

# Klimate High Speed Doors



- High Speed Doors
- Industrial Doors
- Loading Bays
- Gates & Barriers
- Automatic Doors



## Welcome to

# Climate High Speed Doors

### More Than Just Speed

Established in 1987, Climate is a specialist manufacturer of high speed doors. All doors are designed and manufactured to meet the specific, tailor-made needs of you, our customer.

Climate's unique range of high speed doors is already installed in a large number of leading manufacturing and storage sites throughout the UK. Together, the full range of high speed doors ensures a clean and safe environment, maintaining environmental standards.

Other services available for Climate include maintenance contracts and repairs to all competitor makes and models of high speed doors. All Climate high speed doors can be characterized by their low maintenance technology offering customers a cost effective solution to any opening.



## Technical Sales Advice

Our team of Technical Account Managers are all industry trained and fully qualified to assess your own individual requirements, recommend the most suitable application and provide ongoing advice throughout the lifetime of the door.

## Installation

All our high speed doors are fitted by our own teams of highly trained, experienced, high speed door engineers. All of our engineers are qualified electricians as well as having a variety of other industry accreditations such as CSCS, IPAF and CRB checks.

## Technical Support

Following installation, you can relax and enjoy peace of mind knowing that if you ever need assistance, a dedicated technical support line is available during normal working hours with the sole aim of getting your Klimate door back to an operational state without the need of a site visit by engineers.

## Maintenance and Repair

A full maintenance and contract service is available to cover all your high speed doors including repairs to existing Klimate high speed doors or any competitor's high speed door.

## Parts

At Klimate, we have a unique service which offers customers a full range of parts for our own brand and competitor products. This unique service often helps customers dramatically reduce the cost of maintenance on high speed doors.

## Warranty

All high speed doors that are installed by Klimate come with a 12 month or 500,000 cycle warranty on all parts and labour. This adds further peace of mind to the installation.

## ARDENT SPECIFICATION

### MECHANICAL DATA

#### DOOR CURTAIN:

Heavy duty, clear 4mm PVC sheet (solid colours with or without vision panel) providing a barrier which:

- Resists Air Currents
- Provides a Sound Barrier
- Has good Insulation Qualities

**N.B.** Slight discolouration can occur where two PVC sheets are joined. This is unavoidable when trying to achieve a strong weld.

#### CURTAIN BARREL:

Constructed from 139mm O/D mild steel tube with machined blocks at each end incorporating high-speed bearings.

#### SIDE GUIDES:

Fabricated from 3mm thick pre folded steel sections. The side guides support the barrel, curtain and motor assembly. All steel is powder coated Golden Yellow as standard. Other colours available on request.

#### WIND BARS:

A single internal and external wind bar system as standard is supplied on all doors. Double and triple wind bar systems are used when the height, width or location dictates. Wind bars are anodised aluminium tube, which run on nylon pulley wheels.

#### BOTTOM RAIL / SAFETY EDGE:

Constructed from 4mm thick box section steel to give high impact resistance. An electric fully monitored safety edge is fitted to the bottom rail forming the door seal.

#### DAMAGE LIMITATION TABS:

Hard wearing and low impact resistant acrylic end cassettes are fitted to each side of the bottom rail. If the door is impacted, one or both cassettes break off reducing the risk of severe damage to the bottom rail. These cassettes can be replaced by on site maintenance personnel reducing 'down' time and callout charges.

#### CANOPY:

All doors come with a powder coated main canopy. Motor canopies are available.

### ELECTRICAL DATA

#### MOTOR DRIVE UNIT

A three Phase 400v AC brake motor, driving through an anti roll back worm safety gearbox, incorporating encoder switches for open and close positions. The drive unit can be used on manual in the event of power failure. Curtain barrel is driven directly by the motor drive unit eliminating the need for a chain drive. Opening and closing speeds are adjustable up to 1.5m/s depending on the size of the door.

#### CONTROL PANEL

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

The panel is housed in a metal IP55 rated enclosure and the following features can be programmed via the LED: 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 LED shows the number of cycles the door has completed, which actuator is operating the door and the five most recent faults.

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

#### SAFETY FEATURES

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

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

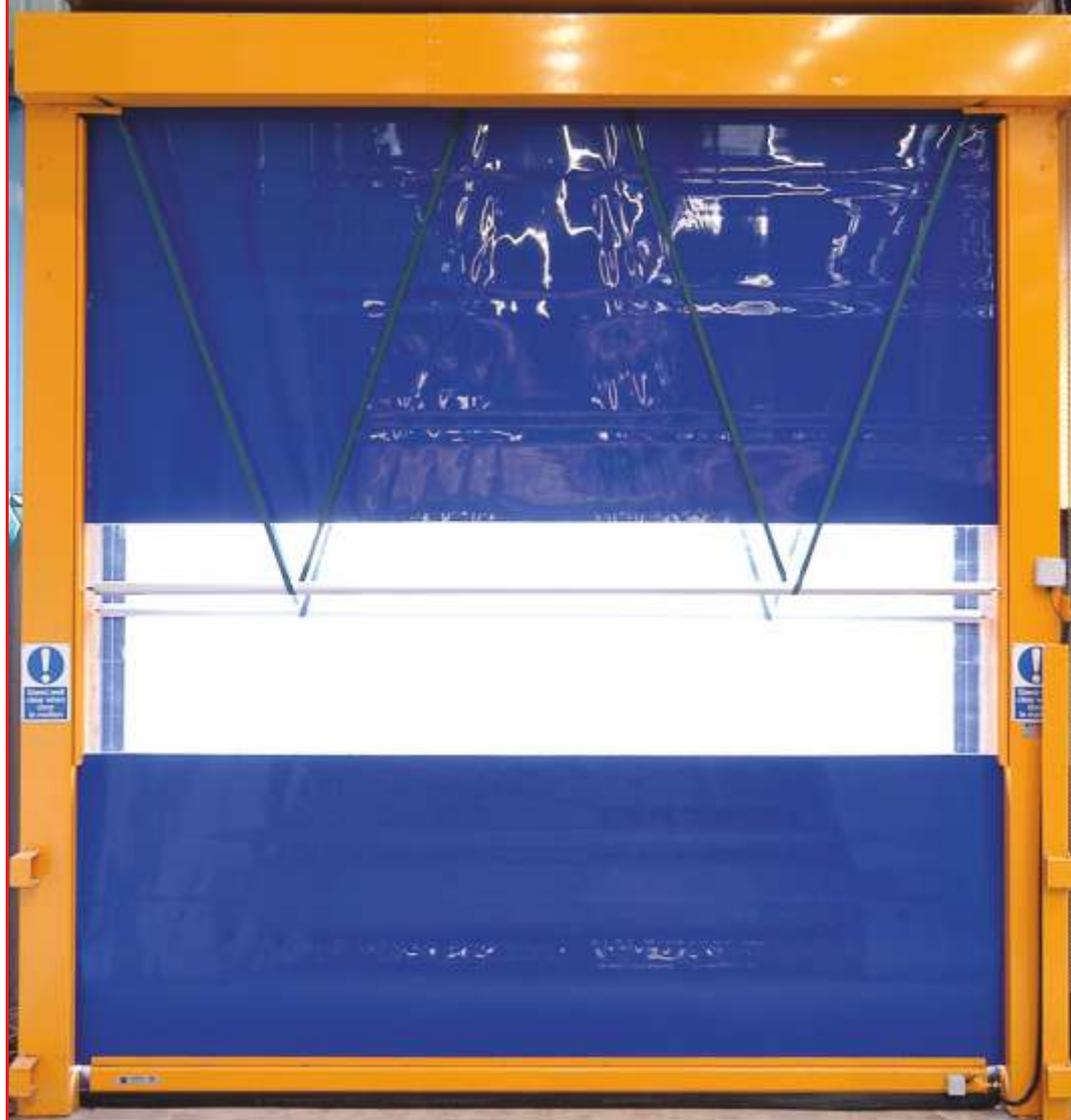
#### ACTUATION

The following options are available

- Induction loop vehicle detectors
- Remote push buttons
- Remote pull switches
- Keyfob / Hand held / Fork truck mounted transmitter units
- Radar movement detectors
- Remote photo-electric cells.

#### OPTIONAL EXTRAS

- Anti Static Curtain
- Solid Coloured Curtains
- Screen Printed Curtains
- Traffic lights
- Warning sirens
- Extra Photo electric beams for pedestrian safety
- Motor Canopies



## ARDENT



### Recommended Usage

The Ardent is intended for use in external locations. Complete with crash resistant feature, the high speed door has manual reset after impact.

### Recommended Size of Opening

Up to 5 metres wide and 5 metres high.

### Safety Features

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

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

A clear PVC vision panel is fitted into the door curtain at eye level to warn of any oncoming traffic.

### CE Conformity

All doors conform to CE Marketing Regulations, see "The Supply of Machinery

*The company reserves the right to change specification without notice.*

Regulations 1992". All KLIMATE doors are manufactured to the European standard EN 12453:2000, copies are available on request.

### Site Requirements

A three phase earth & neutral isolator to the side of the opening, fed from a 16A C rated circuit breaker, to be made available 1m from the door opening to the drive side of the motor.

### Warranty / Guarantee

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



## ARDENT Oversize



### Recommended Usage

The Ardent Oversize is a door designed for use in large external locations complete with manual re-set after impact.

### Recommended Size of Opening

Upto 10 metres wide and 6 metres high (larger door sizes are available).

### Safety Features

Two 24v transmit & receive safety beams (constantly monitored) are fitted providing a closing safety device, which reverses the door if the beam is broken.

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

### CE Conformity

All doors conform to CE Marketing Regulations, see "The Supply of Machinery Regulations 1992". All KLIMATE doors are

manufactured to the European standard EN 12453:2000, copies are available on request.

### Site Requirements

A three phase earth & neutral isolator to the side of the opening, fed from a 16A C rated circuit breaker, to be made available 1m from the door opening to the drive side of the motor.

### 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.*

## ARDENT OVERSIZE SPECIFICATION

### MECHANICAL DATA

#### DOOR CURTAIN:

3 mm thick, Blue PVC sheet with dual ply polyester fabric membrane providing a barrier which -

- Resists Air Currents
- Provides a Sound Barrier
- Has good Insulation Qualities
- Unprecedented lateral strength  
Other colours are available on request and a full screen printing service is provided.
- Due to the size, vision panels are not available.

#### CURTAIN BARREL:

Constructed from 168 mm O/D mild steel tube with machined blocks at each end incorporating high-speed bearings.

#### SIDE GUIDES:

Fabricated from pre folded steel sections. The side guides support the barrel, curtain and motor assembly. All steel is powder coated as standard.

#### WIND BARS:

A triple internal and double external wind bar system as standard is supplied on all doors. Wind bars are 105 mm powder coated aluminium tubes, which run on 75 mm heavy duty nylon pulley wheels.

#### BOTTOM RAIL / SAFETY EDGE:

Constructed from thick box section steel to give high impact resistance. A touch sensitive double electric fully monitored safety edge is fitted to the bottom rail, which reverses the door if it comes into contact with an object. The safety edge covers both sides of the bottom rail. A 400-mm skirt forms the door seal.

#### DAMAGE LIMITATION TABS:

A unique damage limitation system is fitted to the end cassettes that in the event of accident damage the bottom rail will break out. Replacing two nylon shear pins reinstates the door, reducing the risk of severe damage to the door. These shear pins can be replaced by on site maintenance personnel reducing 'down' time and callout charges.

#### CANOPY:

All doors come with a powder coated main canopy.

### ELECTRICAL DATA

#### MOTOR DRIVE UNIT

A three Phase 400v AC brake motor, driving through an anti roll back worm safety gearbox, incorporating encoder switches for open and close positions. The drive unit can be used on manual in the event of power failure. Curtain barrel is driven directly by the motor drive unit eliminating the need for a chain drive. Opening speed is 0.6 m/s, Closing speed is 0.3 m/s based on a 6 meter square door - both opening and closing speeds are adjustable to suit the operating environment.

#### CONTROL PANEL

The control panel is a new generation control unit designed for high-speed doors. Utilizing a three-phase inverter to control the motor to give fast open, slow close, slow start and slow stop. This reduces the wear and tear normally associated with direct on line two speed motors.

The panel is housed in a metal IP55 rated enclosure and has the following features: - Automatic / Semi automatic running, Auto return timer (0-240 seconds), limit switch monitoring, Optional contact for warning lights, Photocell monitoring, all remote signalling and safety features are 24v AC.

In addition the sealed counter shows the number of cycles the door has completed.

#### SAFETY FEATURES

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

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

#### ACTUATION

The following options are available

- Induction loop vehicle detectors
- Remote push buttons
- Remote pull switches
- Keyfob / Hand held / Fork truck mounted transmitter units
- Radar movement detectors
- Remote photo electric cells.

#### OPTIONS EXTRAS

- Traffic lights
- Warning sirens
- Extra Photo Electric beams for pedestrian doors
- Motor Canopies

# Features of High Speed Door

## Motor

3 Phase 400v AC worm gear and brake motor (with anti roll back)  
Encoder switches for open and close positions  
Manual option in the event of an emergency  
Adjustable opening and closing speeds  
Curtain barrel is driven by motor drive unit eliminating the need for chain drive



## PVC Curtain

Wide range of solid colours available with or without vision panel which has good insulation properties, resists air currents and provides a good sound barrier.



## Control Panel

Programmed via LED, including inverter technology giving fully adjustable open and closing speeds to suit specific environment.  
IP55 rated enclosure  
LED shows the number of cycles completed Self diagnostic control panel



## Damage Limitation Tabs

Replaceable end cassettes on bottom rail to prevent damage to door  
Low repair costs



## Canopy

All doors come with a powder coated main canopy. Outdoor motor canopies are available.



## Windbar System

Wind loading resistance  
Anodized tubes which run on nylon pulleys  
Travels with curtain  
Various combinations available depending on wind loadings.



## Photo-electric Safety Beam

Two 24v AC Photo-electric safety beams fitted providing closing safety device, activated by breaking the beam  
IP65 Protection



## Bottom Rail & Electric Safety Edge

Constructed from box section steel for high impact resistance  
Electric fully monitored safety edge forming the door seal  
Touch sensitive fail safe safety edge  
Low repair costs



## ARDENT STAINLESS STEEL SPECIFICATION

### MECHANICAL SPECIFICATION

#### DOOR CURTAIN:

Heavy duty, clear PVC sheet providing a barrier which

- d) Resists Air Currents
- e) Provides a Sound Barrier
- f) Has good Insulation Qualities

**N.B.** Slight discolouration can occur where two PVC sheets are joined. This is unavoidable when trying to achieve a strong weld.

#### CURTAIN BARREL:

Constructed from 139mm O/D mild steel tube with machined blocks at each end incorporating high-speed bearings.

#### SIDE GUIDES:

Fabricated from stainless steel finish pre folded stainless steel sections. The side guides support the barrel, curtain and motor assembly.

#### BOTTOM RAIL / SAFETY EDGE:

Fabricated from stainless steel to give high impact resistance. An electric fully monitored safety edge is fitted to the bottom rail forming the door seal.

#### DAMAGE LIMITATION TABS:

Hard wearing and low impact resistant polycarbonate end cassettes are fitted to each side of the bottom rail. If the door is impacted, one or both cassettes break off reducing the risk of severe damage to the bottom rail. These cassettes can be replaced by on site maintenance personnel reducing 'down' time and callout charges.

#### CANOPY:

Stainless Steel Canopy.

### ELECTRICAL SPECIFICATION

#### MOTOR DRIVE UNIT.

A three Phase 400v AC brake motor, driving through an anti roll back worm safety gearbox, incorporating encoder switches for open and close positions. The drive unit can be used on manual in the event of power failure. Curtain barrel is driven directly by the motor drive unit eliminating the need for a chain drive. Opening and closing speeds are adjustable up to 1.5m/s depending on the size of the door.

#### CONTROL PANEL

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

The panel is housed in a metal IP55 rated enclosure and the following features can be programmed via the LED: 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. An option of stainless steel enclosure is available.

In addition the LED shows the number of cycles the door has completed, which actuator is operating the door and the five most recent faults.

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

#### SAFETY FEATURES

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

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

#### ACTUATION

The following options are available

- Induction loop vehicle detectors
- Remote push buttons
- Remote pull switches
- Keyfob / Hand held / Fork truck mounted transmitter units
- Radar movement detectors
- Remote photo electric cells.

#### OPTIONS

- Traffic lights
- Warning sirens
- Extra Photo Electric beams
- Motor Canopies

#### CE CONFORMITY

All doors conform to CE Marketing Regulations.

#### SITE REQUIREMENTS

A three phase earth & neutral isolator to the side of the opening, fed from a 16A C rated circuit breaker, to be made available 1m from the door opening to the drive side of the motor.



## ARDENT Stainless Steel



### Recommended Usage

The Ardent Stainless Steel is a specially designed high speed door for applications where demands on hygiene are high.

### Recommended Size of Opening

Up to 4 metres wide and 4 metres high

### Safety Features

One 24v AC Photo electric safety beam (constantly monitored) is fitted providing closing safety device.

An electrical transmitter / receiver monitored 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 crank handle can be fitted to the bottom of the motor for manual operation.

### CE Conformity

All doors conform to CE Marketing Regulations, see "The Supply of Machinery Regulations 1992". All KLIMATE doors are manufactured to the

European standard EN 12453:2000, copies are available on request.

### Site Requirements

A three phase earth & neutral isolator to the side of the opening, fed from a 16A C rated circuit breaker, to be made available 1m from the door opening to the drive side of the motor.

### Warranty / Guarantee

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

# Benefits of High Speed Door

## Benefits of Ardent range of High Speed Doors

- Energy Saving
- Low Maintenance
- Product Reliability
- Sound Reduction
- Regulates Temperature
- Dust and Vermin Control
- Dampness and Humidity Control
- Controls traffic
- Secondary security
- Fast operation
- Meets Health and Safety requirements

## Why Chose Klimate?

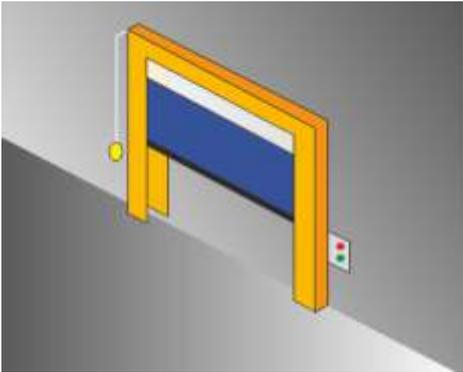
- Low maintenance and repair costs
- High usage and reliability
- Availability of parts for own brand and competitor high speed doors
- All High Speed Doors Manufactured at our Head Office in Bolton, Lancashire

## Competitors Products

We all work in a competitive environment and we are more than aware how important it is for you to make the right purchase at the right price. When comparing our products to those of competitors, compare the following:

- Cost of purchasing spares
- Cost of labour and materials even with slight impact damage
- Inconvenience of sourcing parts from an overseas manufacturer
- Suitability of the door specified for the application
- Suitability of the door specified to withstand wind pressure





A choice of simple push button, pull cord switches or key switches are available.

## Manual Operation

### Advantages

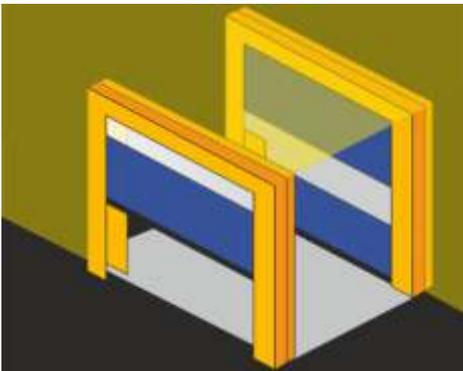
- Simple to use and easy to understand
- Key switch can be added for greater security
- Useful for maintenance checks on doors

### Disadvantages

- Pedestrians may use the automatic door instead of a separate personnel door

### Installation Details

Standard Klimate doors include one set of push buttons on the front of the control panel. A second push-button set is normally fitted on the other side of the wall and wired by Klimate engineers. Closing the Klimate doors is controlled by automatic timer (adjustable between 0 and 30 seconds)



Sequenced operation between any two doors can be arranged in order that only one door can be open whilst the other is closed. This type of air lock offers the user the maximum control of the environment.

Automatic or manual controls can be selected to work in combination with traffic lights or audible alarms.

## Air Lock

### Advantages

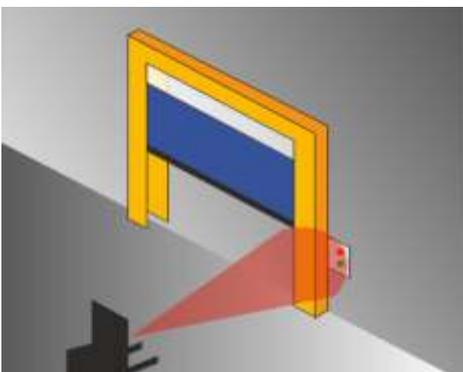
- True airlock prevents a strong wind from entering a building. A must when heat sensitive machines are being used.

### Disadvantages

- May have to wait while another user clears air lock. If one door fails open, the other door won't open until an override switch is activated.

### Installation Details

Doors are linked together so only one door can open at a time. The control panels are linked and then programmed, so only one door opens, by Klimate engineers. An override facility can be fitted to the system.



Activation by radio/infrared is selective, which means that the doors can only be activated by authorised personnel.

A large number of preset combinations are possible with either hand held or truck mounted transmitters. Receiver units are normally mounted in the control panel. All systems are coded so that one transmitter can operate one selected door and no other.

## Radio/Infra-Red Transmitters

### Advantages

- Doors can only be activated by authorised people.
- No external wiring
- Transmitters can be hand-held or truck-mounted
- Secure - more than 1000 pre-set combinations possible
- Good discipline - fork truck driver must make a conscious decision to activate the transmitter

### Disadvantages

- Fork lift truck drivers must remember to activate the transmitter - and at an early enough point in travel
- Occasional sensitivity or range may be affected by certain types of building e.g large quantities of steel frameworks
- Infra-red transmitter needs to be pointed in the direction of the receiver unit

### Installation Details

A receiver unit is mounted in the Klimate control panel. Power supply 24 volt AC. Transmitter units can be hand held or mounted on fascia of fork lift truck or other vehicles. Systems are coded so one transmitter button operates one selected door and no other. Up to seven buttons are available on each transmitter.

# Actuation

## Induction Loop

### Advantages

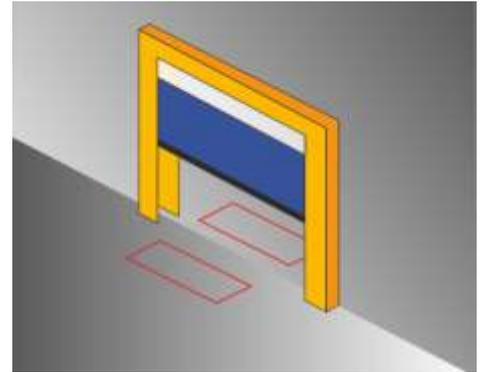
- Fully Automatic (No buttons to press therefore can't be forgotten)
- Ideal for fork lift trucks
- No danger of damage from passing vehicles
- Door is held open as long as the loop is occupied

### Disadvantages

- Will not detect pedestrian traffic
- Best only when floor surfaces are all of the same composition

### Installation Details

- Detector unit is mounted in Klimate control panel
- Continuous wire loops run through a groove in the floor cut by Klimate engineers with a special saw. The cut is 40mm deep and 2mm wide.
- Sensitivity may be increased or reduced depending on the type of vehicles using the door



The induction floor loop is cut into the floor in order to detect the metal content from wheeled traffic. The loop is positioned to suit on either side of the door. It is also possible to install a loop to cut out a signal from cross traffic passing the door. The unit will be tuned to a specific sensitivity to give the best results for the full range of traffic i.e. fork trucks, pallet trucks or vehicles.

The advantages of the floor loop as an activator are that the door is opened automatically and can be timed close. The loops work best when the floor composition is the same construction. People will not be detected by these activators.

## Photocell

### Advantages

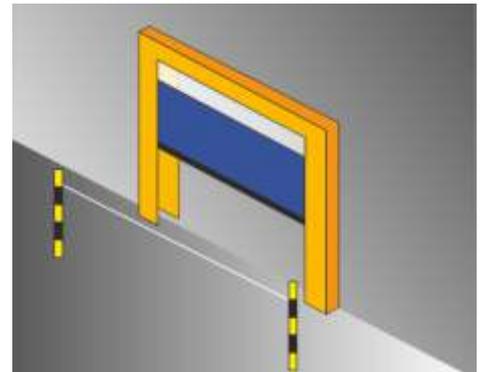
- Automatic - (can't be forgotten)
- Fail-safe - Door is triggered to open if photocell is damaged
- Safe - door is held open as long as the light beam is broken

### Disadvantages

- Mounting height must cater for all types of vehicles

### Installation Details

- Single send-and-return unit is mounted and wired by Klimate engineers on one side with reflector unit on the other side
- Power supply 24v DC or 24v AC
- Standard Klimate unit is heavy duty with a range of 10m



The photocell can 'trigger' the opening and closing of the doors but can act as a safety feature to detect both wheeled and pedestrian traffic. When the beam is obstructed, the door will stay in the open position until the obstruction is removed, then the door will close. A solid fixing area within the door line is necessary to secure photocells from movement or collisions. The distance between cells and reflectors can be up to a maximum of 10m. The photocell for activation of the door should be mounted on handrails or bollards some distance back from both faces of the door to suit the flow and speed of traffic.

## Radar

### Advantages

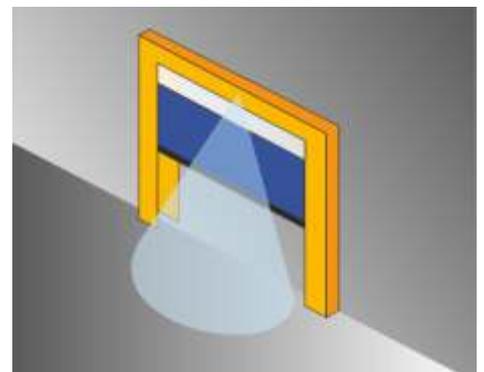
- Automatic (can't be forgotten)
- Simple to install, minimal wiring
- Safe location, no damage from passing vehicles

### Disadvantages

- Not selective - detects movement from vehicles and pedestrians
- Sometimes susceptible to vibration, so needs solid fixing

### Installation Details

- Normally, each detector is located above the door, one on each side of the wall.
- Power supply 24v DC, wired by Klimate engineer



Radar can either trigger the opening/closing of doors or just act as a safety feature protecting the door. Fitted normally above or to the side of the door openings in order to direct a 'doppler beam' for detection of movement by traffic or pedestrians. On detection the door will open, and when all clear on the other side of the door, will time close.

It is possible to set up time delays to offset cross traffic. Various ranges are available from shorter pedestrian detection to vehicle detection some 10m away from the door opening.



Unit C  
Elland Close  
Wingates Industrial Park  
Westhoughton  
Bolton  
BL5 3XE

**T: 0870 607 5050**  
**F: 0870 608 1271**  
**[www.klimate.co.uk](http://www.klimate.co.uk)**

