

# Blast Freezer/ chiller/ Temper Gigablast Frascold Model



## Data sheet

The Gigablast Frascold Blast Freezer is a forced air freezing system that operates in ambient conditions of 32°C or higher.

The refrigeration installation has a double circuit of screw compressors from the Frascold range and incorporates 5 axial fans in the evaporator

The box is configured with intense lighting, emergency lights, fault, temperature and man trapped alarms. Including an integrated data logger and the possibility of remote reading of the main parameters. It is a 100% portable equipment. Can be placed outdoor both at ground level or at a loading dock. They ensure an excellent insulation due to their 115 mm panel as well as total control with CAREL PLC controllers. Its operation is fully automatic.

## Box Specifications

### Dimensions and capacity

**Empty weight:** 18,000kg

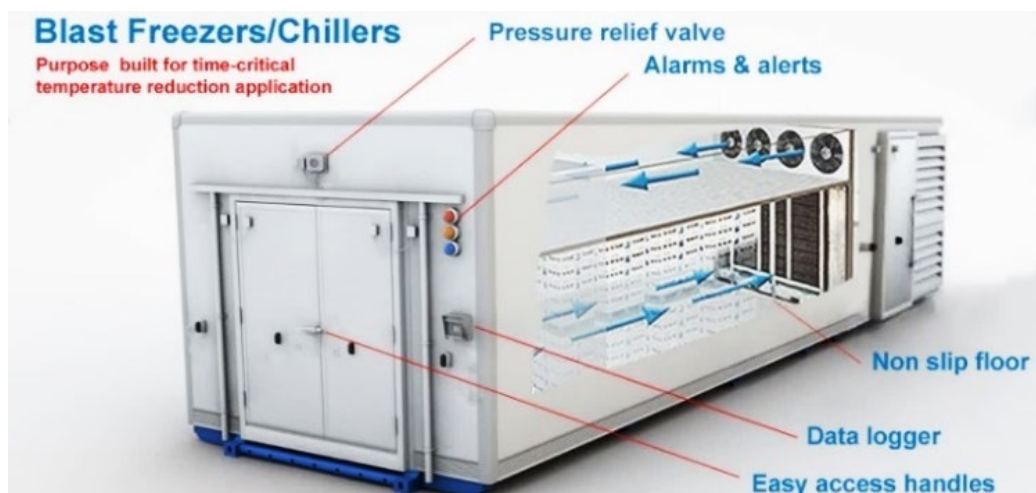
**Max load :** 32 to 35 europallets (max load)

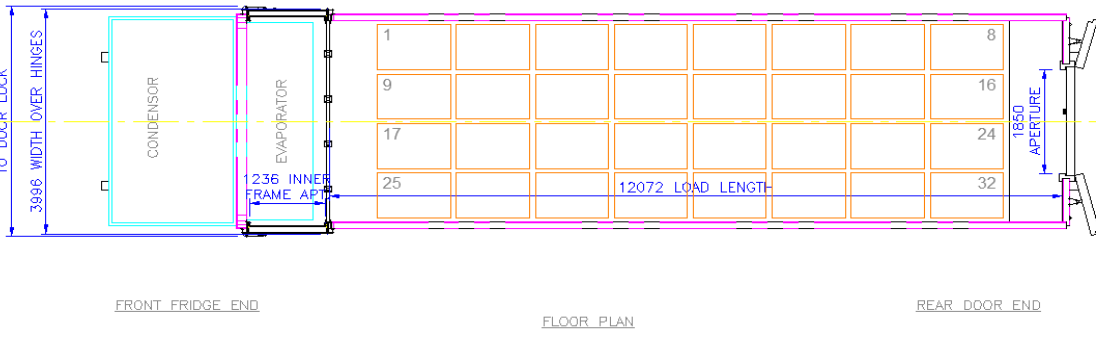
**Surface:** 43.15 m<sup>2</sup> **floor load:** 1,500kg/m<sup>2</sup>

**External measurements:** 16.09m x 3.996m x 3.516m high (length x width x height)

**Usable internal measurements:** 12,072m x 3,574m x 2,24m (length x width x length)

**Door measurements:** 1.85m x 2.2m (width x height)

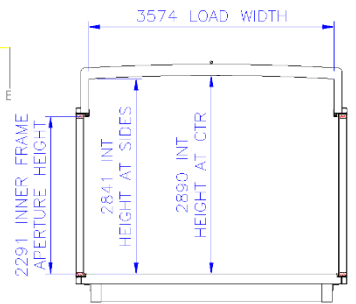




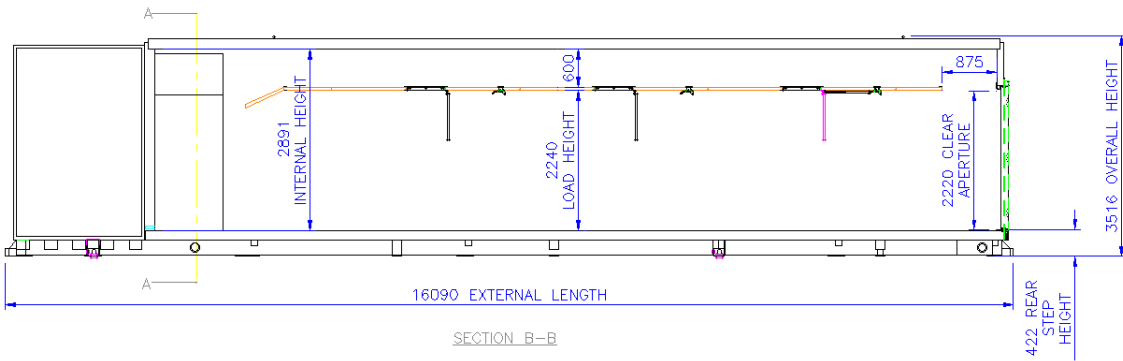
FRONT FRIDGE END

FLOOR PLAN

REAR DOOR END



SECTION A-A



SECTION B-B

## Structure and equipment

- XPS (or PIR) Panel 115mm
- Powerful 300 LUX interior light and resin non-slip floor.
- Heated door (to avoid ice built), easy opening key locked doors, strip curtain.
- Temperature, power failure and man trapped acoustic and visual alarms.
- Internal safety release button.
- Compliance with HACCP regulations.
- CE certification.
- CAREL PLC controller: includes freezing and automatic maintenance programmer: BLAST / HOLD. Multifunction: freezing, chilling, tempering with product probe control.



## Refrigeration plant

The refrigeration plant is made up of 2 independent and autonomous circuits, specifically designed by Dawsongroup.

Each circuit consists of a screw compressor from the Frascold range. Each compressor incorporates a PLC, communicated with each other to keep maximum capacity control and reduce energy consumption. The software is ready to run in freezing / holding / thawing.

It also includes:

- Electrical heaters as a defrost method.
- Evaporator with double interlocking coil with 5 axial fans.
- All components and controls necessary for the operation and control of the aforementioned screw compressors, including oil separators, liquid reservoir, oil coolers, economizer heat exchangers.
- Split circuit condenser coil with 6 axial fans and variable speed EC motors.

<b>Refrigeration capacity (at 32°C ambient temp)</b>	182 kW at temperature <b>+2°C</b>
	123 kW at temperature <b>-25°C</b>
<b>Power supply / power protection</b>	<b>400V / IV / 50Hz / 250A (TPN+E)</b>
<b>maximum electric power</b>	<b>150kW</b>
<b>Average consumption in 24H</b>	±84 kW/h
<b>compressor type</b>	2 x Semi-hermetic screw
<b>Compressor model:</b>	Frascold NRL3-70-240Y
<b>Compressor noise level</b>	58 dB(A) at 10m (open field)
<b>Refrigerant Type</b>	R-448A / R-449A
<b>refrigerant charge</b>	65kg per system
<b>Standard oil type</b>	ICI Emkerate RL68H
<b>Condenser</b>	Double integrated circuit with 6 EC fans
<b>condenser flow</b>	23 m <sup>3</sup> /s
<b>Condenser noise level</b>	66 dB(A) at 10m (free field)
<b>Evaporator</b>	Double circuit with 5 axial fans
<b>evaporator flow</b>	17.5 m <sup>3</sup> /s
<b>defrost method</b>	Electric heaters
<b>Drain pan defrost method</b>	Electric heaters

Cooling capacity below:

**32°C ambient**

Unit air temperature (°C)	-36	-32	-27	-22	-17	-12	<-7
Cooling power (kW)	70	86	109	133	161	192	223
Consumed current (A)	202	210	225	241	258	277	305

**38°C ambient**

Unit air temperature (°C)	-36	-32	-27	-22	-17	<-12
Cooling power (kW)	61.2	75.4	94.2	119	143.8	170.8
Consumed current (A)	223	231	247	261	281	303

**Electrical power installation and connection**



To connect the unit, it is necessary to have previously made the following electrical connection: 400V/ IV / 50Hz, 250 A protection and 5-wire cable (3 phases, neutral and earth) , a round terminal with an internal diameter of 12mm, with the length and necessary section, to connect to the unit box.

The electrical panel must be protected by an independent automatic differential for the equipment, this must not be more sensitive than 0.3Amp. The electrical connection must be made by a customer electrician. If there is any doubt, please contact us in advance.

The blast freezer electrical panel has several fully identified panels: "Compressor 1" (compressor 1), "Mains income" (network input), "Common control" (general controls) and "Compressor 2" (compressor 2).



