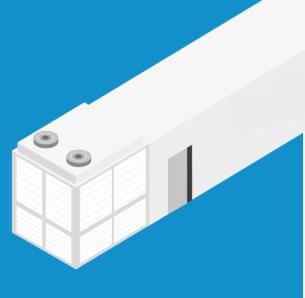


FRIO MODULAR



Equipment specifications

Dimensions and capacity

Empty weight: 18.000 kg

Capacity: 32 European pallets (maximum load) 28 American pallets (maximum load)

Surface area: 42,96m2

Maximum floor load: 1.500 kg/m2

External measurements: 16,09m long *

4,09m wide * 3,53m high

Internal usable measurements: 12,07m long * 3,56m wide * 2,14m high

Door opening: 1,85m wide * 2,12m high

Blast Freezing J&E Hall

Description of equipment

Equipment descriptionDawsongroup's fully portable, fully automatic multifunction tunnels allow different processes - **blast chilling**, **freezing**, **tempering and defrosting** - to be carried out quickly, uniformly and in a controlled manner, even with large volumes of product.

Thanks to its exclusive software, developed by Dawsongroup tcs, the system manages the different temperature probes that monitor the critical points of the load and automatically adjusts the set points of the equipment, guaranteeing optimum treatment in each process. All of this is achieved by means of high-speed air flow through the product.

With a processing capacity of up to 25,000 kg per day for freezing and up to 15,000 kg per day for thawing, these tunnels offer exceptional performance.

Furthermore, the equipment is entirely UK manufactured, plug & play, installed immediately, attached to the production plant and without the need for building works or building space, making it a flexible, efficient and ready-to-operate solution from day one.











Technical specifications

Structure and equipment

- Expanded polyurethane panel (XPS) 115mm.
- Anti-slip floor.
- Drains. Rounded edges.
- Heated pivoting doors with keys.
- 300Lux lighting.
- Emergency lighting and signalling.
- Interior unlocking and safety axe (only in negative temperature).
- Alarms (visual and acoustic): voltage failure, temperature range and trapped person.
- Compliance with HACCP regulations. CE certification.
- CAREL PLC controller: includes freezing programmer and automatic maintenance: BLAST / HOLD.

Refrigeration installation

The refrigeration system consists of 2 independent and autonomous circuits, specifically designed by Dawsongroup.

Each circuit consists of a Frascold brand screw compressor. Each compressor incorporates a PLC and they communicate with each other to control the maximum capacity and reduce energy consumption. The units are ready to offer freezing / holding / defrosting.

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.

Refrigeration capacity (at 32°C ambient 182 kW at +2°C temp) 123 kW at -25°C

Power supply / power protection 400V / IV / 50Hz / 250A (TPN+E)

Maximum electric power 150kW

Average consumption in 24h ± 84 kW / h

Compressor type 2 x Semi-hermetic screw

Compressor model J&E HALL HSL 3120

Compressor noise level 58 dB (A) a 10m (campo abierto)

Refrigerant type R-448A / R-449A
Refrigerant charge 65 kg per system
Standard oil type ICI Emkerate RL68H

Condenser Dual integrated circuit with 6 EC fans

Condenser flow 23 m³/s Condenser noise level 66dB a 10m

Evaporator Dual integrated circuit with 5 axial fans.

Evaporator flow 17,5 m3/s
Defrost method Electric

Drain pan defrost method Electric



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32ºC ambient							
Unit air temperature (ºC)	-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
38ºC ambient							
Unit air temperature (ºC)	-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 installation and connection

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

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

The electrical panel of the tunnel has several fully identified panels: 'Compressor 1' (compressor 1), 'Mains incomer' (mains input), 'Common control' (general controls) and 'Compressor 2' (compressor 2).













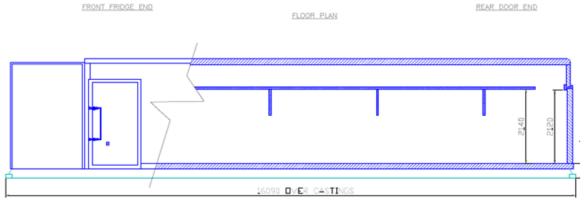
DWhere the following main components are included:

- Main compressor control panels (per compressor) including start-up gear, suffusion and Carel secondary compressor controller.
- Mains distribution panel connected to the mains input terminal panel.
- Main control panel including master controller and user interface to allow selection of operating function and input of adjustable control parameters.

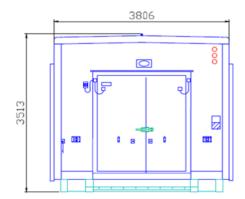


Plans





SIDE VIEW





Images









