

Klimate High Speed Doors

Klimate K2 High Speed Freezer Door Specification

The Klimate K2 is a high-speed freezer door designed to be installed on the freezer or chill side of a doorway. The Klimate K2 will maintain the freezer / chill temperature when closed; with its air defrost system and double door curtain. Its twin barrel construction with off the shelf components makes it reliable and simple to maintain.

MECHANICAL SPECIFICATION

DOOR CURTAIN:

2 ply polyester monofilament with lateral stability, forming a double curtain with a 50mm air gap. Each leaf is 2mm thick with a weight of 2.0 Kg/m². Available in a range of colours with a hydrophobic stipple matt finish. Providing a barrier that:

- Has good insulation qualities
- Resists air currents
- Remains ice & condensation free
- Provides a sound barrier
- Has low running costs

CURTAIN BARREL:

Constructed from twin 127mm O/D mild steel tubes with machined blocks at each end, incorporating high-speed bearings synchronised via heavy duty chain drives at each side with trans torque sprockets.

SIDE GUIDES:

Fabricated from 3mm thick pre folded galvanised steel sections, the side guides are heated and fitted with a class 2 sealing system. They house air ducts to channel air through the curtain air gap and support the barrel, curtain and motor assembly. All steel is powder coated white as standard, other BS colours are available.

BOTTOM RAIL / SAFETY EDGE:

Constructed from 4mm thick box section steel to give high impact resistance with outer covers fitted. A fully monitored wireless safety edge is fitted to the bottom rail forming a continuous door seal.

HINGED BREAK-AWAY TABS:

Hard wearing hinged memory plastic end cassettes are fitted to each side of the bottom rail. Should the door be impacted, one or both cassettes will break out, reducing the risk of severe damage to the bottom rail. The door will stop at the point of impact requiring a key to operate the door on the push button station. The cassettes can be reset by on site personnel, minimising 'down' time and callout charges. An optional data-logging device can be fitted to record what date and time the door has been impacted.

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ELECTRICAL SPECIFICATION

MOTOR-DRIVE UNIT.

Three Phase 400v AC worm gear and brake motor, incorporating a pulse generator for accurate door positioning. The drive unit can be used on manual in the event of power failure. The curtain barrel is driven directly by the motor drive unit. Opening speed and closing speed are adjustable. The standard opening speed is 1.5m per second.

CONTROL PANEL

The control panel is a new generation control unit designed for high-speed doors. The unit is programmed via an LED screen, allowing operational parameters to be modified to each users needs.

The panel is housed in a metal IP55 rated enclosure and the following features can be programmed via the control panel: Run timer, automatic / semi automatic running, auto return timer (0-240 seconds), limit switch monitoring, photocell monitoring, safety edge monitoring, optional contact for warning lights. The system has been specifically designed for high-speed doors. It combines the door control features and variable speed inverter to provide a smooth operating door.

In addition the clear diagnostic display shows the current status of the door, the number of cycles the door has completed, which actuator is operating the door and the five most recent faults.

An open, close, emergency stop button, isolator and LED window are sited on the control panel.

The control panel is future proof due to the unique way that software can be loaded. This enables new solutions and applications to be loaded onto new and existing control panels. For example, if a new safety edge is developed, then the relevant software can be loaded onto an existing control panel to allow it to be used.

AIR SYSTEM

Heated air is fed from a fan through the side guide heaters into the gap between the door curtains and up through the canopy. This process prevents Ice forming on the door surfaces.

SAFETY FEATURES

Two 24v AC Photo-electric safety beams (constantly monitored) are fitted providing a closing safety device.

A fully monitored wireless safety edge system is fitted to the bottom rail providing an instantaneous stop/reverse feature should the bottom rail come into contact with an object before it reaches the floor. The safety edge is also constantly monitored and programmable.

A high level hand-crank is fitted to the bottom of the motor for manual operation.

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ACTUATION

The following options are available

- Induction loop vehicle detectors
- Remote push buttons
- Remote pull switches
- Key fob /Hand held /Fork truck mounted transmitter units
- Radar movement detectors
- Remote photoelectric cells.

OPTIONS

- Traffic lights
- Warning sirens
- Extra Photo electric beams for pedestrian safety
- Heated motor & control panel (no cost option)
- Data logging device
- IP 65 Control Panel

CE CONFORMITY

All doors conform to CE Marking Regulations EN 13241.1 2003

SITE REQUIREMENTS

Door power requirements

Three phase and neutral isolator to the side of the opening. Fed from a 20 Amp C rated circuit breaker to be made available 1m from the door opening and to the drive side of the door.

WARRANTY/GUARANTEE

12 Months or 500,000 cycles, parts and labour excluding damage not caused by normal operation.

The company reserves the right to change specification without notice.