

# DOOR FREEZER -30°C M2

# Ref.: F.M2

#### 1. DESCRIPTION

Intended use: For inside environment.

**Maximum dimensions**: W 4.500 mm x H 4.500 mm. **Opening speed**: 2,4 m/s. **Closing speed**: 1,2 m/s. **Operating type:** gear driven, without ballast.

**Frame** made of structural channels (U) of 80 x 40 x 3 mm in steel, galvanised before cutting and folding. (Optionally: 80 x 40 x 2 mm, in stainless steel) and protected by a layer of polyethylene in order to create a thermal barrier between the door frame and the wall, provided with heating-cables which prevent ice formation that could prevent the correct functioning of the door. Inclusive: motor cover and frame covers (protection of the heating strings).

<u>Beware</u>: in spite of the presence of heating-cables, in some cases, an accumulation of ice at certain places occurs. For this reason, it is necessary to carefully remove the ice on the sides of the door and the door curtain. Therefore, the customer has to indicate a person responsible for the maintenance of the Freezer M2 within his organisation.

#### Protection- and lintel sealing sheet.

## Reinforced sealing at the bottom inclusive.

**Drum** in steel, diameter 102 x 2 mm, axis in steel. The drum is not visible: the door curtain always covers the drum, even when the door is in a closed position.

Side guides in polyethylene (PE-UHMW 1000); outer section 23 x 40 mm, on springs, provided with heating strings which prevent ice formation in these side guides.

**Door curtain in reinforced PVC** (900 g/m²), very resistant, in colour (RAL) yellow (1003), grey (7035), blue (5002), red (3000), green (6005), orange (2004), white (9010) or black (9005) and provided with lateral bearing strings (section 16 x 12,5 mm).

**Motor** without brake, with 4 poles, controlled by a frequency inverter. Power: 1,5 kW. Tension: 3 x 230 / 400 V. Protection degree IP 65.

## 2. EN 13241-1 CLASSIFICATION

Characteristics	Standard	Test acc.	Results
Water permeability	EN 12425	EN 12489	Class 1
Wind load	EN 12424	EN 12444	Class 3*
Wind permeability	EN 12426	EN 12427	Class 1
Safe openings	EN 12453	EN 12445	Pass
Mechanical resistance	EN 12604	EN 12605	Pass
Unintended movements	EN 12604	EN 12605	Pass
Thermal resistance	EN 12428	EN 12428	58,57W/m <sup>2</sup> K
Performance (cycles)	EN 12604	EN 12605	1.000.000

**Gearbox** with worm and crownwheel, size 63 and reduction report 1/7

**Compact control panel** in painted steel, with a circuit breaker, a padlockable divider, an adjustable timer for closing, a push button for opening and reset after a power failure or an emergency stop. Degree of protection: IP54.

The length of the electrical cables connecting the different electrical components such as the motor, the limit switches and other standard elements, allows the installation of the control box at about 1200 mm of the floor and 1000 mm of the door at the motorside.

**Positioning limit switch**: by means of an absolute encoder situated at the back of the motor.

### Detectors delivered with the standard equipment:

A presence detector realised by means of an infrared photocell, installed at  $\pm$  20 mm of the axis of the curtain and detecting the presence of a pedestrian or a vehicle, immediately opens the door and keeps it open as long as the presence is detected. Position of the photocell : 300 mm from the floor.

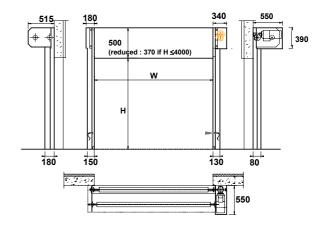
Wireless DYNACO Detector (WDD): a wireless detection system consisting of a transmitter in the bottom bag of the door and a receiver in the control box. The system operates according to the "open loop" principle: when the sensor encounters an obstacle, the transmitter leaves the standby mode and sends a signal to the receiver that immediately opens the door. The operating mode "open loop" offers an extremely high life time to the lithium battery of the transmitter, as it only operates when the sensor encounters an obstacle, otherwise, the transmitter remains inactive.

#### Power supply: single phase 220 to 240 V.

Frequency: 50-60 Hz. Fuses to be provided by the customer: 25 A

# 3. REQUIRED SPACE

All indicated dimensions are net: the space necessary for mounting and maintenance has to be provided. Reduced dimensions: upon request.



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