7,337	13,338	20,007		
1,471 ⁴⁾	2,826	4,120	Volume flow [btu/h] ³⁾ : 60 - 235	-



VD	VF	VH	WDV	DV
36.6 x 44.5 x 43.3	54.3 x 42.1 x 48.8	66.1 x 49.6 x 56.7	36.8 x 26.4 x 14.0	36.0 - 83.3 x 35.8 x 10.6
882	1,544	2,095	172	77 - 201
84,000	120,000	180,000	8,000 - 22,000	34,000 - 105,000
-	-	-	7,850 - 10,580	10,240 - 20,480
75,663	100,568	207,801	-	-
33,665	44,655	92,510		
30,012	39,747	82,162		
-	-	-	441 - 824 ⁴⁾	1,089 - 3,779



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™.



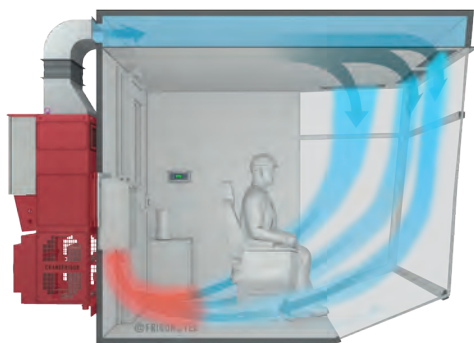
CRANEFRIGOR™ – Crane air conditioning units, custom-made and serial production

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 (see 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

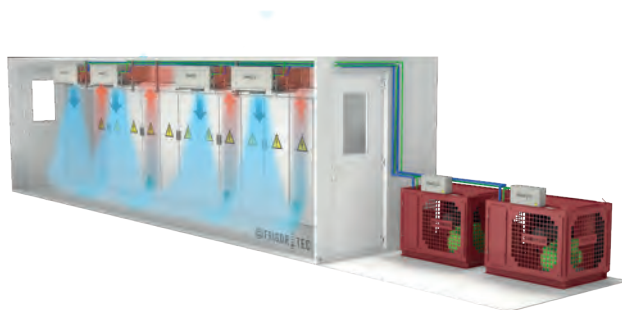


The V model – Custom-made split units

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 units 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:

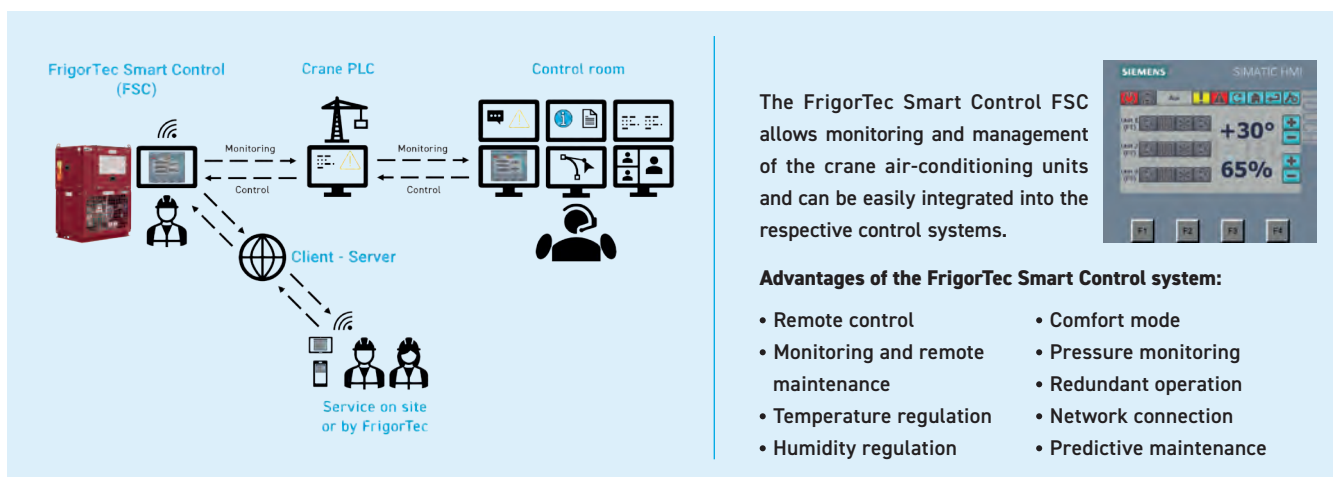
- Reliable cooling at ambient temperatures of up to +195 °F
- Compact construction with precise machine and air-conditioning unit measurements
- Split construction (V model) allows for a variety of installation options
- Versatile electrical arrangements related with voltage, frequency, and current type

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, foundries, and mills and many other places.



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



All products are developed, constructed and made by FrigorTec. Every device passes a quality inspection with test runs before delivery. FrigorTec solutions are sold in over 100 countries through the worldwide distribution network.

SERVICE (24 / 7)



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

Grain cooling
GRANIFRIGOR™

Crane air conditioning
CRANEFRIGOR™

Standard cooling
STANDARDFRIGOR

FrigorTec
SERVICES

Insect heat treatment
DEBUGGER

Hay dryer
AGRIFRIGOR™

Distributor:

FRIGOR TEC
Cooling to the point



FrigorTec GmbH
209 Terra Road
Blytheville, AR72315
Phone: +1(832) 730 - 1894
info@frigortecamericas.com
frigortecamericas.com