



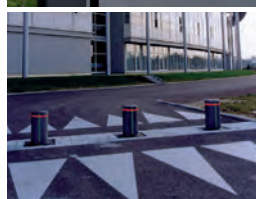
**SWING GATE**  
AUTOMATION



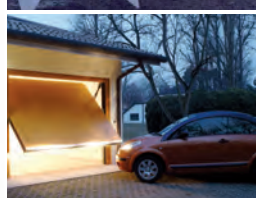
**SLIDING GATE**  
AUTOMATION



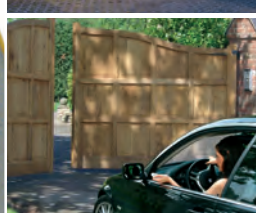
**BARRIERS**



**BOLLARDS**



**GARAGE DOOR**  
AUTOMATION



**AUTOMATION**  
ACCESSORIES

Came 2009  
**General Catalogue**



# About CAME



## Came Worldwide: for over 36 years

For over 36 years CAME has been fully committed to an ambitious project embracing all aspects of security.

We have conducted stringent product tests, careful checks on the production processes, and ongoing personnel training programmes for all work phases.

Every phase - from design to assembly - is followed by highly specialised teams and state-of-the-art sector equipment.

All production activities are carried out in our production units. This ensures that our internal managers can constantly control all the various procedures.

CAME guarantees distribution in Italy and around the world through its branches in Italy, France, Germany, Spain, UK, Belgium, Poland and United States, and its complete distribution and technical/commercial assistance network at the service of local operators.



### Use

### Installation

### Product

### Standards



Product specifically designed to be used in residential settings.



Battery-powered, Wireless product with wireless connection.



24V D.C. Motor. Generally used for intensive use settings.



Made in compliance with maximum impact force standards established by EN12445 & EN12453 Technical Regulations.



Product designed to be used in apartment blocks or other high-traffic settings.



PRATICO SYSTEM the remote control radio release system.



Motor and control panel powered by 3-phase, 230-400V A.C. line voltage.



Exclusive CAME patent.



Compliant with UL 325 safety standards for both the US and Canada.



Product specifically designed for intensive use.



New for 2009

See our price lists to check availability.





Swing gates



## FROG-AE

page 36

**New EN TESTED 230v AC underground motor with encoder.**

FROG-AE is a new 230v AC Frog underground operator with encoder controlled movement management.

Combined with the new ZM3E control panel, the new FROG-AE simplifies the installation of EN compliant gateways using force limitation.

230v Control Panel



## ZM3E

page 37

**New EN TESTED 230v AC Control Panel.**

The ZM3E control panel is our first 230v AC control board with slow down function capable of limiting the forces during gate opening and closing to meet current EN standards.

Euronorm Compliant Sliding Gate Motor



## BX246

page 68

**For gates weighing up to 600kg**

For sliding gates weighing up to 600kg, the BX-246 is an intensive use automation motor featuring built in control board, radio decoder, encoder based movement control device and obstacle detection devices. The BX-246 model also contains mechanical end stops and battery backup options.

Swing Gates



## Axo

page 52

**New range of worm drive motors**

The AXO worm drive swing gate operators offers a complete range of motors suitable for opening large or heavy gates of wing widths of up to 7m. An evolution of mechanical and electrical improvements ensures the Axo meets every power and reliability expectation.

The remote control with "Duplication Code Lock"



## Twin

page 188

**Exclusive and safe with the new generation radio system**

Twin is the new CAME transmitter with a 12 bit "Duplication Code Lock". This system ensures unauthorised duplication of remote handsets is restricted, only allowing additional remotes to be cloned by administrators who have the original key code.

Automatic touch screen paystation



## Parking System

page 122

**Barcode ticket carpark management**

Secure and robust, the PS range is engineered to work with tickets, tokens, keyfobs and transponder cards. During payment the PS system accepts note & coins.

Access Control



## Turnstiles

page 206

**A new range of passage control turnstiles**

A complete range of turnstiles ideal for controlling access in a variety of situations. Turnstiles include compact three arm models, modern DDA compatible gateways to full height entrances. The CAME range of turnstiles is capable of meeting your requirements.

Mechanical Safety Edge



## DF20N

page 168

**Sensitive Safety Edges - now available in black**

Ideal to meet current safety norms, sensitive safety edges are the answer to the multiple active protection requirements. CAME offers a host of ready to install and customisable profiles; depending on the requirements of the installation.

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# Technical Reference Standards

The system's position and type of command are the most important characteristics to keep in mind, according to the EN 12445 and EN 12453 European Standards, when determining the exact setup and proper protection devices to install when it comes to safety. The Standards, define the minimum technical solutions that need to be present to make the primary edge safe (the passage zone), for every type of system and usage.

The letters **A – B – C – D** describe the mandatory devices for each type of system.

## Command definitions

### 1. No self-holding command

The system works only with automatically reloading buttons or selector switches, which, if released block movement of the automation.

Choosing a "No self-holding" command depends on the type of use, (i.e. whether it is private or public).

### 3. Out-of-sight or Radio remote command

The system works with commands that are placed out-of-sight of the installation, such as transmitters, selector switches, buttons, wireless digital keypads, etc.

Whoever controls such devices need not be in plain view of the installed system.

### 2. Visible impulses from a fixed station

The system only works with buttons or selector switches that are placed in plain view of the door or gate.

Any type of command may be used, as long as it is of the impulse type and from a fixed station. (Self-holding is not required)

### 4. Automatic command

The system works with commands that are placed out-of-sight of the installed automation, and one, single impulse is enough for an entire work cycle (i.e. opening – pause – closing).

Commands which are for public use, such as buttons, radar, transmitters or timed, automatic commands.

## Definitions of the solutions

**A**

Button operated, no self-holding command.

When conditions allow visibility on the system, safety is guaranteed by the operator.

**C**

Limiting the forces in compliance with annex A of EN Standard 12453.

Achievable through specific mechanical machinery, such as sensitive safety edges, or electronic ones fitted on the motor. Requires testing, in the points predetermined by the Standards, for compliance with maximum allowed impact forces, using a suitable CAME instrument.

**B**

Selector-switch, key or similarly operated, no self-holding command.

Placed right next to the installed system. When conditions allow visibility on the system, safety is guaranteed by the operator.

**D**

A device – placed on the floor to the side of a door or gate – to detect the presence of any person or obstacle.

A typical example is the application of infrared beam photocells.

## Users and position + Command = Minimal solutions



**TRAINED** users' position in **PRIVATE** and **DEMARCATED** area

A limited group of people is trained to activate the automation and said automation is not located in public areas.

Example: automation is placed in private area and commanded by company employees.

1. No self-holding command **A**
2. Visible impulses from a fixed station **C**
3. Out-of-sight or Radio remote command **C**
4. Automatic command **C + D**



**TRAINED** users positioned on **PUBLIC STREET**

A limited group of people is trained to activate the automation and said automation is located in a public area.

Example: automation placed on a public street and commanded by members of a family.

1. No self-holding command **B**
2. Visible impulses from a fixed station **C**
3. Out-of-sight or Radio remote command **C + D**
4. Automatic command **C + D**



**FREE** users  
**FREE** position

Any person is free to activate the automation and said automation comes into contact with the general public.

Example: automation placed in a public parking lot or in a shopping mall and is freely used.

2. Visible impulses from a fixed station **C + D**
3. Out-of-sight or Radio remote command **C + D**
4. Automatic command **C + D**



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[www.cameuk.com](https://www.cameuk.com)



Complete system kits



## FrogAE-P kit

Complete kit for a pair of swing gates of up to 3.5 m / 11'5" each leaf, 230V A.C. motors.



Qty		
2	001FROG-AE 230v Motor	
2	001FROG-BN Foundation Case	
2	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZM3E Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	



## Frog-P24 kit

Complete kit for a pair of swing gates of up to 3.5 m / 11'5" each leaf, 24V D.C. motors.



Qty		
2	001FROG-A24 24v Motor	
2	001FROG-BN Foundation Case	
2	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZL19N Control Panel 24v	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	

Emergency battery backup available as an optional extra, see page 38 for details



## FrogAE-S kit

Complete kit for a single swing gate of up to 3.5 m / 11'5" leaf, 230V A.C. motor.



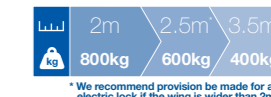
Qty		
1	001FROG-AE 230v Motor	
1	001FROG-BN Foundation Case	
1	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZM3E Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	



## Frog-S24 kit

Complete kit for a single swing gate of up to 3.5 m / 11'5" each leaf, 24V D.C. motor.



Qty		
1	001FROG-A24 24v Motor	
1	001FROG-BN Foundation Case	
1	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZL170N Control Panel 24v	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	

Emergency battery backup available as an optional extra, see page 38 for details



## Frog-P kit

Complete kit for a pair of swing gates of up to 3.5 m / 11'5" each leaf, 230V A.C. motors.



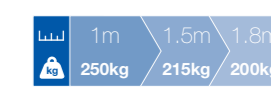
Qty		
2	001FROG-A 230v Motor	
2	001FROG-BN Foundation Case	
2	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZA3N Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	



## FrogJ-P kit

Complete kit for a pair of swing gates of up to 1.8 m / 6 ft each leaf, 24V D.C. motors.



Qty		
2	001FROGJ 24v Motor & Link Arm	
2	001FROGJC Foundation Case	
2	001A4617 Release Assembly	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZL90 Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	

Emergency battery backup available as an optional extra, see page 41 for details



## Frog-S kit

Complete kit for a single swing gate of up to 3.5 m / 11'5" leaf, 230V A.C. motor.



Qty		
1	001FROG-A 230v Motor	
1	001FROG-BN Foundation Case	
1	001A4364 Release Mechanism	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZA3N Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	



## FrogJ-S kit

Complete kit for a single swing gate of up to 1.8 m / 6 ft each leaf, 24V D.C. motor.



Qty		
1	001FROGJ 24v Motor & Link Arm	
1	001FROGJC Foundation Case	
1	001A4617 Release Assembly	
1	001DIR-10 Pair Safety Photocells	

Qty		
1	002ZL90 Control Panel	
2	001TOP-432NA Radio Remote (433,92MHz)	
1	001TOP-A433N Antenna	
1	001AF43S Frequency card. (433,92MHz)	

Emergency battery backup available as an optional extra, see page 41 for details



## Fast-P24 kit

Complete kit for a pair of swing gates of up to 2.3 m / 7'6" each leaf, 24V D.C. motors.



1m	2m	2.3m
300kg	215kg	200kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty	24V	EN TESTED
001F7024N 24v Motor	2	
001AF43S Frequency card. (433,92MHz)	1	
001DIR10 Pair Safety Photocells	1	
001KIARO24N Flashing Light	1	

Qty	24V	EN TESTED
002ZL180 Control Panel with decoder	1	
001TOP-432NA Radio Remote (433,92MHz)	2	
001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 49 for details



## Fast-S24 kit

Complete kit for a single swing gate of up to 2.3 m / 7'6" leaf, 24V D.C. motor.



1m	2m	2.3m
300kg	215kg	200kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty	24V	EN TESTED
001F7024N 24v Motor	1	
001AF43S Frequency card. (433,92MHz)	1	
001DIR10 Pair Safety Photocells	1	
001KIARO24N Flashing Light	1	

Qty	24V	EN TESTED
002ZL180 Control Panel with decoder	1	
001TOP-432NA Radio Remote (433,92MHz)	2	
001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 49 for details



## Fast-P kit

Complete kit for a pair of swing gates of up to 2.3 m / 7'6" per leaf, 230V A.C. motors.

1m	2m	2.3m
300kg	215kg	200kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty
001F7000 230v Motor with control panel
001AF43S Frequency card. (433,92MHz)
001DIR10 Pair Safety Photocells
001KIARON Flashing Light

Qty
001F7001 230v Motor
001TOP-432NA Radio Remote (433,92MHz)
001TOP-A433N Antenna



## Fast-S kit

Complete kit for a single swing gate of up to 2.3 m / 7'6" leaf, 230V A.C. motor.

1m	2m	2.3m
300kg	215kg	200kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty
001F7000 230v Motor with control panel
001AF43S Frequency card. (433,92MHz)
001DIR10 Pair Safety Photocells

Qty
001TOP-432NA Radio Remote (433,92MHz)
001TOP-A433N Antenna
001KIARON Flashing Light



## Krono-P3 kit

Complete kit for a pair of swing gates of up to 3.0 m / 9'10" each leaf, 230V A.C. motors.

2m	2.5m	3m
800kg	600kg	400kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty
001KR300S 230v Motor, left handed
001AF43S Frequency card. (433,92MHz)
001DIR-10 Pair Safety Photocells
001KIARON Flashing Light

Qty
001KR300D 230v Motor, right handed
002ZA3N Control Panel
001TOP-432NA Radio Remote (433,92MHz)
001TOP-A433N Antenna



## Krono-P5 kit

Complete kit for a pair of swing gates of up to 5.0 m / 16'4" each leaf, 230V A.C. motors.

2m	4m	5m
1000kg	500kg	400kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty	new
001KR510S 230v Motor, left handed	1
001AF43S Frequency card. (433,92MHz)	1
001DIR-10 Pair Safety Photocells	1
001TOP-A433N Antenna	1

Qty	new
001KR510D 230v Motor, right handed	1
002ZA3N Control Panel	1
001TOP-432NA Radio Remote (433,92MHz)	2



## Krono-S5S kit

Complete kit for a single swing gate of up to 5.0 m / 16'4" leaf, 230V A.C. motor.

Left Handed System

2m	4m	5m
1000kg	500kg	400kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty	new
001KR510S 230v Motor, left handed	1
001AF43S Frequency card. (433,92MHz)	1
001DIR-10 Pair Safety Photocells	1

Qty
002ZA3N Control Panel
001TOP-432NA Radio Remote (433,92MHz)
001TOP-A433N Antenna



## Krono-S5D kit

Complete kit for a single swing gate of up to 5.0 m / 16'4" leaf, 230V A.C. motor.

Right Handed System

2m	4m	5m
1000kg	500kg	400kg

\* We recommend provision be made for an electric lock if the wing is wider than 2m

Qty	new
001KR510D 230v Motor, right handed	1
001AF43S Frequency card. (433,92MHz)	1
001DIR-10 Pair Safety Photocells	1

Qty
002ZA3N Control Panel
001TOP-432NA Radio Remote (433,92MHz)
001TOP-A433N Antenna





FERNI technical specification & operational limits for all kits on these pages can be found on page 42

### Ferni Kits

## Ferni-P24 kit

Complete kit for a pair of swing gates of up to 4.0 m / 13 ft each leaf, 24V D.C. motors.



Qty	24V	EN TESTED	Qty	24V	EN TESTED
001F1024 24v Motor	2		002ZL19N Control Panel	1	
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)	2	
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 43 for details

## Ferni-S24 kit

Complete kit for a single swing gate of up to 4.0 m / 13 ft leaf, 24V D.C. motors.



Qty	24V	EN TESTED	Qty	24V	EN TESTED
001F1024 24v Motor	1		002ZL19N Control Panel	1	
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)	2	
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 43 for details

## Ferni-P kit

Complete kit for a pair of swing gates of up to 4.0 m / 13 ft each leaf, 230V A.C. motors.



Qty	Qty
001F1000 230v Motor	2
001AF43S Frequency card. (433,92MHz)	1
001DIR-10 Pair Safety Photocells	1
002ZA3N Control Panel	1
001TOP-432NA Radio Remote (433,92MHz)	2
001TOP-A433N Antenna	1

## Ferni-S kit

Complete kit for a single swing gate of up to 4.0 m / 13 ft leaf, 230V A.C. motors.



Qty	Qty
001F1000 230v Motor	1
001AF43S Frequency card. (433,92MHz)	1
001DIR-10 Pair Safety Photocells	1
002ZA3N Control Panel	1
001TOP-432NA Radio Remote (433,92MHz)	2
001TOP-A433N Antenna	1

Certain items listed in the kits on these pages, namely control board, remote controls or safety photocells, may be substituted without prior notice for a comparative alternative if the advertised item code is temporarily out of stock.

COMPLETE KITS

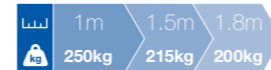
Amico Kits

AMICO technical specification & operational limits for all kits on these pages can be found on page 50

### Amico Kits

## Amico-P24 kit

Complete kit for a pair of swing gates of up to 1.8 m / 6 ft each leaf, 24V D.C. motors.

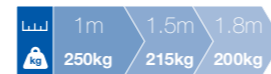


Qty	24V	EN TESTED	Qty	24V	EN TESTED
001A1824 24v Motors	2		002ZL90 Control Panel	1	
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)	2	
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 51 for details

## Amico-S24 kit

Complete kit for a single swing gate of up to 1.8 m / 6 ft leaf, 24V D.C. motor.

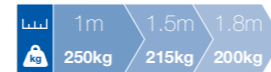


Qty	24V	EN TESTED	Qty	24V	EN TESTED
001A1824 24v Motor	1		002ZL90 Control Panel	1	
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)	2	
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna	1	

Emergency battery backup available as an optional extra, see page 51 for details

## Amico-P230 kit

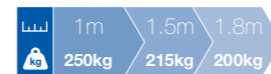
Complete kit for a pair of swing gates of up to 1.8 m / 6 ft each leaf, 230V A.C. motors.



Qty	new	EN TESTED	Qty
001A18230 230v Motor	2		002ZA3N Control Panel
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna

## Amico-S230 kit

Complete kit for a single swing gate of up to 1.8 m / 6 ft leaf, 230V A.C. motor.



Qty	new	EN TESTED	Qty
001A18230 230v Motor	1		002ZA3N Control Panel
001AF43S Frequency card. (433,92MHz)	1		001TOP-432NA Radio Remote (433,92MHz)
001DIR-10 Pair Safety Photocells	1		001TOP-A433N Antenna

Swing Gates

Amico Technical Information page 50  
Amico Complete Range page 51  
Control Panels pages 58 to 61

Accessories

Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189

Swing Gates

Ferni Technical Information page 42  
Ferni Complete Range page 43  
Control Panels pages 58 to 61

Accessories

Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Ati-P kit

Complete kit for a pair of swing gates of up to 5.0 m / 16'4" each leaf, 230V A.C. motors.



Qty		Qty	
001A5000A 230v Motor	2	002ZA3N Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati-S kit

Complete kit for a single swing gate of up to 5.0 m / 16'4" each leaf, 230V A.C. motors.



Qty		Qty	
001A5000A 230v Motor	1	002ZA3N Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati P3 kit

Complete kit for a pair of swing gates of up to 3.0 m / 9'10" each leaf, 230V A.C. motors.



Qty		Qty	
001A3000A 230v Motor	2	002ZA3N Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati-S3 kit

Complete kit for a single swing gate of up to 3.0 m / 9'10" each leaf, 230V A.C. motors.



Qty		Qty	
001A3000A 230v Motor	1	002ZA3N Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati-P24 kit

Complete kit for a pair of swing gates of up to 5.0 m / 16'4" each leaf, 24V D.C. motors.

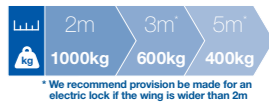


Qty		Qty	
001A5024N 24v Motor	2	002ZL180 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati-S24 kit

Complete kit for a single swing gate of up to 5.0 m / 16'4" each leaf, 24V D.C. motors.



Qty		Qty	
001A5024N 24v Motor	1	002ZL180 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati P324 kit

Complete kit for a pair of swing gates of up to 3.0 m / 9'10" each leaf, 24V D.C. motors.



Qty		Qty	
001A3024N 24v Motor	2	002ZL180 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



# Ati-S324 kit

Complete kit for a single swing gate of up to 3.0 m / 9'10" each leaf, 24V D.C. motors.



Qty		Qty	
001A3024N 24v Motor	1	002ZL180 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



## Axo-P3 kit

Complete kit for a pair of swing gates up to 3.0 m / 9' 10" per leaf, 230V A.C. motors.

2m	2.5m	3m
800kg	600kg	500kg

	Qty	new	EN TESTED
001AX302304 230v Motor	2		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-S3 kit

Complete kit for a single swing gate up to 3.0 m / 9' 10" leaf, 230V A.C. motors.

2m	2.5m	3m
800kg	600kg	500kg

	Qty	new	EN TESTED
001AX302304 230v Motor	1		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-P4 kit

Complete kit for a pair of swing gates up to 4.0 m / 13' per leaf, 230V A.C. motors.

2m	3m	4m
800kg	500kg	300kg

	Qty	new	EN TESTED
001AX402306 230v Motor	2		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-S4 kit

Complete kit for a single swing gate up to 4.0 m / 13' leaf, 230V A.C. motors.

2m	3m	4m
800kg	500kg	300kg

	Qty	new	EN TESTED
001AX402306 230v Motor	1		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-P7 kit

Complete kit for a pair of swing gates up to 7.0 m / 22' 11" per leaf, 230V A.C. motors.

2m	5m	7m
1000kg	400kg	300kg

	Qty	new	EN TESTED
001AX71230 230v Motor	2		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-S7 kit

Complete kit for a single swing gate up to 7.0 m / 22' 11" leaf, 230V A.C. motors.

2m	5m	7m
1000kg	400kg	300kg

	Qty	new	EN TESTED
001AX71230 230v Motor	1		
001AF43S Frequency card. (433,92MHz)	1		
001DIR-10 Pair Safety Photocells	1		

	Qty	new	EN TESTED
002ZM3E Control Panel	1		
001TOP-432NA Radio Remote (433,92MHz)	2		
001TOP-A433N Antenna	1		



## Axo-P324 kit

Complete kit for a pair of swing gates up to 3.0 m / 9' 10" per leaf, 24V D.C. motors.

2m 2.5m 3m  
800kg 600kg 500kg

Qty	24V new EN TESTED	Qty	24V new EN TESTED
001AX3024 24v Motor	2	002ZLJ24 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



## Axo-S324 kit

Complete kit for a single swing gate up to 3.0 m / 9' 10" leaf, 24V D.C. motors.

2m 2.5m 3m  
800kg 600kg 500kg

Qty	24V new EN TESTED	Qty	24V new EN TESTED
001AX3024 24v Motor	1	002ZLJ24 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



## Axo-P524 kit

Complete kit for a pair of swing gates up to 5.0 m / 16'4" per leaf, 24V D.C. motors.

2m 3m 5m  
1000kg 700kg 400kg

Qty	24V new EN TESTED	Qty	24V new EN TESTED
001AX5024 24v Motor	2	002ZLJ24 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



## Axo-S524 kit

Complete kit for a single swing gate up to 3.0 m / 16'4" leaf, 24V D.C. motors.

2m 3m 5m  
1000kg 700kg 400kg

Qty	24V new EN TESTED	Qty	24V new EN TESTED
001AX5024 24v Motor	1	002ZLJ24 Control Panel	1
001AF43S Frequency card. (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DIR-10 Pair Safety Photocells	1	001TOP-A433N Antenna	1



## BX-74 kit

Complete kit for a sliding gate for a gate weighing up to 400kg, 230V A.C.

10m  
400kg

Qty	new EN TESTED	Qty	
001BX74 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BX-78 kit

Complete kit for a sliding gate for a gate weighing up to 800kg, 230V A.C.

14m  
800kg

Qty	new EN TESTED	Qty	
001BX78 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BX-P kit

Complete kit for a sliding gate for a gate weighing up to 600kg, 230V A.C.

12m  
600kg

Qty	new EN TESTED	Qty	
001BX-P 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BX-10 kit

Complete kit for a sliding gate for a gate weighing up to 600kg, 230V A.C.

12m  
600kg

Qty	new EN TESTED	Qty	
001BX10 230v Motor & LCD Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BX-243 kit

Complete kit for a sliding gate for a gate weighing up to 400kg, 24v D.C.

10m  
400kg

Qty		Qty	
001BX243 24v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BX-246 kit

Complete kit for a sliding gate for a gate weighing up to 600kg, 24v D.C.

12m  
600 kg

Qty		Qty	
001BX246 24v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BK-800 kit

Complete kit for a sliding gate for a gate weighing up to 800kg, 230V A.C.

20m  
800kg

Qty		Qty	
001BK800 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BK-12P kit

Complete kit for a sliding gate for a gate weighing up to 1200kg, 230V A.C.

20m  
1200kg

Qty		Qty	
001BK1200P 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BK-1200 kit

Complete kit for a sliding gate for a gate weighing up to 1200kg, 230V A.C.

20m  
1200kg

Qty		Qty	
001BK1200 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BKE-1200 kit

Complete kit for a sliding gate for a gate weighing up to 1200kg, 230V A.C.

13m  
1200kg

Qty		Qty	
001BKE1200 230v Motor & Panel & encoder	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BK-1800 kit

Complete kit for a sliding gate for a gate weighing up to 1800kg, 230V A.C.

20m  
1800kg

Qty		Qty	
001BK1800 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BKE-1800 kit

Complete kit for a sliding gate for a gate weighing up to 1800kg, 230V A.C.

13m  
1800kg

Qty		Qty	
001BKE1800 230v Motor, Panel & Encoder	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BK-2200 kit

Complete kit for a sliding gate for a gate weighing up to 2200kg, 230V A.C.

20m  
2200kg

Qty		Qty	
001BK2200 230v Motor & Panel	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## BKE-2200 kit

Complete kit for a sliding gate for a gate weighing up to 2200kg, 230V A.C.

13m  
1200kg

Qty		Qty	
001BKE2200 230v Motor, Panel & Encoder	1	001TOP-432NA Radio Remote (433,92MHz)	2
001AF43S Frequency card. (433,92MHz)	1	001TOP-A433N Antenna	1
001DIR-10 Pair Safety Photocells	1		



## Flex U8600 Kit

Complete kit for a single swing gate of up to 1.6 m / 5'3" per leaf. 24v D.C. motors.

0.8m 1.2m 1.6m  
150kg 125kg 100kg

Qty		Qty	
001F500 24v Motor	1	002ZL160N Control Panel	1
001S0001 1 channel control card	1	001S7000 Keypad	1



## Flex U8711 Kit

Complete kit for a pair of swing gates of up to 1.6 m / 5'3" per leaf. 24v D.C. motors.

0.8m 1.2m 1.6m  
150kg 125kg 100kg

Qty		Qty	
001F500 24v Motor	2	002ZL150N Control Panel	1
001AF43S Radio Card (433,92MHz)	1	001TOP-432NA Radio Remote (433,92MHz)	2
001DOC-E Pair Safety Photocells	1	001TOP-A433N Antenna	1
001SET-E Antenna cable.	1	001TOP-RG58 Antenna cable.	5m
001KIARO24N Flashing Light.	1	001LOCK82 Electric Lock.	

# Ver U4483-B Kit

Complete Garage Door Kit.  
Complete with chain guide

Traction Force 500n

Qty	24V	Qty
1	001V900E 24v Motor	1
1	001V0679 Transmission Arm	1
1	001DIR10 Pair Safety Photocells	1
1	001DOC-P Push Button	1
1	001AF43S Radio Card (433,92MHz)	1
1	001TAM-432SA Radio Remote	1
1	001KIARO24N Flashing Light	1

# Ver U4480-B Kit

Complete Garage Door Kit.  
Complete with belt guide

850n

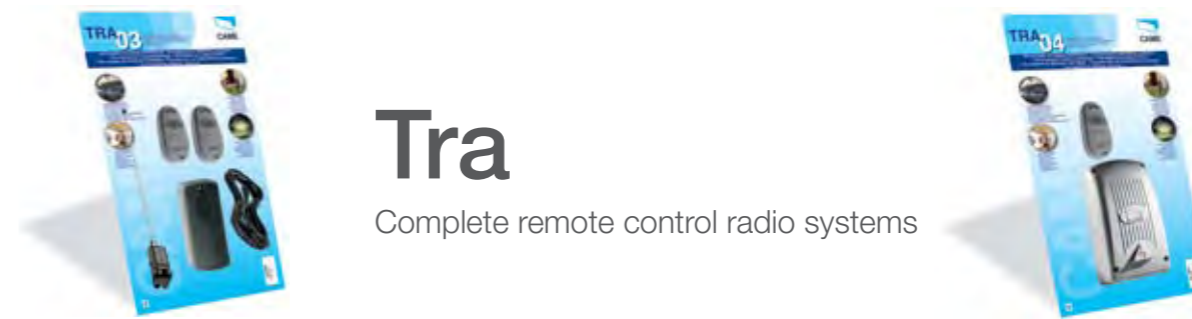
Qty	24V	Qty
1	001V900E 24v Motor	1
1	001V0687 Standard Transmission Arm	1
1	001DOC-P Push Button	1
1	001AF43S Radio Card (433,92MHz)	1
1	001TOP-432NA Radio Remote (433,92MHz)	1
1	001TOP-A433N Antenna	1
5m	001TOP-RG58 Antenna cable.	5m

# Ver U4512-B Kit

Complete Garage Door Kit.  
Complete with belt guide

850n

Qty	24V	Qty
1	001V700E 24v Motor	1
1	001V0687 Standard Transmission Arm	1
5m	001TOP-RG58 Antenna cable.	1
1	001DOC-P Push Button	1
1	001AF43S Radio Card (433,92MHz)	1
1	001TOP-432NA Radio Remote (433,92MHz)	1
1	001TOP-A433N Antenna	1



# Tra

Complete remote control radio systems

## Complete Kits

### Tra03

Complete 433,92 MHz radio system for 12-24V A.C.-D.C. universal use

Qty	Qty
1	001RE432 12 - 24V A.C.-D.C. IP54 surface mount bi-channel receiver
2	001TOP-432NA Radio Remote (433,92MHz)
1	001TOP-A433N Antenna
5m	001TOP-RG58 Antenna cable

### Tra08

Complete 433,92 MHz radio system for 230V A.C. universal use

Qty	Qty
1	001RBE42 230V A.C. IP54 surface mount 4-channel radio module
2	001AF43S Plug-in radio frequency card. (433,92MHz)
2	001TOP-434NA Radio Remote (433,92MHz)
1	001TOP-A433N Antenna
5m	001TOP-RG58 Antenna cable

### Tra010

Complete 433,92 MHz radio system for 12-24V A.C.-D.C. universal use - 999 users

Qty	Qty
1	001RBE4MT 12 - 24V A.C.-D.C. IP54 surface mount 4-channel multi-user receiver to store up to 999 codes (users)
2	001TAM-432SA Radio Remote (433,92MHz)
2	001TOP-A433N Antenna.
5m	001TOP-RG58 Antenna cable.

### Tra04

Complete 433,92 MHz command system for ROLLING SHUTTERS

Qty	Qty
1	002ZR24 230V A.C. control panel with built-in radio decoder.
1	001AF43S Plug-in radio frequency card. (433,92MHz)
1	001TOP-432NA Radio Remote (433,92MHz).

Certain items listed in the kits on these pages, namely control board, remote controls or safety photocells, may be substituted without prior notice for a comparative alternative if the advertised item code is temporarily out of stock.



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## Swing gate operators



## The models

With a range of 27 models, automating almost any swing gate is possible. Be they wrought iron, steel or wooden, you will find a motor contained in the table below that will meet your needs. CAME models are available in 230v A.C., 24v D.C. and three phase options, follow the suggested application type below to choose the system that suits your application.

Use	RESIDENTIAL	APARTMENT BLOCKS	INDUSTRIAL	INTENSIVE USE
Series	Model	Max Width (m)		
Frog	Frog-AV	1.3		
Flex	F500	1.6		YES
Flex	F510	1.6		YES
Amico	A1824	1.8		YES
Frog-J	FROG-J	1.8		YES
Amico	A18230	2.2		
Fast	F7024N	2.3	2.3	YES
Fast	F7001	2.3	2.3	
Fast	F7000	2.3	2.3	
Ati	A3024N	3	3	YES
Ati	A3000A	3	3	
Ati	A3100	3	3	
Ati	A3006	3	3	
Ati	A3106	3	3	
Axo	AX3024	3	3	YES
Axo	AX302304	3	3	
Krono	KR300D/S	3	3	
Krono	KR310D/S	3	3	
Frog	Frog-A24	3.5	3.5	YES
Frog	FROG-A	3.5		
Frog	FROG-AE	3.5		
Axo	AX402306	4	4	
Axo	AX412306	4	4	
Ferni	F1024	4	4	YES
Ferni	F1000	4	4	
Ferni	F1100	4	4	
Ati	A5024N	5	5	YES
Ati	A5000A	5	5	
Ati	A5100	5	5	
Ati	A5006	5	5	
Ati	A5106	5	5	
Ati	A5106	5	5	
Axo	AX5024	5	5	YES
Krono	KR510D/S	5	5	
Axo	AX71230	7	7	
Superfrog	Frog MD/MS	8	8	

● 230V A.C. ● 24V D.C. ● 230-400V A.C. three phase

Compliant with EN12453 and EN12445 safety norms.



## Standard RESIDENTIAL installation example

TRAINED users and positioned on a PUBLIC STREET

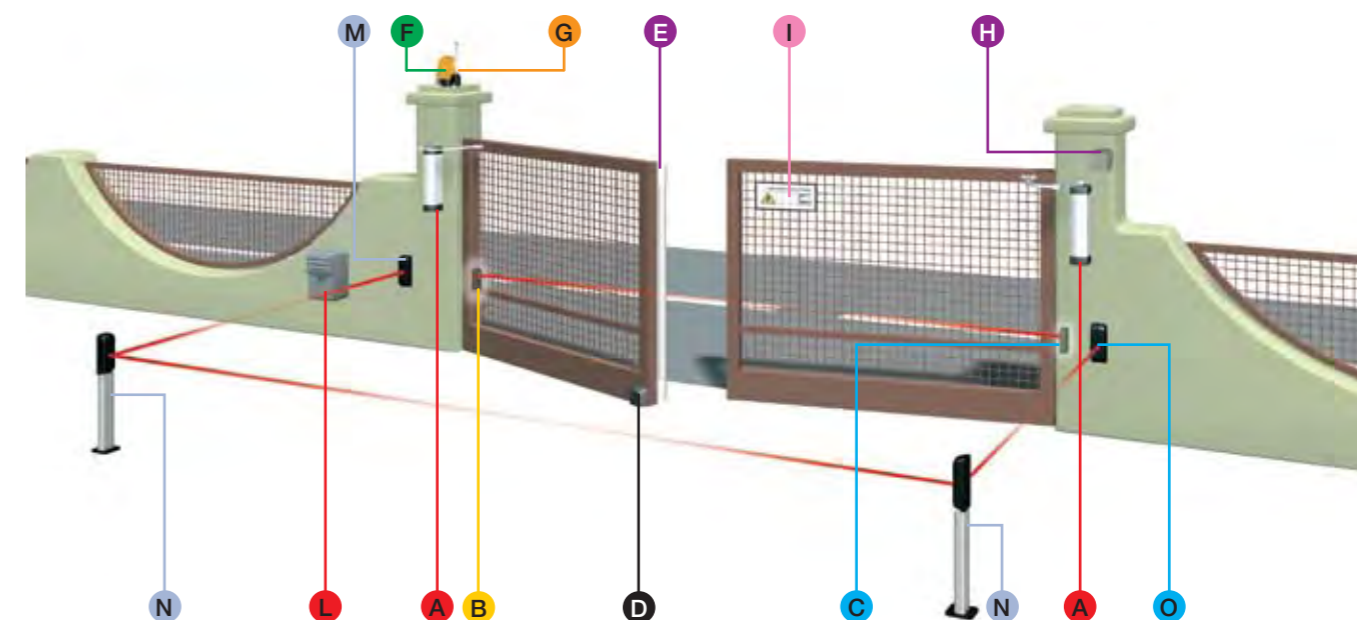
Remote controlled operation is often the desired activation method, this needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (i.e. the passage zone) and the "secondary edge" (the zone behind the gate leaf).

**Current legislation requires the C + D type minimal solutions (ref. page 8):** employing sensitive safety edges and infrared beam photocells.



### Important

If using EN12445 – EN12453 tested motors and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation by the engineer responsible) are compliant with the parameters dictated by the Standards.



### Standard issue

- A** Motors
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Electric lock
- E** Safety sensitive edge
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Gate plate
- L** Control panel
- M** **N** **O** Wireless photocells M=TX - N=TX/RX - O=RX

The diagram above is for the Flex, Ferni & Fast series.

Cable length (m)	<10	10 - 20	20 - 30	30 - 40	40 - 50
Cable length (ft)	< 32,8	32,8 - 65,61	65,61 - 98,42	98,42 - 131,23	131,23 - 164,04
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG14	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2GxAWG13
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*x0.5mm <sup>2</sup>	n*xAWG20
● Flashing light 24V A.C. -D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>
● Antenna	RG58 Max 10m 32.8 ft				

\*n° = see instructions ● European standards ● US standards

### Safety Edges



The Df series sensitive edges are exclusively patented by CAME. They are deformable along their entire length and have no rigid parts. Df is a unique product able to detect any contact with an object or person, and command the gate to stop or reverse.

### Wireless Convenience



The new Db series' Wireless photocells allow increased protection of the gateway without the increased costs incurred by running cable to the beam locations. Plus Db cells are capable of zonal coverage, improving the overall protection area.

## Standard APARTMENT BLOCK installation example

TRAINED users and positioned on a PUBLIC STREET

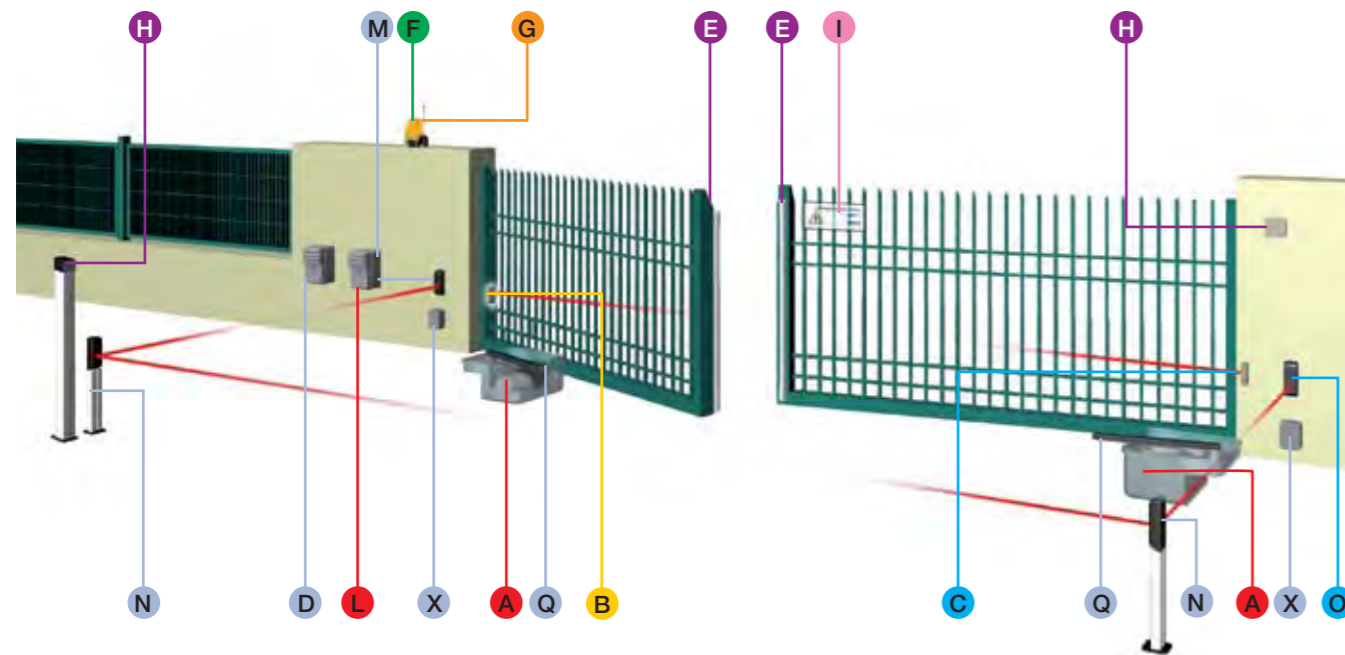
In the following example we suggest using a 24V D.C. system, to guarantee the highest performance levels and intensive use. Again, remote controlled operation is often the desired activation method, which needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (the passage zone) and the "secondary edge" (the zone behind the gate leaf).

**Current legislation requires the C + D type minimal solutions (ref. page 7):** employing sensitive safety edges and infrared beam photocells.



### Important

If using EN12445 – EN12453 tested motors and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation by the engineer responsible) are compliant with the parameters dictated by the Standards.



### Standard issue

- A Motors
- B TX Infrared photocells
- C RX Infrared photocells
- D Emergency batteries and operation card
- E Safety sensitive edge
- F Flashing light
- G Reception antenna
- H Selector switch (key - code - card)
- I Gate plate
- L Control panel
- M N O Wireless photocells M=TX - N=TX/RX - O=RX
- Q Key release
- X Junction box

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n"x0.5mm <sup>2</sup>	n"xAWG20	*rx0.5mm <sup>2</sup>
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Commands	*n"x0.5mm <sup>2</sup>	n"xAWG20	*n"x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32.8 ft

\*n° = see instructions ● European standards ● US standards

The given diagram is for all operators of Frog - Frog-J series.

### 24 Volts to adjust speed



24V D.C. swing-gate motors, let you manage the movement speed of the gate leaves, obstacle sensitivity and deceleration during the final closing phase, all to provide maximum safety even in multi-user settings where a high volume of traffic requires greater performance levels.

### Keyfob Activation



The PCT transponder keyfobs, coupled with the TSP01 proximity sensors, lets you open your gates simply by holding them up to the sensor, which can store up to 250 different keyfobs (or cards). These can also be used to open the door to stairwells or private garage doors.

## Swing Gate Operators

OPERATORS – SERIES	ATI KRONO FROG FAST FERNI	ATI KRONO FROG FAST FERNI F7000 MODEL (with built-in panel)	A1824 FROG-J	F500 F510	F500 F510	FROG-A24 F1024	A3024N A5024N F7024N	FROG-A24 F1024	
CARD – PANEL	ZA3N	ZM3E	ZF1	ZL90	ZL150N	ZL160N	ZL170N	ZL180	ZL19N
<b>FUNCTIONAL FEATURES</b>									
SELF-DIAGNOSIS of active safety devices function		●		●				●	●
Opening and closing PREFLASHING function	●	●		●	●		●	●	●
REOPENING during closing function	●	●	●	●	●	●	●	●	●
RECLOSEING during opening function	●	●			●				
Obstacle STALL function		●		●				●	●
TOTAL STOP function	●	●	●	●	●	●	●	●	●
PARTIAL STOP of the gate-leaf function	●	●		●	●		●	●	●
OBSTACLE DETECTION function on photocells	●	●		●	●	●	●	●	●
ENCODER operation		●		●					
MOVEMENT CONTROL and obstacle detection device		●							
AMPEROMETRIC DETECTION function				●		●	●	●	●
<b>SAFETY</b>									
1 leaf PEDESTRIAN OPENING function		●	●	●			●	●	●
1 leaf PARTIAL OPENING function	●	●			●				
TRANSMITTER OPEN ONLY function	●	●		●	●		●	●	●
OPEN ONLY button connection function	●	●		●	●		●	●	●
CLOSE ONLY button connection function	●	●		●	●		●	●	●
OPEN-STOP-CLOSE-STOP button connection function	●	●	●	●	●	●	●	●	●
OPEN-CLOSE-REVERSE button connection function	●	●	●	●	●	●	●	●	●
MAINTAINED ACTION command function	●	●	●	●	●	●	●	●	●
1st leaf DELAYED CLOSING function	●	●	●	●	●		●	●	●
2st leaf DELAYED CLOSING function	●	●	●	●	●				
IMMEDIATE CLOSING function									
EMERGENCY RELEASE function from the remote control									
<b>COMMAND</b>									
FLASHING LIGHT connection	●	●	●	●	●	●	●	●	●
CYCLE LAMP connection	●	●							
COURTESY LAMP connection		●							
Antenna connection	●	●	●	●	●	●	●	●	●
24V ACCESSORIES connections	●	●	●	●	●	●	●	●	●
OPEN WARNING LIGHT connection	●	●	●	●	●	●	●	●	●
CLOSED WARNING LIGHT connection									
Contact output for 2nd RADIO CHANNEL	●	●	●	●	●	●	●	●	●
Adjusting RUNNING TIME	●	●	●	●	●	●	●	●	●
EXTRACTABLE, NUMBERED connection terminals	●	●	●	●	●	●	●	●	●
SELF-LEARNING function of the transmitter's RADIO code	●	●	●	●	●	●	●	●	●
RAM BLOW function to aid the release of the electrolock	●	●	●	●	●	●	●	●	●
Adjustable AUTOMATIC RE-CLOSING TIME function	●	●	●	●	●	●	●	●	●
ELECTROLOCK/ELECTRORELEASE connection output	●	●	●	●	●	●	●	●	●
OPENING AND/OR CLOSING deceleration					●	●	●	●	●
EMERGENCY-BATTERY operation (optional)					●	●	●	●	●
MASTER-SLAVE operation mode									
Adjustable RUNNING SPEED AND DECELERATION function		●			●		●		●
Warning DISPLAY		●							
Electronic BRAKE									
CONTROL and warning led	●	●		●	●	●	●	●	●
SELF-LEARNING function of the opening and closing endstops					●				

● 230V A.C. ● 24V D.C.

# Frog

## Swing gate operators

### Completely Hidden

Frog represents the synthesis of CAME's design philosophy and creativity applied to swing gates. Extremely sturdy and all but invisible, the system in no way detracts from the aesthetics of your entrance.



for gate leaves of up to 3.5 m  
for gate leaves of up to 11'5" ft



**Water tight.**  
Frog's high quality standards and its IP67 protection rating from external agents help keep the motor in working order.



**Bottom Hinge.**  
Installing Frog casings as a bottom hinge is simple and enables you to retrofit the automation with ease at a later date.



**Easy, patented release.**  
In the event of a power cut, the FROG manual release mechanism is easily accessible. It comes in three versions for each specific need, from a practical lever arm to the customised key.



## Advantages of Frog

FROG is the most functional and desirable solution for every type of swing gate. It is the best way to automate a gate without altering its shape and design.

In the CAME tradition the gearing is electromechanical and ensures smooth precise and safe movement over time.

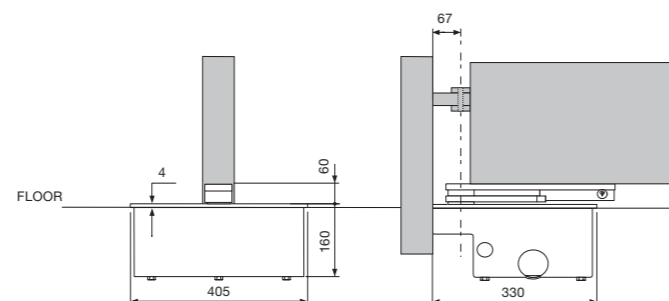
### Limits to use

Model	FROG-AV	FROG-A	FROG-AE	FROG-A24
Max width of gate leaf (m)	1.3	*3.5	*2.5	2
Max weight of gate leaf (Kg)	300	400	600	800

● 230V A.C. ● 24V D.C.

NOTES: \* We recommend provision be made for an electric lock if the wing is wider than 2.5m

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## EN Tested Models

Frog 24V and 230V technology allows for total control of the gate movement. FROGA-A24 and FROG-AE models are compliant to EU standards (EN12445 and EN12453) together with the ZL19N, ZL170N and ZM3E control panels.



### Technical features

Type	FROG-A	FROG-AV	FROG-AE	FROG-A24
Protection rating	IP67	IP67	IP67	IP67
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	24 D.C.
Current draw (A)	1.9	2.5	1.9	15 Max
Power (W)	200	300	200	180
90° opening time (s)	18	9	18	16 - 45
Duty cycle (%)	30	30	30	Intensive use
Thrust (N)	320	240	320	320
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	
Motor's thermo-protection (°C/°F)	150/302	150/302	150/302	-

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. underground operators



001FROG-A Self-locking operator of up to 3.5 m / 11'5" per gate leaf.



001FROG-AV Self-locking operator of up to 1.3 m / 4'3" per gate leaf.



001FROG-AE Self-locking operator **with encoder** for gate leaves of up to 3.5 m / 11'5" per gate leaf. For use with ZM3E control panel (below).



### 230V A.C. control panels



002ZM3E Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder.



002ZA3N Multifunction control panel with built-in radio decoder.

### 24V D.C. underground operator and control panels



001FROG-A24 Self-locking operator of up to 3.5 m / 11'5" per gate leaf.



002ZL170N Control panel for one-leaf swing gates with built-in radio decoder.



002ZL19N Control panel for two-leaf swing gates with built-in radio decoder.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189


# Frog

for gate leaves of up to 3.5 m  
for gate leaves of up to 11'5" ft

## The complete range

### Casings & Locks



001FROG-BN Coated steel foundation case. 



001FROG-BI Inox AISI 304 steel foundation case.



001A4364 Lever key release.




001A4365 Triangular key release.



001A4366 Customized key release and EURO-DIN cylinder.

### Accessories



002LB18 Casing with emergency card, fitted to house three 12V - 7 Ah batteries (for ZL170N and ZL19N control panels). 



BAT3PK Set of 3 12V - 7Ah batteries



001A4370 Transmission lever for opening arcs of up to 140° for gate leaves no wider than 2 m / 6'6".



001A4472 Transmission lever with adjustable gate-leaf opening stop.



001FL-180 Chain driven transmission lever for opening arcs of up to 180° for gate leaves no wider than 2 m / 6'6" ft (excluding FROG-A24).



001LOCK81 Electric lock with single-cylinder.



001LOCK82 Electric lock with double-cylinder.



M6 Grease gun adaptor for Frog shoe (enables application of grease during maintenance).

### New FROG foundation case



With a cataphoresis treatment and black resin coating the new FROG foundation case provides improved chemical and corrosion resistance to ensure long lasting protection.

### Technical Features

type	FROG-BN
Thickness (µm)	15 - 30
Resistance to salt/water per norm ASTM B117-94 (hours)	500 - 700
Alkali Resistance	High
Hydrocarbon Resistance	High
UV Resistance	High
Impact Resistance	Direct 70 Kg - Indirect 70 Kg



A world of **safe automation**

### Accessories

**Access control** pages 160-165

**Safety** pages 166-175

**Radio control** pages 176-189

# Frog-J



for gate leaves of up to 1.8 m  
for gate leaves of up to 5'9" ft

## Swing gate operators

Underground automation motor, just 85mm deep!  
The Frog-J is a 24V underground operator for swing gates of up to 1.8 m / 5'9" per gate leaf. It is tested in compliance with European Standards on the subject of impact force. This feature makes Frog-J a safe and reliable electromechanical system suitable for use around children or pets.



**Innovative double release.**  
The easily operated double release system is accessible from either side of the gateway. It is secure and protected from the elements.



**Encoder technology**  
The encoder is constantly monitoring and controlling the gate movement allowing for total safety.



**Easy connections.**  
With Frog-J you need just one 3 core cable to connect the motors and to manage endstops.



## Advantages of Frog-J

CAME's latest solution in underground operators, suitable even when gates are not originally designed for underground automation. The Frog-J needs very little space to be fitted. Requiring a minimal amount of ground work, it adds the advantages of an underground system with reduced extra cost.

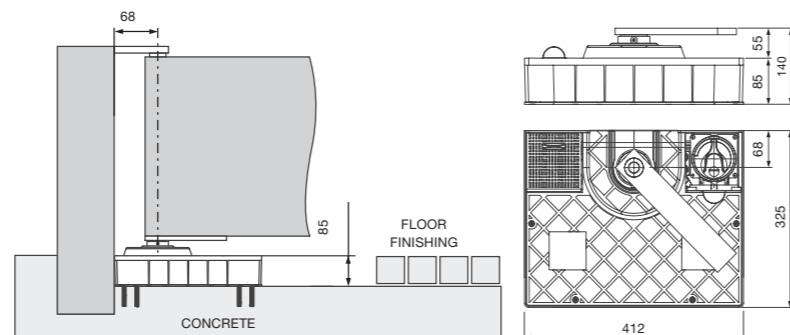
The ZL90 latest generation control panel is fitted with a led-monitored, self-diagnosing function and is designed to be connected to motors by way of a three core cable.

## Limits to use

Model	FROG-J
Max width of gate leaf (m)	1.8
Max weight of gate leaf (Kg)	200
Max opening of gate leaf (°)	105

● 24V D.C.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	FROG-J
Protection rating	IP67
Power supply (V) (50/60Hz)	230 A.C.
Motor power supply (V)	24 D.C.
Current draw (A)	10 Max
Power (W)	240
90° opening time (s)	Adjustable
Duty cycle (%)	Intensive use
Torque (Nm)	260
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F

● 24V D.C.

## The complete range



001FROG-J Operator with encoder.



002ZL90 Control panel for two-leaf swing gates with built-in radio decoder.



### Casing & Locks

001FROG-JC Foundation case.



001A4617 Release assembly with customised key.



### Accessories

BAT2PK Set of 2 x 12V - 1.2 Ah batteries.



002LB90 Card for connecting up two 12V - 1.2Ah emergency batteries with rack.

## 24 Volts

Frog-J is a below ground, 24V D.C. automation system which offers all of the advantages that come with working with continuous current. These include, managing the gate run, obstacle detection and emergency batteries that can be connected to the system to allow opening even when the power is out.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Ferni



for gate leaves of up to 4 m  
for gate leaves of up to 13 ft

## Swing gate operators

For mounting on large pillars.

Ferni is the optimal solution for gates mounted on pillars where the motor-hinge centre distance can be quite large. Its unique transmission lever provides a simple and effective solution to the movement issues affecting such gates.



**Advantages of the 24V D.C. electronics**  
The 24V technology adds increased safety, allowing for adjustments of run speed, opening & closing deceleration, & electronic obstacle detection.



**Precise, sturdy and dependable.**  
Ferni features micro-switches for adjusting the opening of the gate, and is manufactured from high quality materials helping reduce maintenance costs.



**Large sized Pillars.**  
Ferni is the optimal solution for gates with leaves of up to 4 m / 13'1" long, mounted on pillars where the motor-hinge centre distance can be quite large. (up to 38 cm / 15 in)



## Advantages of Ferni

The sturdy and powerful operator featuring an articulated arm for gates with leaves of up to 4 m / 13 ft in length. A system which enables gate automation when the dimensions of a pillar prevent any other automated device from being installed. Ferni is also available with the special "slide" arm version. This can be installed where little lateral space is available on gate leaves up to 2 m / 6'6" wide.

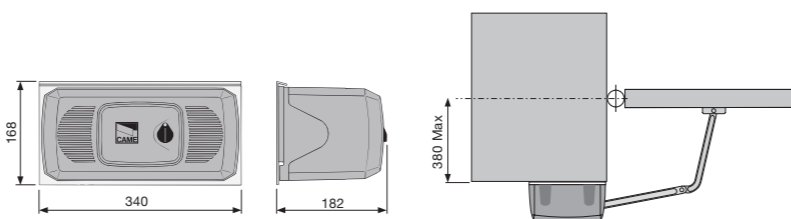
### Limits to use

Model	F1000 - F1100	F1024
Max width of gate leaf (m)	4	2.5
Max weight of gate leaf (Kg)	400	800

● 230V A.C. ● 24V D.C.

NOTES: if the gate leaf is wider than 2.5 m / 8'2" ft, the F1000 and F1024 models require an electric lock to be installed. While an electric lock is always required for the F1100 model.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## EN Tested Models

Ferni 24V technology allows for total control of the gate movement. The F1024N model complies with European Standards as concerns the impact forces generated during operation.



## Technical features

Type	F1000	F1100	F1024
Protection rating	IP54	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	24 D.C.
Current draw (A)	1.3	1	15 Max
Power (W)	150	110	180
90° opening time (s)	18	18	16 - 45
Duty cycle (%)	30	50	Intensive use
Torque (Nm)	320	380	470
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F
Motor's thermo-protection (°C/°F)	150/302	150/302	-

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. external operators

- 001F1000** Self-locking operator with articulated transmission arm.
- 001F1100** Reversible operator with articulated transmission arm.

### 230V A.C. control panels

- 002ZA3N** Multifunction control panel with built-in radio decoder.
- 002ZM3E** Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder.

### 24V D.C. external operator and control panels

- 001F1024** Self-locking operator complete with articulated transmission arm.
- 002ZL170N** Control panel for one-leaf swing gates with built-in radio decoder.
- 002ZL19N** Control panel for two-leaf swing gates with built-in radio decoder.

### Accessories

- 002LB18** Casing with emergency card, fitted to house three 12V - 7 Ah batteries (for ZL170N and ZL19N control panels).
- 001LOCK81** Electric lock with single-cylinder.
- 001LOCK82** Electric lock with double-cylinder.
- 001F1001** Straight telescopic transmission arm for up to 2 m / 6'6" long gate leaves.
- 001H3000** Safety casing complete with release handle and command button for pull-cord release L = 5 m / 16'4".
- BAT3PK** Set of 3 12V - 7Ah batteries.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189





for gate leaves of up to 3 - 5 m  
for gate leaves of up to 10 - 16 ft

## Swing gate operators

### Sturdy & powerful.

Ati is the perfect operator for medium to large swing gates. It is powerful and versatile, does not require excessive periodic maintenance. It can also be used under intense duty conditions such as in apartment blocks, company facilities or other multi user environments.



**Practical and safe.**  
The easily operated release system is readily accessible. It is secure, protected from the elements and provides simple operation during power cuts.



**The 24V D.C. electronics.**  
The ZL180 control panel can be integrated with LB180 card allowing emergency function via batteries (optional extra) during a power cut. The amperometric detection function if needed stops or inverts the direction of motion.



**Next-generation control panels.**  
The new ZM3E control panel is fitted with "self-diagnosis" of their protective devices connected up to the system.



## Advantages of Ati

Sturdy, compact and dependable, it is the perfect operator for swing gates of considerable size.

With precise attention to detail, every aspect of the Ati range of motors has been developed to provide maximum usability. It can be used under intense duty conditions such as in apartments, company facilities and other high-traffic environments.

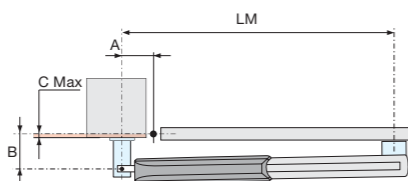
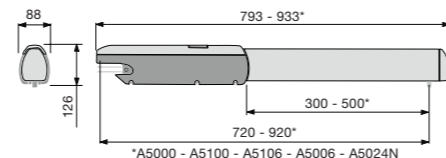
A totally reliable automation system, that requires few alterations to existing gates or excessive on-going periodic maintenance.

### Limits to use

Model	A3000 - A3100 - A3106 - A3006 - A3024N		
Max width of gate leaf (m / ft)	3	2.5	2
Max weight of gate leaf (Kg)	400	600	800
Model	A5000 - A5100 - A5106 - A5006 - A5024N		
Max width of gate leaf (m)	5	4	2
Max weight of gate leaf (Kg)	400	500	600
	800	1,000	

● 230V A.C. ● 24V D.C.

### Dimensions



Model	Opening (°)	A	B	C max	LM
<b>ATI 3m (A3000 - A3100 - A3000A - A3024N)</b>					
	90°	130	130	60	720
	120°	130	110	50	720
<b>ATI 5m (A5000 - A5100 - A5000A - A5024N)</b>					
	90°	200	200	120	920
	120°	200	140	70	920

Above measurements in mm.

Dimensions in millimetres (25.4 mm = 1 in)

## EN Tested Models

The 24V D.C. models together with the dedicated ZL180 panel constantly controls the gate movement allowing for safe movement, in compliance with EU standards.

## Technical features

Type	A3000A - A3100 / A5000A - A5100	A3006 - A3106 / A5006 - A5106	A3024N - A5024N
Protection rating	IP44	IP44	IP44
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	24 D.C.
Current draw (A)	1,2	1,2	10 Max
Power (W)	150	150	120
90° opening time (s)	19 / 32	28 / 45	Adjustable
Duty cycle (%)	50	50	Intensive Use
Thrust (N)	400 - 3000	400 - 3000	400 - 3000
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F
Motor's thermo-protection (°C/°F)	150/302	150/302	-

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. external operators

- 001A3000A Self-locking operator for gate leaves of up to 3 m / 10 ft (opening time 90° 19s).
- 001A3100 Reversible operator for gate leaves of up to 3 m / 10 ft (opening time 90° 19s).
- 001A3006 Self-locking operator for gate leaves of up to 3 m / 10 ft (opening time 90° 28s).
- 001A3106 Reversible operator for gate leaves of up to 3 m / 10 ft (opening time 90° 28s).
- 001A5000A Self-locking operator for gate leaves of up to 5 m / 16 ft (opening time 90° 32s).
- 001A5100 Reversible operator for gate leaves of up to 5 m / 16 ft (opening time 90° 32s).
- 001A5006 Self-locking operator for gate leaves of up to 5 m / 16 ft (opening time 90° 45s).
- 001A5106 Reversible operator for gate leaves of up to 5 m / 16 ft (opening time 90° 45s).

### 230V A.C. control panels

- 002ZA3N Multifunction control panel with built-in radio decoder.
- 002ZM3E Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder.

### 24V D.C. external operators and control panel (min gate leaf width = 1.5 m / 4'9" ft)

- 001A3024N Self-locking operator for gate leaves of up to 3 m / 10 ft (adjustable 90° opening time).
- 001A5024N Self-locking operator for gate leaves of up to 5 m / 16 ft (adjustable 90° opening time).
- 002ZL180 Control panel for two-leaf swing gates with built-in radio decoder.

### Accessories

- 002LB180 Card for connecting two 12V - 1.2Ah emergency batteries with rack for ZL180 control panel. (use with BAT2PK, see AMICO accessories)
- 001LOCK81 Electric lock with single cylinder.
- 001LOCK82 Electric lock with double cylinder.
- 001D001 Lock cylinder with DIN key.
- 001H3000 Safety casing complete with release handle and command button for pull-cord release L = 5 m / 16'4".

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Krono

## Swing gate operators

CAME, great reliability and efficiency.

A complete range of swing gate operators in the best of CAME tradition; sturdy and silent.

The ideal solution for prestigious gates integrating harmony, aesthetics and functionality.

An extremely robust, simple and flexible solution.



**Simple Adjustments**  
The endstop micro-switches allow for quick, precise adjustment of the gates position while opening or closing.



**New generation control panels.**  
The new ZM3E control panel comes with a display which shows the self-diagnosing functions of any safety devices connected to the system.



**Perfect integration.**  
Its arced shape and coated finish make Krono suited to even the most demanding architectural contexts.



for gate leaves of up to 3 - 5 m  
for gate leaves of up to 10 - 16 ft



## Advantages of Krono

Manufactured in aluminium, the Krono provides constant robust and reliable operation.

In two versions, the Krono can be installed on gate leaves of up to 3 or 5 metres wide.

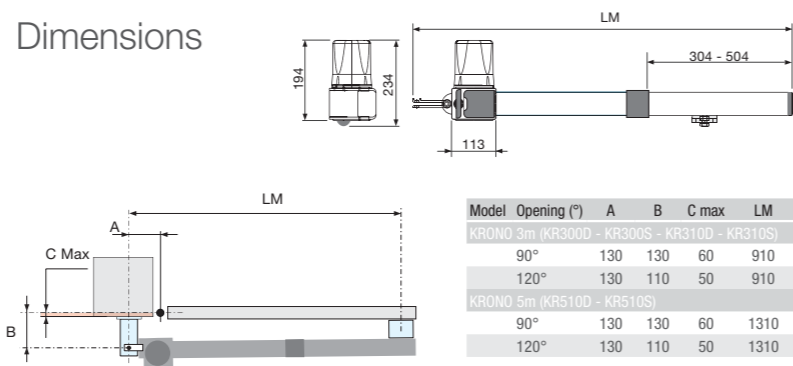
Motors can also feature micro-switches for adjusting the endstops both in opening and closing.

### Limits to use

Model	KR300D - KR300S - KR310D - KR310S		
Max width of gate leaf (m)	3	2.5	2
Max weight of gate leaf (Kg)	400	600	800
Model	KR510D - KR510S		
Max width of gate leaf (m)	5	4	2.5
Max weight of gate leaf (Kg)	400	500	800

● 230V A.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

**new** New to the UK

The Krono motor is now available in a 5m version. This new model is ideal for automating larger or heavier gates and brings with it everything users have come to expect from the Krono motor.

## Technical features

Type	KR300D - KR300S - KR310D - KR310S	KR510D - KR510S
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V) (50/60 Hz)	230 A.C.	230 A.C.
Current draw (A)	1.1	1.1
Power (W)	130	130
90° opening time (s)	22	34
Duty cycle (%)	30	30
Thrust (N)	400 - 3000	400 - 3000
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Motor's thermo-protection (°C/°F)	150/302	150/302

● 230V A.C.

## The complete range

### 230V A.C. external operators

- 001KR300D Right-hand self-locking operator for gate leaves of up to 3 m / 10 ft.
- 001KR300S Left-hand self-locking operator for gate leaves of up to 3 m / 10 ft.
- 001KR310D Right-hand self-locking operator with built-in gate-leaf stop microswitches, for leaves of up to 3 m / 10 ft.
- 001KR310S Left-hand self-locking operator with built-in gate-leaf stop microswitches, for leaves of up to 3 m / 10 ft.
- 001KR510D Right-hand self-locking operator with built-in gate-leaf stop microswitches, for gate leaves of up to 5 m / 16 ft. **new**
- 001KR510S Left-hand self-locking operator with built-in gate-leaf stop microswitches, for gate leaves of up to 5 m / 16 ft. **new**

### 230V A.C. control panels

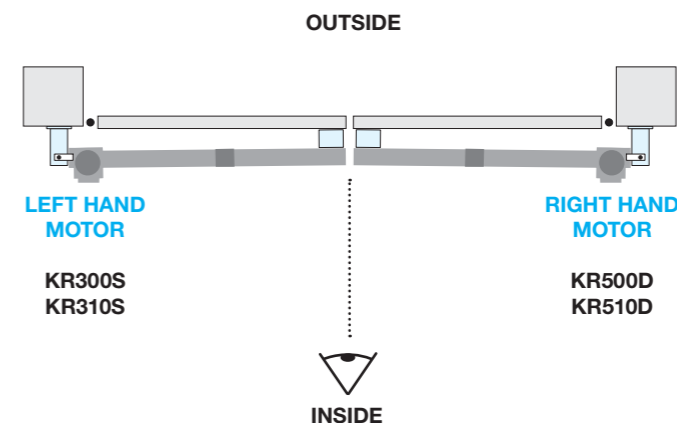
- 002ZA3N Multifunction control panel with built-in radio decoder.
- 002ZM3E Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder. **new**

### Accessories

- 001KR001 Lock cylinder with DIN key.

### Krono Handing

Look at the gateway from the inside of the property looking out when choosing which Krono motor you require



**Accessories** [Access control](#) pages 160-165  
[Safety](#) pages 166-175  
[Radio control](#) pages 176-189





# Fast



for gate leaves of up to 2.3 m  
for gate leaves of up to 7'5" ft

## Swing gate operators

The compact, versatile solution.

The Fast is part of an innovative series of automation systems for swing gates. Powerful and versatile, it is specifically designed to be mounted on medium and large pillars.



**Safe and practical.**  
The convenient release lever enables manual opening of the gate in case of a power cut.



**Advantages of the 24V D.C. electronics.**  
The 24V-powered Fast electronics automatically recognises the interruption of electric power and activates the emergency batteries, so that the gate can always be opened and closed (optional extra).



**Fast.**  
Modern design thanks to the extreme attention to detail and choice of materials.



## Advantages of Fast

With its articulated transmission arms Fast is the new automation system for swing gates up to 2.3 m / 7'5" long. Ideal for installation on medium and large pillars with straightforward hinge geometry.

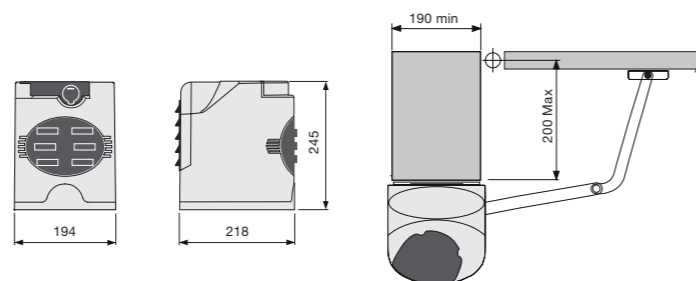
The Fast is also available in the 24V version, to ensure a safe movement of the gate.

### Limits to use

Model	F7000 - F7001	F7024N
Max width of gate leaf (m)	2.3	2
Max weight of gate leaf (Kg)	200	215

● 230V A.C. ● 24V D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## EN Tested Models

Fast 24V technology allows for total control of the gate movement. The new F7024N complies with European Standards regarding the impact forces generated during operation.



## Technical features

Type	F7000 - F7001	F7024N
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	24 D.C.
Current draw (A)	1,4	11 Max
Power (W)	160	140
90° opening time (s)	18	16 - 45
Duty cycle (%)	30	Intensive use
Torque (Nm)	180	180
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Motor's thermo-protection (°C/°F)	150/302	-

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. external operators

- 001F7000** Self-locking operator complete with articulated transmission arm and **built-in control panel**. (See p. 58 for control panel functions)
- 001F7001** Self-locking operator complete with articulated transmission arm.

### 230V A.C. control panels

- 002ZA3N** Multifunction control panel with built-in radio decoder.
- 002ZM3E** Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder. new

### 24V D.C. external operator and control panel

- 001F7024N** Self-locking operator complete with articulated transmission arm. 24V EN TESTED
- 002ZL180** Control panel for two-leaf swing gates with built-in radio decoder. 24V

### Accessories

- 002LB180** Card for connecting two 12V - 1.2 Ah emergency batteries with rack (for ZL180 control panel). 24V
- 001LOCK81** Electric lock with single-cylinder.
- 001LOCK82** Electric lock with double-cylinder.
- 001F7002** Straight transmission arm with slide guide.
- 001H3000** Safety casing complete with release handle and command button for pull-cord release L = 5 m / 16'4".
- BAT2PK** Set of 2 12V - 1.2 Ah batteries.

**Accessories** **Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

# Amico



for gate leaves of up to 1.8 m  
for gate leaves of up to 6 ft

## Swing gate operators

### Safety and design.

Amico encoder controlled operator. Coupled with the ZL90 control panel, it makes it possible to install systems which are compliant with European standards for the maximum impact forces generated by gate movement.



**Encoder technology**  
The encoder is constantly monitoring and controlling the gate movement allowing for total safety.



**Easy gate-run adjustments**  
Amico automatically manages the opening and closing endpoint adjustments. The final adjustment takes place during the initial installation testing phase, and through the positioning of mechanical stops.



**Easy connections.**  
With the Amico you need just one three-core cable to connect the motors and to manage endstops.



## Advantages of Amico

An electromechanical motor that comprises all of CAME's design experience and technology. With encoder control of impact forces, coupled with the ZL90 control panel, it makes it possible to install systems which are fully compliant with European standards regarding the maximum impact forces generated by gate movement.

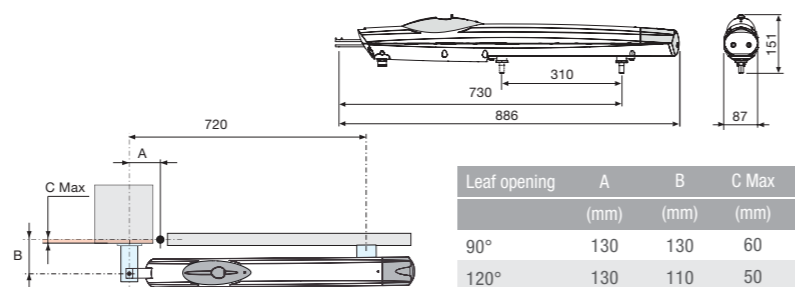
The ZL90 latest generation control panel is fitted with a led-monitored, self-diagnosing function and is designed to be connected to motors using a three-core cable.

### Limits to use

Model	A1824 - A18230		
Max width of gate leaf (m)	1	1.5	1.8
Max weight of gate leaf (Kg)	250	215	200

● 230V A.C. ● 24V D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## New 230v motor


The AMICO range has been expanded with a 230v motor which, combined with a ZA3N control panel will provide you with all the features you are used to.


### Technical features


Type	A1824	A18230
Protection rating	IP44	IP44
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	230 A.C.
Current draw (A)	4 Max	1.2
Power (W)	100	80
90° opening time (s)	Adjustable	19
Duty cycle (%)	Intensive use	50
Thrust (N)	400 - 2000	400 - 2000
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F	-20 °C to 55 °C -4 °F to 131 °F


● 230V A.C. ● 24V D.C.


## The complete range


- 


**001A1824** Self-locking operator with encoder.
- 24V D.C. control panels**
- 


**002ZL90** Control panel for two-leaf swing gates with built-in radio decoder.
- 230V A.C. external operators**
- 


**001A18230** 230v A.C. self-locking motor
- 230V A.C. control panels**
- 

**002ZA3N** Multifunction control panel with built-in radio decoder.
- Accessories**
- 


**002LB90** Card for connecting up two 12V - 1.2Ah emergency batteries with rack
- 

**BAT2PK** Set of 2 x 12V - 1.2 Ah batteries.

**Accessories** [Access control](#) pages 160-165  
[Safety](#) pages 166-175  
[Radio control](#) pages 176-189



# Axo



for gate leaves of up to 7 m  
for gate leaves of up to 23 ft

## Swing Gate Operators

### Supreme Reliability.

The new Axo range features a comprehensive series of motors suitable for a multitude of applications. Features include built in end stop adjustment and with the ZM3E and ZLJ24 control panels, full euronorm compliance in both 230v and 24v versions.



## Advantages of Axo

The Axo range has a motor suitable for any application. From 230v residential uses on smaller gates to opening exceedingly heavy or large gates.

Combined with the functionality of the ZM3E control panel, the Axo range offers a vast array of functions and is capable of meeting the EN Standards straight out of the box.

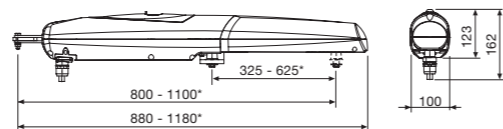
### Limits to use

Model	AX302304 - AX3024						
Max width of gate leaf (m)	2	2.5	3				
Max weight of gate leaf (Kg)	800	600	500				
Model	AX402306 - AX412306						
Max width of gate leaf (m)	2	2.5	3	4			
Max weight of gate leaf (Kg)	800	600	500	300			
Model	AX5024						
Max width of gate leaf (m)	2	2.5	3	4	5		
Max weight of gate leaf (Kg)	1000	800	700	500	400		
Model	AX71230						
Max width of gate leaf (m)	2	2.5	3	4	5	6	7
Max weight of gate leaf (Kg)	1000	800	700	500	400	350	300

● 230V A.C. ● 24V D.C.

NOTES: if the gate leaf is wider than 2.5 m / 8'2" ft, the Axo models require an electric lock to be installed. An electric lock is always required for the AX71230 model.

### Dimensions



Model	Opening (°)	A	B	C max	LM
AXO 3m (AX302304 - AX3024)					
	90°	130	130	70	800
	120°	150	100	50	800
AXO 4m (AX402306 - AX412306)					
	90°	130	130	70	800
	120°	150	100	50	800
AXO 5m (AX5024)					
	90°	200	220	150	1100
	120°	220	220	100	1100
AXO 7m (AX71230)					
	90°	200	220	150	1100
	120°	220	220	100	1100

Above measurements in mm.

**Advanced modern design.**  
The new aesthetic of the Axo range meets the expectations of the modern consumer. The models are contained within 2 casing forms.



**Encoder technology**  
The encoder is constantly monitoring and controlling the gate movement allowing for complete safety.



**En Tested**  
Thanks to the advanced electronics on the ZM3E and ZLJ24 control boards, the Axo motors are capable of meeting the EN standards regarding impact forces.



## EN Tested Models

Axo technology allows for total control of the gate movement. The new range is capable of complying with European Standards regarding the impact forces generated during operation.

## Technical features

Type	AX302304	AX402306-AX412306	AX71230	AX3024	AX5024
Protection Rating	IP44	IP44	IP44	IP44	IP44
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C.	230 A.C.	230 A.C.	24 D.C.	24 D.C.
Current Draw (A)	1.5	1.5	1.5	10 MAX	10 MAX
Power (W)	175	175	175	120	120
90° opening time (s)	20	28	40	Adjustable	Adjustable
Duty cycle (%)	50	30	30	Intensive use	Intensive use
Thrust (N)	500 - 4500	500 - 4500	500 - 4500	500 - 4500	500 - 4500
Operating temperature (°C)	-20 - +55	-20 - +55	-20 - +55	-20 - +55	-20 - +55

● 230V A.C. ● 24V D.C.



## The complete range

### 230V A.C. external operators

- 001AX302304 Self-locking operator for gate leaves of up to 3 m / 10 ft. (opening time 90° 20s)
- 001AX402306 Self-locking operator for gate leaves of up to 4 m / 13 ft. (opening time 90° 28s)
- 001AX412306 Reversible operator for gate leaves of up to 4 m / 13 ft. (opening time 90° 28s)
- 001AX71230 Reversible operator for gate leaves of up to 7 m / 22'9" ft. (opening time 90° 40s)

### 230V A.C. control panels

- 002ZM3E Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder.

### 24V D.C. external operators

- 001AX3024 Self-locking operator for gate leaves of up to 3 m / 10 ft. (opening time 90° adjustable)
- 001AX5024 Self-locking operator for gate leaves of up to 5 m / 16'4" ft. (opening time 90° adjustable)

### 24V D.C. control panels

- 002ZLJ24 Control panel for two-leaf swing gates with built-in radio decoder.

### Accessories

- 002LB180 Card for connecting two 12V - 1.2Ah emergency batteries.
- 001LOCK81 Electric lock with single cylinder.
- 001LOCK82 Electric lock with double cylinder.
- BAT2PK Set of 2 x 12V - 1.2 Ah batteries.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Flex



for gate leaves of up to 1.6 m  
for gate leaves of up to 5'2" ft

## Swing gate operators

Capable of mounting to posts as small as 8cm. Flex, the operator designed for small swing gates, it needs very little space to be installed and fits even when the pillars are right-up against a wall or fence. It is the ideal solution to manage pedestrian passages in residential or apartment settings.



**Straight Arm Option**  
The standard F510 model comes with a straight transmission arm and slide-guide for applications where space is truly minimum such as when the gate is right up against a fence.



**24V D.C. electronics**  
The Flex motors, run on 24V of continuous current to give maximum guarantee of safety to the user at all times.



**Ready-to-use and sensitive.**  
Even the slightest obstacle will trigger the gate stopping function contained on the Flex models.



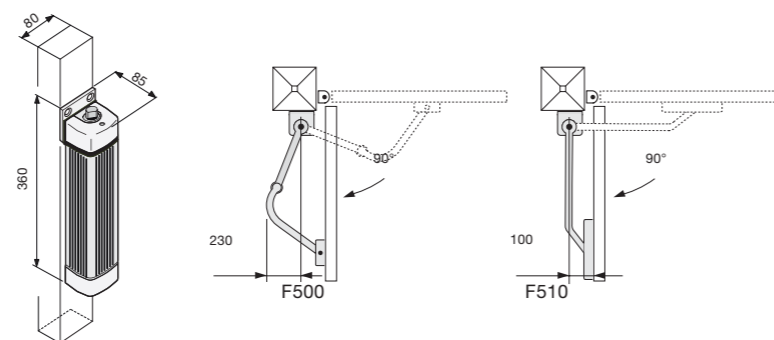
## Advantages of Flex

Extremely compact and a simple, versatile product. Flex is also available with a "slide arm" option, when reduced space or adjacent wall require such a solution. The electronics in the Flex system accept an add-on emergency battery back-up device for power cuts. The batteries are recharged automatically during normal operation.

### Limits to use

Model	F500 - F510		
Max width of gate leaf (cm)	160	120	80
Max weight of gate leaf (Kg)	100	125	150 / 330
			● 24V D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## EN Tested Models

The Flex series together with the ZL160N control panel constantly controls the gate movement allowing for safe operation, and is EU standard EN12453 and EN12445 compliant.



## Technical features

Type	F500	F510
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.
Current draw (A)	2 Max	2 Max
Power (W)	48	48
90° opening time (s)	13	9
Duty cycle (%)	Intensive use	Intensive use
Torque (Nm)	100	100
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 24V D.C.

## The complete range

### 24V D.C. external operators

- 001F500 Reversible operator with articulated transmission arm.
- 001F510 Reversible operator with straight transmission arm and slide guide.

### 24V D.C. control panels

- 002ZL160N Control panel for single-leaf swing gates with built-in radio decoder and amperometric obstacle detection device.
- 002ZL150N Control panel for two-leaf swing gates with built-in radio decoder.

### Accessories

- 002LB54 Card for connecting two 12V – 1.2Ah emergency batteries.
- 001LOCK81 Electric lock with single cylinder.
- 001LOCK82 Electric lock with double cylinder.
- BAT2PK Set of 2 x 12V - 1.2 Ah batteries.

### Accessories

Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189

# Superfrog

## Swing gate operators

### Invisible power!

Superfrog is an underground electromechanical operator, engineered and built by CAME to operate uncommonly large and heavy swing gates. Superfrog, for "super-sized" gates!



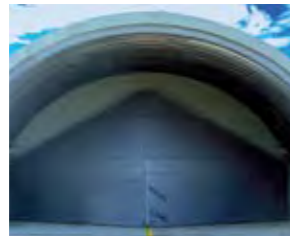
**It withstands anything!**  
The carefully chosen materials and the high protection from environmental agents ensure that Superfrog will last and last with little periodic maintenance.



**Extremely sturdy.**  
Superfrog is a system which features exceptional force and extreme mechanical sturdiness.



**Multiple Applications.**  
Among the different application options, Superfrog can be installed on the large doors of aeroplane hangers.



for gate leaves of up to 8 m  
for gate leaves of up to 26 ft



## Advantages of Superfrog

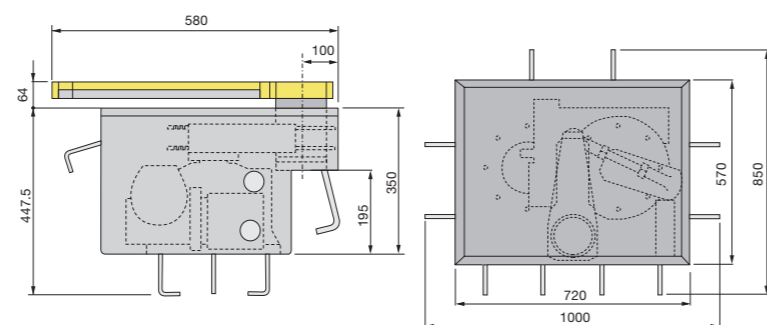
This is the underground operator for very large swing gates. Made of the highest quality materials, the Superfrog is unmatched when it comes to power. The motor can also operate very large swing doors, such as those found on hangars, or even special doors installed in large industrial facilities or freight depots.

### Limits to use

Model	FROG-MD/MS					
Max width of gate leaf (m)	<4	4	5	6	7	8
Max weight of gate leaf (Kg)	1.500	1.200	1.000	800	700	600

● 230-400V A.C. 3-phase

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	FROG-MD/MS	
Protection rating	IP67	
Power supply (V) (50/60Hz)	230-400 A.C. 3-phase	
Motor power supply (V) (50/60Hz)	230-400 A.C. 3-phase	
Current draw (A)	2.5 max	
Power (W)	600	
95° Max opening time (s)	45	
Duty cycle (%)	50	
Torque (Nm)	1000	
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 230-400V A.C. 3-phase

## The complete range

### 230-400V A.C. 3-phase underground operators

001FROG-MD Right-hand self-locking operator.

001FROG-MS Left-hand self-locking operator.



### 230-400V A.C. three-phase control panel

002ZM3ES Control panel.

### Foundation cases

001FROG-CD Foundation case for right-hand operator.

001FROG-CS Foundation case for left-hand operator.



## 3-phase

Superfrog is powered by a 230-400V A.C. 3-phase which provides maximum thrust and minimal energy consumption. The 3-phase power supply also provides optimal current when operating helping to solve problems with inertia on large swing gates.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Z230

230V A.C.

## Control panels

### New generation technology.

The new generation of CAME control panels for swing gates, able to meet all application contexts. In all of the versions the logic is handled by a MICROPROCESSOR-operated command and control system. The control units are already fitted with built-in "radio decoders"; all you need to do is insert one of CAME's cards matched to the required frequency.

Maximum useful space for electrical connections. CAME's casings are designed to make it easy to perform all system wiring operations, as well as any subsequent maintenance.



### Right or left door.

The bilaterally-hinged door and technical sheet rack are just some of the features that make CAME containers extremely practical and easy to use.



### Auto test.

Some models are fitted with "self-diagnosis" of their protective devices. The circuit prevents the operator from working in case any anomaly is detected in one of the safety devices which is connected up to the system.



### Better when illuminated!

Through the control panels, you can control the auxiliary lighting of the driveways surrounding area. This feature makes it safer and easier to use the entrance.

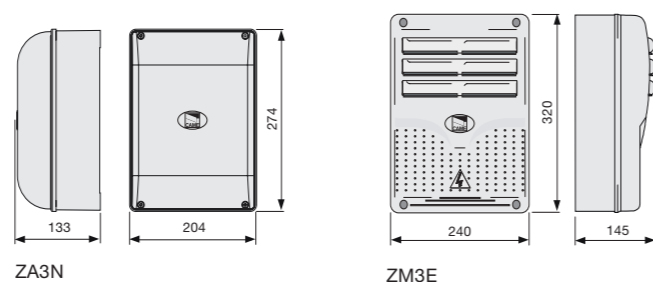


## Advantages of control panels (230V A.C.)

Following are some technical characteristics:

- **STANDARDISATION** across the entire range makes commissioning a CAME control panel quicker, easier and safer.
- **RELIABILITY** is one of the main characteristics of a CAME control panel.
- **BUILT-IN RADIO DECODING**, directly on the electronic card. A feature that blends savings and ease-of-installation. All you need to do is choose and install one of CAME's radio frequency cards that has the required frequency.
- **BUILT-IN SURGE ARRESTERS ON THE ELECTRONIC CARDS**, as a further, effective protection against those damaging power surges that go to and from the electric circuit.
- **ZM3E CONTROL BOARD**, with its advanced technology, makes it possible to automate any 230V system, even on outdated systems or ones assembled with a variety of materials.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	Z230
Protection rating	IP54
Material	ABS
Operating temperature (°C/°F)	-20 °C to 55 °C    -4 °F to 131 °F

● 230V A.C.



## The complete range

### 230V A.C. control panels for 230V A.C. operators



**002ZA3N** Multifunction control panel with built-in radio decoder.



**002ZM3E** Multifunction control panel with signalling display, auto-diagnosis of safety devices and built-in radio decoder.



## 230V technology

CAME's 230V control panels are fitted with surge protectors and integrate the standard radio decoder on all models.

### Accessories

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

# Z24

24V D.C.

## Control panels

### Standard issue safety.

The CAME 24V control boards are the ideal solution for creating perfectly personalised automated systems according to user and gate requirements, paying particular attention to safety. The technology used allows for the motors and all system-connected accessories to be managed in low-voltage 24V DC. The special characteristics of these boards also make provision for battery-powered automation without mains power, to allow for operation even during power cuts.

### Maximum sensitivity.

The adjustment of the amperometric sensor through the dedicated trimmers, makes the 24V systems safer and more reliable, should the gate strike an obstacle while in motion.



### Simplified connections.

With the ZL170N, ZL180 and ZL90 control panels, only one cable needs to be connected to three conductors to power the motor, and to manage the decelerations and endstops.



### Autotest.

Some models are fitted with "self-diagnosis" of their protective devices. The circuit prevents the operator from working in case any anomaly is detected in one of the safety devices which is connected up to the system.



### Rechargeable batteries.

All of the 24V control panels can be integrated with emergency operation cards that run on regular rechargeable batteries. The change-over from mains to batteries is controlled automatically.

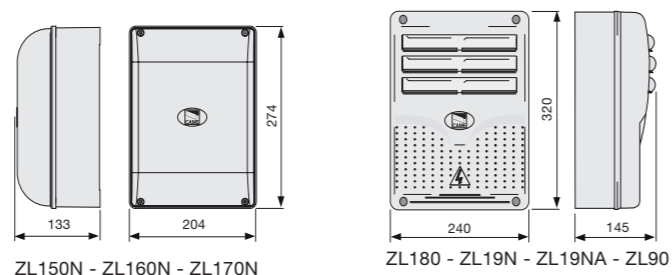


## Advantages of control panels (24V D.C.)

Following are some technical characteristics:

- **AMPEROMETRIC DEVICE** featuring an "anti-crushing" function that electronically detects any obstacles and stops or reverses the movement of the gate.
- **EMERGENCY BATTERIES** connected to the control panel through the recharging and operation card. During a power cut the batteries automatically take over powering of the gate.
- **ADJUSTING DECELERATION SPEED OF THE GATE LEAVES**, when opening or closing, to calibrate movement to the gate's requirements and make it safer and softer in the final phase of its opening or closing swing.
- **INTENSIVE USE**, thanks to the technology employed, the 24V systems can work frequent opening/closing cycles without any overheating issues. They are the most suitable solution for apartment, industrial, and high-traffic settings.
- **MAXIMUM SAFETY**, thanks to the low-voltage operation of all accessory devices, such as, photocells, flashing lights, sensitive safety edges.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	Z24
Protection rating	IP54
Material	ABS
Operating temperature (°C/°F)	-20 °C to 55 °C    -4 °F to 131 °F

● 24V D.C.



## The complete range

### 24V D.C. control panels for 24V D.C. operators



**002ZL150N** Control panel for two-leaf swing gates with built-in radio decoder for Flex series.



**002ZL160N** Control panel for one-leaf swing gates with built-in radio decoder for Flex series.



**002ZL170N** Control panel for one-leaf swing gates with built-in radio decoder for Flex - Frog series.



**002ZL180** Control panel for two-leaf swing gates with built-in radio decoder for Fast - Ati series.



**002ZL19N** Control panel for two-leaf swing gates with built-in radio decoder for Frog - Ferni series.



**002ZL90** Control panel for two-leaf swing gates with built-in radio decoder for Frog-J - Amico series.



**002ZLJ24** Control panel for two-leaf swing gates with built-in radio decoder for Axo series.



**EN TESTED** EN Tested Z24

Thanks to the 24V panels, EN tested systems restrict forces to ensure automated systems are always perfectly compliant with current EU standards (see technical specifications for each model).

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



A world of [safe automation](#)

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## Sliding gate operators



### The models

The convenience of sliding automatic gates is making them an increasingly popular choice throughout the market. This is due to their user-friendliness and reduced use of space. CAME offers several solutions suitable for small as well as large sliding gates, like those installed in apartment blocks, industrial facilities or high-traffic premises in general. The table below sums up the complete range of motors for sliding gates depending on their performance levels, limits to use and suggested application.

Use	RESIDENTIAL	APARTMENT BLOCKS	INDUSTRIAL	INTENSIVE USE
Series	Model	Max weight of gate leaf (Kg)		
Bx-243	BX-243	300		YES
Bx-243	Bx-243C	300		YES
Bx	BX-74	400	400	
Bx	BX-246	600	600	YES
Bx	BX-P	600	600	
Bx	BX-78	800	600	
Bx	BX-10	800	600	
Bk	BK-800	800	800	YES
Bk	BK-1200	1,200	1,200	
Bk	BK-1200P	1,200	1,200	
Bk	BKE-1200	1,200	1,200	
Bk	BK-1800	1,800	1,800	
Bk	BKE-1800	1,800	1,800	
Bk	BK-2200	2,200	2,200	
Bk	BKE-2200	2,200	2,200	
Bk	BK-2200T	2,200	2,200	
By-3500T	BY-3500T	3,500	3,500	

● 230V A.C. ● 24V D.C. ● 230-400V A.C. 3-phase

Compliant with EN12453 and EN12445 safety norms.



### Standard RESIDENTIAL installation

TRAINED users and positioned on PUBLIC STREET

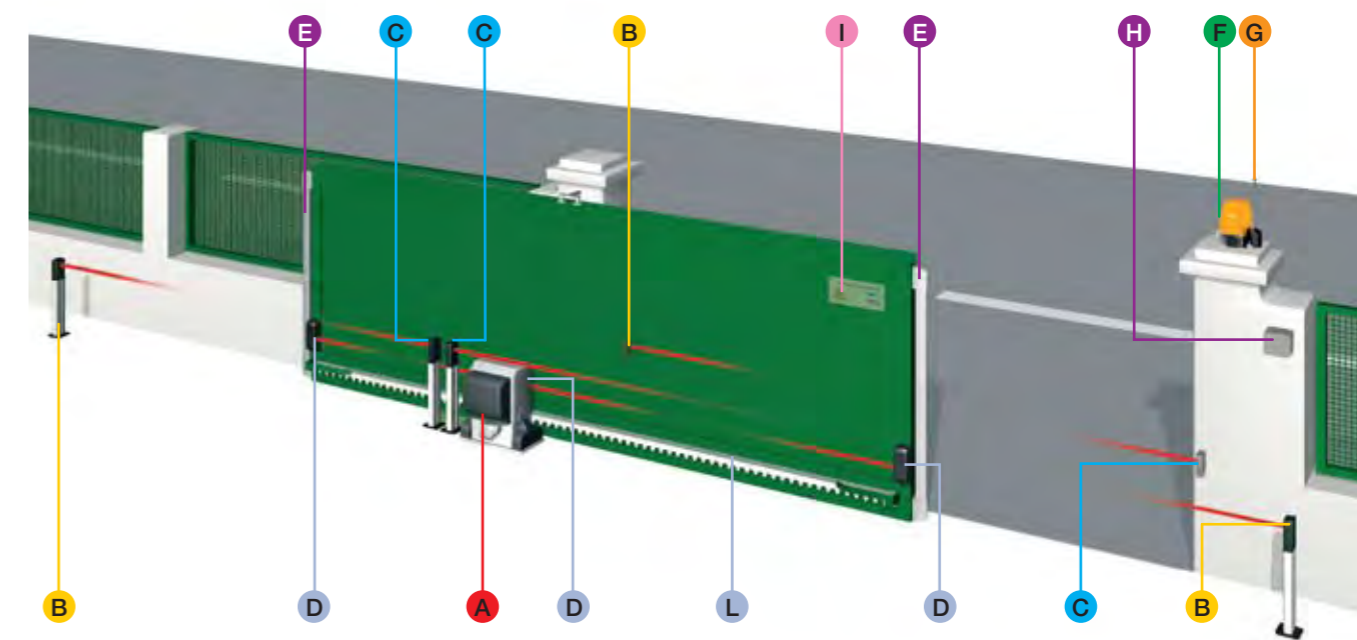
Remote controlled operation is often the desired activation method, this needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (i.e. the passage zone) and the "secondary edge" (the zone behind the gate leaf).

**Current legislation requires the C + D type minimal solutions (ref. page 8):** employing sensitive safety edges and infrared beam photocells.



#### Important

If using EN12445 – EN12453 tested motors and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation by the engineer responsible) are compliant with the parameters dictated by the Standards.



#### Standard issue

- A** Operator with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Integrated protection system with safety sensitive edges
- E** Safety sensitive edge
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Gate plate
- L** Rack

Cable length (m)	<10	10 - 20	20 - 30	30 - 40	40 - 50
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"	98'4" - 131'2"	131'2" - 164'0"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG14	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2GxAWG13
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>
● Flashing light 24V A.C. -D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32.8 ft		

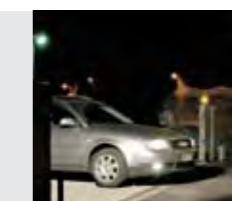
\*n° = see instructions ● European standards ● US standards

#### Integrate safety with Db + Df



CAME's integrated Db + Df system lets you monitor the passage zone and the area directly behind the sliding gates leaves. The infrared beam technology makes it possible to install sensitive safety edges without needing complicated cabling, thus eliminating any danger of crushing.

#### Lighting the way



Through the control panels, you can control the auxiliary lighting of the gates area of movement. This feature makes it safer and easier to use the entrance.

## Standard INDUSTRIAL installation

TRAINED users and positioned in a PUBLIC STREET

Whenever possible, we suggest using 230-400V 3-phase systems to ensure greater control during working cycles. It is ideal for large gates such as those used in industrial applications. Remote controlled operation is often the desired activation method, this needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (i.e. the passage zone) and the "secondary edge" (the zone behind the gate leaf).

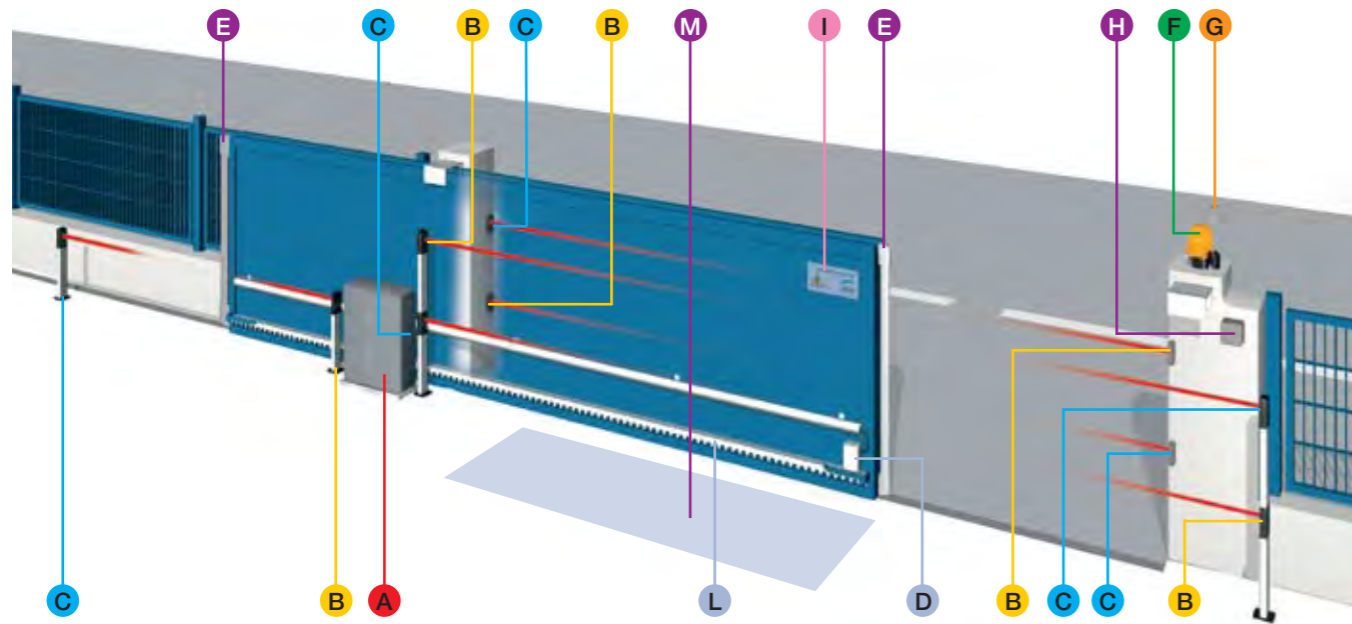
**Current legislation requires the C + D type minimal solutions (ref. page 8):**

employing sensitive safety edges and infrared beam photocells.



### Important

Industrial passages normally see heavy vehicle transit. In such cases it is always advisable to install infrared beam photocells at two different heights to prevent possible closing of the gate – if vehicles stop in the passage zone while loading or unloading.



### Standard issue

- A** Operator with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Integrated protection system with safety sensitive edges
- E** Safety sensitive edge
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Gate plate
- L** Rack
- M** Metal mass detector ground plate-sensor

Cable length (m)	<10		10 - 20	20 - 30
Cable length (ft)	< 32'8"		32'8" - 65'6"	65'6" - 98'4"
Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>
Endstop microswitches	n°x0.5mm <sup>2</sup>	n°xAWG20	n°x0.5mm <sup>2</sup>	n°x0.5mm <sup>2</sup>
Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>
TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
Commands	n°x0.5mm <sup>2</sup>	n°xAWG20	n°x0.5mm <sup>2</sup>	n°x0.5mm <sup>2</sup>
Antenna		RG58 Max 10m	32.8 ft	

\*n° = see instructions ● European standards ● US standards

### 24V guaranteed opening



CAME's range of sliding gates offers two 24V D.C. models. These motors can also run on emergency batteries, so that the gate will always open, even when the power is out.

### Total control



CAME sliding gate motors can be connected to many access control systems that can identify, memorise and allow entry/exit to authorised personnel. The equipment can be integrated with an access control system for specific departments in a company or services offered by a high-traffic premises.

## Summary of features

### Sliding gates operators

OPERATORS - SERIES	Bx-243 Bx-243C	BX-74 BX-78	BX-P	BX-246	BX-10	BK-800 BK-1200 BK-1800 BK-2200	BKE-1200 BKE-1800 BKE-2200	BK-1200P	BK-2200T BY-3500T
CARD - PANEL	ZN2	ZBX 74-78	ZBX8	ZD2	ZBX10	ZBK	ZBKE	ZBK8	ZT6 ZT6C
FUNCTIONAL FEATURES									
SELF-DIAGNOSIS of active safety devices function	●			●	●	●	●	●	●
Opening and closing PREFLASHING function	●	●	●	●	●	●	●	●	●
REOPENING during closing function	●	●	●	●	●	●	●	●	●
RECLOSEING during opening function	●	●	●	●	●	●	●	●	●
Obstacle STALL function					●				
TOTAL STOP function	●	●	●	●	●	●	●	●	●
PARTIAL STOP of the gate-leaf function	●	●	●	●	●	●	●	●	●
OBSTACLE DETECTION function on photocells	●	●	●	●	●	●	●	●	●
ENCODER operation	●						●		
MOVEMENT CONTROL and obstacle detection device		●		●	●				
AMPEROMETRIC DETECTION function	●			●					
SAFETY									
1 leaf PEDESTRIAN OPENING function									
1 leaf PARTIAL OPENING function	●	●	●	●	●	●	●	●	●
TRANSMITTER OPEN ONLY function	●	●	●	●	●	●	●	●	●
OPEN ONLY button connection function		●		●	●	●	●	●	●
CLOSE ONLY button connection function		●		●	●	●	●	●	●
OPEN-STOP-CLOSE-STOP button connection function	●	●	●	●	●	●	●	●	●
OPEN-CLOSE-REVERSE button connection function	●	●	●	●	●	●	●	●	●
MAINTAINED ACTION command function	●	●	●	●	●	●	●	●	●
1st leaf DELAYED CLOSING function									
2st leaf DELAYED CLOSING function									
IMMEDIATE CLOSING function									
EMERGENCY RELEASE function from the remote control			●					●	
COMMAND									
FLASHING LIGHT connection	●	●	●	●	●	●	●	●	●
CYCLE LAMP connection		●	●			●	●		●
COURTESY LAMP connection						●	●		●
Antenna connection	●	●	●	●	●	●	●	●	●
24V ACCESSORIES connections	●	●	●	●	●	●	●	●	●
OPEN WARNING LIGHT connection	●	●	●	●	●	●	●	●	●
CLOSED WARNING LIGHT connection		●	●						●
Contact output for 2nd RADIO CHANNEL		●		●		●	●		●
Adjusting RUNNING TIME					●				●
EXTRACTABLE, NUMBERED connection terminals	●	●	●	●	●	●	●	●	●
SELF-LEARNING function of the transmitter's RADIO code	●	●	●	●	●	●	●	●	●
RAM BLOW function to aid the release of the electrolock									
Adjustable AUTOMATIC RE-CLOSING TIME function	●	●	●	●	●	●	●	●	●
ELECTROLOCK/ELECTRORELEASE connection output									
OPENING AND/OR CLOSING deceleration	●	●	●	●	●	●	●	●	●
EMERGENCY-BATTERY operation (optional)	●			●					●
MASTER-SLAVE operation mode					●	●	●		●
Adjustable RUNNING SPEED AND DECELERATION function	●	●	●	●	●	●	●	●	●
Warning DISPLAY					●				
Electronic BRAKE		●		●	●	●	●	●	●
CONTROL and warning led	●	●	●	●	●	●	●	●	●
SELF-LEARNING function of the opening and closing endstops									

● 230V A.C. ● 24V D.C. ● 230-400V A.C. 3-phase

# Bx-243



for gates of up to 300 Kg  
for gates of up to 660 lb

## Sliding gate operators

Tested in compliance with European Legislation BX-243 is a complete automation system for sliding gates. An ideal solution for residential installations, this innovative operator has been brought up to EU and international standards for impact forces and meets even the most stringent safety requirements.



**Emergency batteries.**  
The BX243 board can also run on emergency batteries, so that the gate will always open, even when the power is out (optional extra).



**Encoder technology.**  
The encoder constantly and accurately controls the gate movement allowing for complete safety.



**Built-in endstops.**  
BX-243 controls the gate run with built-in endstops located within the motors body.



## Advantages of Bx-243

Thanks to the testing it has undergone to bring it up to European standards in terms of the impact forces generated by gate movement, the BX-243 offers the highest safety Standards for its intended use (EN12445 - EN12453).

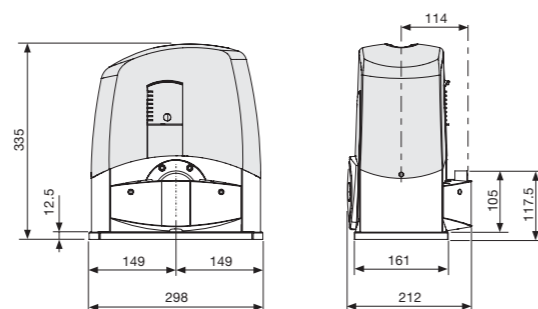
A complete operator, equipped with encoder-based movement control, and features an easy to access control board. BX-243 is an ideal solution for sliding residential gates.

### Limits to use

Model	BX-243 - BX-243C
Max weight of gate leaf (Kg)	300
Max length of gate leaf (m)	8.5

● 24V D.C

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	BX-243	BX-243C
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.
Current draw (A)	7 Max	7 Max
Power (W)	170	170
Manoeuvre speed (m/min)	12	12
Duty cycle (%)	Intensive use	30
Thrust (N)	300	300
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F	-20 °C to 55 °C -4 °F to 131 °F

● 24V D.C

## The complete range

### Complete automation system with 24V D.C. motor



**001BX-243** Automation system complete with electronic card, radio decoder, encoder-based movement control and obstacle detection devices. Plus, mechanical endstops for sliding gates of up to 300 Kg / 660 lb and 8.5 m / 27'10" ft.



**001BX-243C** Automation system with chain transmission (included) complete with control board, radio decoder, encoder-based movement control and obstacle detection device. Plus, mechanical endstops for sliding gates of up to 300 Kg / 660 lb and 8.5 m / 27'10" ft.



### Accessories



**002LB90** Card for connecting up two 12V - 1.2Ah emergency batteries with rack.



**009BCAT** Galvanised chain Ø 5 mm DIN 766 G 30 type A (Packages of 50 m / 164 ft).



**009CGZ** Galvanized rack in rolled steel 22 x 22 mm in module 4.



**009CGZP** Rack in PA6 nylon and fibreglass with steel core 20 x 20 mm in module 4, with securing holes and distancers, for sliding gates of up to 300 Kg / 661 lb.



**009CGZS** Galvanized rack in rolled steel 30 x 8 mm module 4 with securing holes and distancers.



**BAT2PK** Set of 2 x 12V - 1.2 Ah batteries.

## 24 Volt

BX-243's 24V electronics can accept an additional LB90 card which detects any lack of power and activates the battery-powered emergency mode (optional).

**Accessories** [Access control](#) pages 160-165  
[Safety](#) pages 166-175  
[Radio control](#) pages 176-189



# Bx



for gates of up to 400 - 600 - 800 Kg  
for gates of up to 880 - 1,320 - 1,760 lb

## Sliding gate operators

Introducing the refreshed Bx range.

The Bx series complies with current safety standards with a range of operators suitable for all sliding gates with leaves of up to 800 Kg. A complete series to best meet different operational and safety needs of the market. It features 230V A.C. and 24V D.C. models, for all applications, including high-traffic settings.



Exclusively practical. The BX-P features the PRATICO SYSTEM – a user friendly PATENTED device which, in the event of a power cut, releases the motor through the transmitter. This enables activation from outside of the property where the release lock is usually inaccessible.



Innovative ZBX10 electronics. The BX-10 comes with new electronics – a display on which to program its functions plus an encoder to manage both decelerations and obstacle detection. The card can also store up to 250 different codes from the Touch, Top, Atomo, Tam, Tfm and Twin series transmitters.



EN TESTED. The BX-246 model, besides having the advantages of 24V systems, is tested according to the parameters set forth by European Standards EN12445 and EN12453, as concerns compliance with maximum impact forces generated by the gate during movement.



## Advantages of Bx

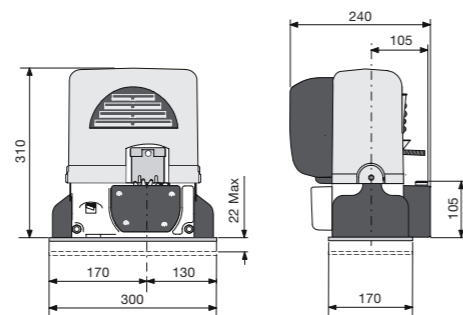
The Bx is the solution for automating medium sized sliding gates. Thanks to high levels of efficiency and safety, it is suitable for numerous applications, both in residential and apartment block settings. The series offers four 230V A.C. versions and one 24V D.C. model to be used under intense work loads and is ideal where there are frequent power cuts. The control boards are all latest-generation and fitted with all the indispensable commands for a complete system. They can be integrated at any time with any of CAME's safety and command accessories.

### Limits to use

Model	BX-74	BX-P	BX-246	BX-10	BX-78
Max weight of gate leaf (Kg)	400	600	600	800	800

● 230V A.C. ● 24V D.C.

### Dimensions



NOTES:  
To activate the release device of item 001BX-P you will need a SECOND radio frequency card of the same series as the automation's radio command (Except for AF30 – AF40).

## EN Tested Models

The BX-74 model is tested according to the parameters described by European Standards EN12445 and EN12453, concerning compliance with maximum impact forces generated by the gate during movement.

## Technical features

Type	BX-74	BX-P	BX-246	BX-10	BX-78
Protection rating	IP54	IP54	IP54	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. (50/60 Hz)	230 A.C. (50/60 Hz)	24 D.C.	230 A.C. (50/60 Hz)	230 A.C. (50/60 Hz)
Current draw (A)	2.6	2	10 Max	2.4	2.4
Power (W)	200	230	400	300	300
Manoeuvre speed (m/min)	10	17	6 - 12	10.5	10.5
Duty cycle (%)	30	30	Intensive use	30	30
Thrust (N)	300	600	700	800	800
Motor's thermo-protection (°C/°F)	150/302	150/302	-	150/302	150/302
Operating temperature (°C/°F)			-20 °C to 55 °C -4 °F to 131 °F		

● 230V A.C. ● 24V D.C.

## The complete range

### Complete automation system with 230V A.C. motor

**001BX-74** Automation system complete with control board, radio decoder, encoder-based movement control and obstacle detection devices. Also, mechanical endstops for sliding gates of up to 400 Kg / 880 lb.

### Complete automation systems with 230V A.C. motor

**001BX-78** Automation system complete with control board, radio decoder, encoder-based movement control and obstacle detection devices. Also, mechanical endstops for sliding gates of up to 800 Kg / 1.760 lb.

**001BX-10** Automation system complete with control board featuring function programming display, built-in radio decoder, encoder-based movement control device and obstacle detection for sliding gates of up to 800 Kg / 1.760 lb in weight and 14 m / 45,93 ft in length.

**001BX-P** Automation system complete with control board, built-in radio decoder and PRATICO SYSTEM radio release system with a 12V – 1.2 Ah battery for gates weighing up to 600 Kg / 1.320 lb. (notes)

### Complete automation system with 24V D.C. motor

**001BX-246** Automation system complete with control board, radio decoder, encoder-based movement control and obstacle detection devices. Also, mechanical endstops for sliding gates of up to 600 Kg / 1.320 lb. Fitted to take two 12V – 1.2 Ah batteries.

### Accessories

**001R001** Lock cylinder with DIN key.

**001B4337** Chain transmission device.

**009CCT** 1/2 in simple chain for B4337

**009CGIU** Joint for 1/2 in chain.

**002LBD2** Card for connecting two 12V – 1.2Ah emergency batteries (for BX-246).

**002RSE** Allows 'Master Slave' functionality for operating a pair of sliding gate motors in synchronisation.

**009CGZ** Galvanized rack in rolled steel 22 x 22 mm / 0,86 x 0,86 in module 4.

**009CGZP** Rack in PA6 nylon and fibreglass with steel core 20 x 20 mm / 0,78 x 0,78 in module 4, with securing holes and distancers, for sliding gates of up to 300 Kg / 661 lb.

**009CGZS** Galvanized rack in rolled steel 30 x 8 mm / 1,18 x 0,31 in module 4 with securing holes and distancers.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Bk

for gates of up to 800 - 1,200 - 1,800 - 2,200 Kg  
for gates of up to 1,760 - 2,640 - 3,970 - 4,850 lb

## Sliding gate operators

### Maximum flexibility and safety.

Designed for automating sliding gates on apartment blocks, commercial premises and other multi-user environments. With 9 models the Bk range is designed to meet all and any requirements and to automate even gates of considerable weight.



**Encoder technology.**  
The encoder constantly and accurately controls the gate movement allowing for complete safety.



**Easier and safer operations.**  
Bk can be connected to and control any auxiliary lighting, which turns on each time the gate opens, making it easier and safer to drive in and out.



**Exclusively practical.**  
The BK1200-P features the PRATICO SYSTEM – a user friendly PATENTED device which, in the event of a power cut, releases the motor through the transmitter. This enables activation from outside of the property where the release lock is usually inaccessible.



## Advantages of Bk

The Bk is the top when it comes to service and safety. When total power, performance and reliability are needed, the Bk 3-phase technology enables the operator to reach its full potential. For example, the “self-diagnostics of the safety circuits” which blocks the system from working if one of the photocells or sensitive edges malfunctions; and the “auxiliary lighting of the driving area”, which is directly controlled by the electronic card.

### Limits to use

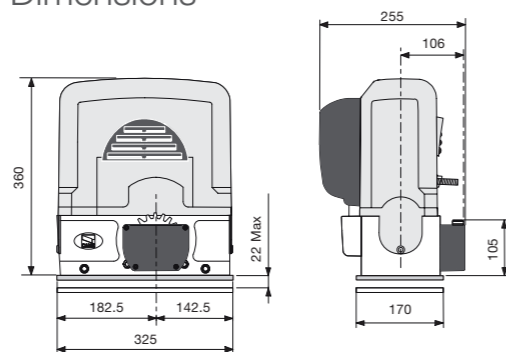
Model	BK-800	BK-1200	BK-1200P	BK-1800	BK-2200	BK-2200T
Max weight of gate leaf (Kg)	800	1200	1200	1800	2200	2200
Max length of gate leaf (m)	20	20	20	20	20	20

Model	BK-1200E	BK-1800E	BK-2200E
Max weight of gate leaf (Kg)	1200	1800	2200
Max length of gate leaf (m)	13	13	13

● 230V A.C. ● 230-400V A.C. 3-phase

### Dimensions



**NOTES:**  
To activate the release device of item 001BK-1200P, you will need a SECOND radio frequency card of the same series as the automation's radio command (Except for AF30 – AF40)

## Technical features

Type	BK-800	BK-1200/E	BK-1200P	BK-1800/E	BK-2200/E	BK-2200T
Protection rating	IP54	IP54	IP54	IP54	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230-400V A.C. 3-phase
Motor power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230-400V A.C. 3-phase
Current draw (A)	4,5	3,3	3,3	4,2	5,1	1,5
Power (W)	520	380	380	480	580	600
Manoeuvre speed (m/min - ft/s)	10.5/0.57	10.5/0.57	14.5/0.79	10.5/0.57	10.5/0.57	10.5/0.57
Duty cycle (%)	Intensive use	50	30	50	50	50
Thrust (N)	800	850	850	1150	1500	1650
Motor's thermo-protection (°C/°F)	150/302	150/302	150/302	150/302	150/302	150/302
Operating temperature (°C/°F)			-20 °C to 55 °C	-4 °F to 131 °F		

● 230V A.C. ● 230-400V A.C. 3-phase



## The complete range

### Complete automation systems with 230V A.C. motor

- 001BK-800** Automation system complete with control board, radio decoder and mechanical endstops for sliding gates of up to 800 Kg / 1,760 lb.
- 001BK-1200** Automation system complete with control board, radio decoder and mechanical endstops for sliding gates of up to 1,200 Kg / 2,640 lb.
- 001BK-1200P** Automation system complete with control board, built-in radio decoder, mechanical endstops and PRATICO SYSTEM radio release with a 12V – 1.2 Ah battery for gates weighing up to 1,200 Kg / 2,640 lb.
- 001BK-1800** Automation system complete with control board, radio decoder and mechanical endstops for sliding gates of up to 1,800 Kg / 3,970 lb.
- 001BK-2200** Automation system complete with control board, radio decoder and mechanical endstops for sliding gates of up to 2,200 Kg / 4,850 lb with module 6 pinion.
- 001BKE-1200** Automation system complete with control board, radio decoder, encoder-based movement control for sliding gates of up to 1,200 Kg / 2,640 lb and 13 m / 42'7"
- 001BKE-1800** Automation system complete with control board, radio decoder, encoder-based movement control for sliding gates of up to 1,800 Kg / 3,970 lb and 13 m / 42'7"
- 001BKE-2200** Automation system complete with control board, radio decoder, encoder-based movement control for sliding gates of up to 2,200 Kg / 4,850 lb and 13 m / 42'7" with module 6 pinion.

### Automation system with 230-400V A.C. 3-phase

- 001BK-2200T** Operator with module 6 pinion.

### Control panels for 230-400V A.C. 3-phase operator

- 002ZT6** Control panel with built-in radio decoder and self-diagnosing safety devices.
- 002ZT6C** Control panel, complete with safety block and buttons, including a built-in radio decoder and self-diagnosing safety devices.

### Accessories

- 001R001** Lock cylinder with DIN key.
- 001B4353** Chain transmission device.
- 009CCT** 1/2-inch simple chain for B4353
- 009CGIU** Joint for 1/2-inch chain.
- 009CGZ** Galvanized rack in rolled steel - 22 x 22 mm, module 4.
- 009CGZS** Galvanized rack in rolled steel - 30 x 8 mm, module 4 with securing holes and spacers.
- 009CGZ6** Galvanized rack in rolled steel - 30 x 30 mm, module 6.

### Accessories

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

## 230-400V 3-phase

When you need maximum power and performance, such as in industrial applications, the BK-2200T's 3-phase provides maximum thrust and minimal energy consumption. The 3-phase power supply also provides optimal current when operating helping to solve problems with inertia on large sing gates.

# By-3500T

## Sliding gate operators

### Complete power with total safety.

The ideal solution for powering exceptionally heavy gate leaves. A state-of-the-art control board provides maximum resistance to wear and total safety. The By-3500T is the ideal solution for powering exceptionally heavy gate for gate leaves of up to 3,500 Kg / 7,720 lb.



**Easier and safer operations.**  
CAME operators can control the auxiliary lighting of the operator's area of movement. This feature makes it safer and easier to use the gate entrance.



**Extremely sturdy.**  
The sturdy and reliable BY-3500T typifies the CAME philosophy. The motor will meet even to most exacting demands.



**Total auto-control.**  
Before actually opening or closing the gate, the electronics checks the proper functioning of all of the system's safety devices.



for gate leaves of up to 3.500 Kg  
for gate leaves of up to 7,720 lb



## Advantages of By-3500T

BY-3500T - CAME reliability to the maximum power. It is the ideal solution for powering gate for gate leaves of up to 3,500 Kg / 7,720 lb.

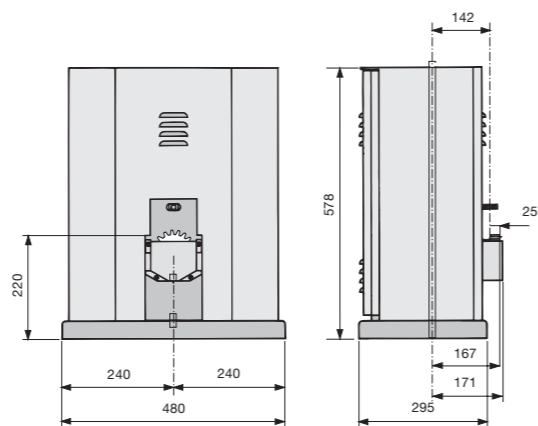
Besides the normal command and safety functions, the new electronics supplied with the BY-3500T series provides certain special features: programming the command for partial opening of the gate leaf, ideal for all entrances lacking a pedestrian gate; safety even when the gate is not moving because each command is overridden if an obstacle is detected by the safety devices and gate.

### Limits to use

Model	<b>BY-3500T</b>
Max weight of gate leaf (Kg)	3500

● 230-400V A.C. 3-phase

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	<b>BY-3500T</b>	
Protection rating	IP54	
Power supply (V) (50/60Hz)	230-400 A.C. 3-phase	
Motor power supply (V)	230-400 A.C. 3-phase	
Current draw (A)	2	
Power (W)	750	
Manoeuvre speed (m/min)	10.5	
Duty cycle (%)	50	
Thrust (N)	3500	
Motor's thermo-protection (°C/°F)	150/302	
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 230-400V A.C. 3-phase

## The complete range

### Complete automation with 230-400V 3-phase motor

**001BY-3500T** Automation system complete with control board, radio decoder and mechanical endstops for sliding gates of up to 3.500 Kg / 7,720 lb with module 6 pinion.



### Accessories

**009CGZ6** Galvanized rack in rolled steel - 30 x 30 mm, module 6.



**001BRC15** Power cable collector device for sensitive safety-edges for sliding gates up to 15 m / 49'2" ft in length.



**001BRCP** Aluminium profile for extension L = 5.10 m / 16'7" ft to couple with a BRC15. Application example: on a 15 metre sliding gate set up 1 x BRC15 and 3 x BRCPs.



## 3-phase

The 3-phase voltage power supply to the unit ensures intensive service even under heavy duty working conditions such as armoured gates or hangar doors.

**Accessories** **Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189





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Sectional and overhead  
garage door operators

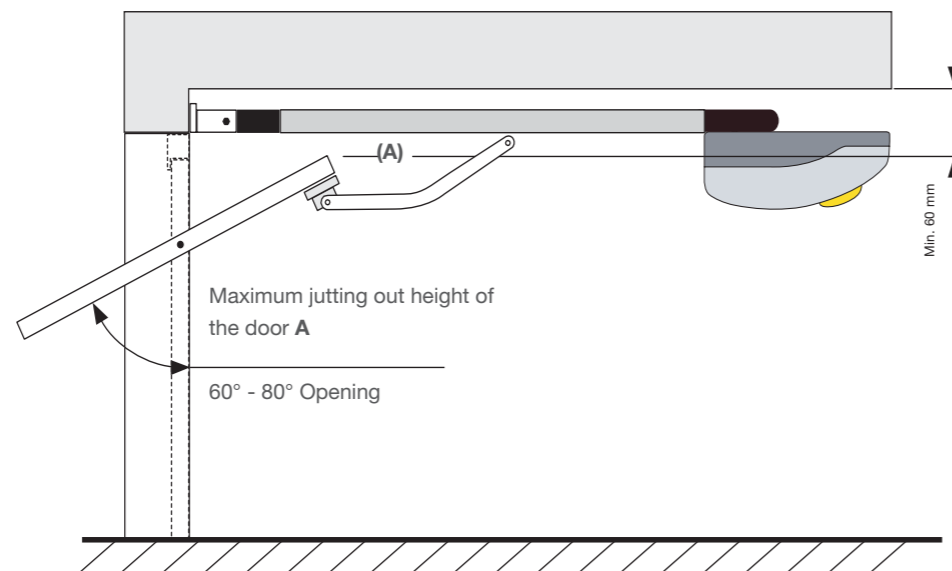
### The models

Overhead and sectional door operators are normally used to open large garages and vehicle access ways. CAME offers specific solutions for every type of door, without needing any adaptations nor modifications of the existing door. The table below lists the complete range of operators for overhead and sectional doors, showing the performance features of each one, the limitations of use and suggested application.

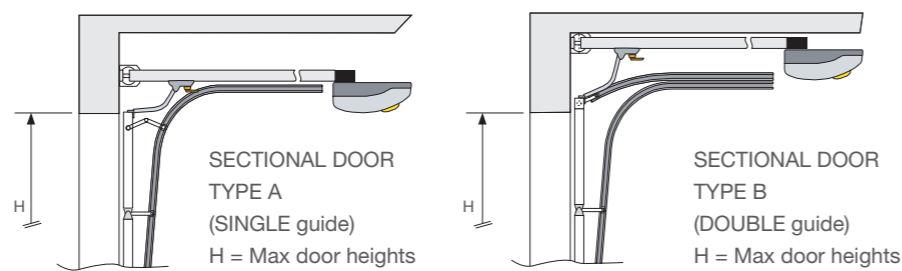
Use	RESIDENTIAL	APARTMENTS	INDUSTRIAL	INTENSIVE USE
Series	Model	Traction force (N)		
VER	V900E	500	500	YES
VER	V700E	850	850	850
				YES

● 24V D.C.

### Pre-installation checks



### Recommended use of transmission guide



NOTE: BC = Counter-weighted-Overhead - BM = Spring-loaded Overhead - STA = Type A Sectional A - STB = Type B Sectional

### Sectional and overhead garage door operators

OPERATORS - SERIES	V700E	V900E
CARD - PANEL	ZL55	ZL56
<b>FUNCTIONAL FEATURES</b>		
SELF-DIAGNOSIS of active safety devices function		
Opening and closing PREFLASHING function	●	
REOPENING during closing function	●	●
RECLOSEING during opening function		
Obstacle STALL function		
TOTAL STOP function	●	●
PARTIAL STOP of the gate-leaf function		
OBSTACLE DETECTION function on photocells		
ENCODER operation		●
MOVEMENT CONTROL and obstacle detection device		
AMPEROMETRIC DETECTION function	●	●
<b>SAFETY</b>		
1 leaf PEDESTRIAN OPENING function		
* PARTIAL OPENING function		●
TRANSMITTER OPEN ONLY function		
OPEN ONLY button connection function	●	
CLOSE ONLY button connection function	●	
OPEN-STOP-CLOSE-STOP button connection function		●
OPEN-CLOSE-REVERSE button connection function	●	
MAINTAINED ACTION command function	●	
1st leaf DELAYED CLOSING function	●	
2st leaf DELAYED CLOSING function		
IMMEDIATE CLOSING function		
EMERGENCY RELEASE function from the remote control		
<b>COMMAND</b>		
FLASHING LIGHT connection		●
CYCLE LAMP connection		
COURTESY LAMP connection		●
Antenna connection	●	●
24V ACCESSORIES connections	●	●
OPEN WARNING LIGHT connection	●	
CLOSED WARNING LIGHT connection		
Contact output for 2nd RADIO CHANNEL		
Adjusting RUNNING TIME		
EXTRACTABLE, NUMBERED connection terminals		●
SELF-LEARNING function of the transmitter's RADIO code	●	●
RAM BLOW function to aid the release of the electrolock	●	
Adjustable AUTOMATIC RE-CLOSING TIME function		●
ELECTROLOCK/ELECTRORELEASE connection output	●	
OPENING AND/OR CLOSING deceleration		●
EMERGENCY-BATTERY operation (optional)	●	●
MASTER-SLAVE operation mode	●	
Adjustable RUNNING SPEED AND DECELERATION function		
Warning DISPLAY		
Electronic BRAKE		
CONTROL and warning led		●
SELF-LEARNING function of the opening and closing endstops	●	
<b>FUNCTIONALITY</b>		

● 230V A.C. ● 24V D.C.

NOTES: \* OPTION 1: Activation of the partial opening command function with command device (selector, N.O. button and transmitter). \* OPTION 2: Activation of Partial opening function with command device.



## Standard RESIDENTIAL installation

TRAINED users and positioned on PUBLIC STREET

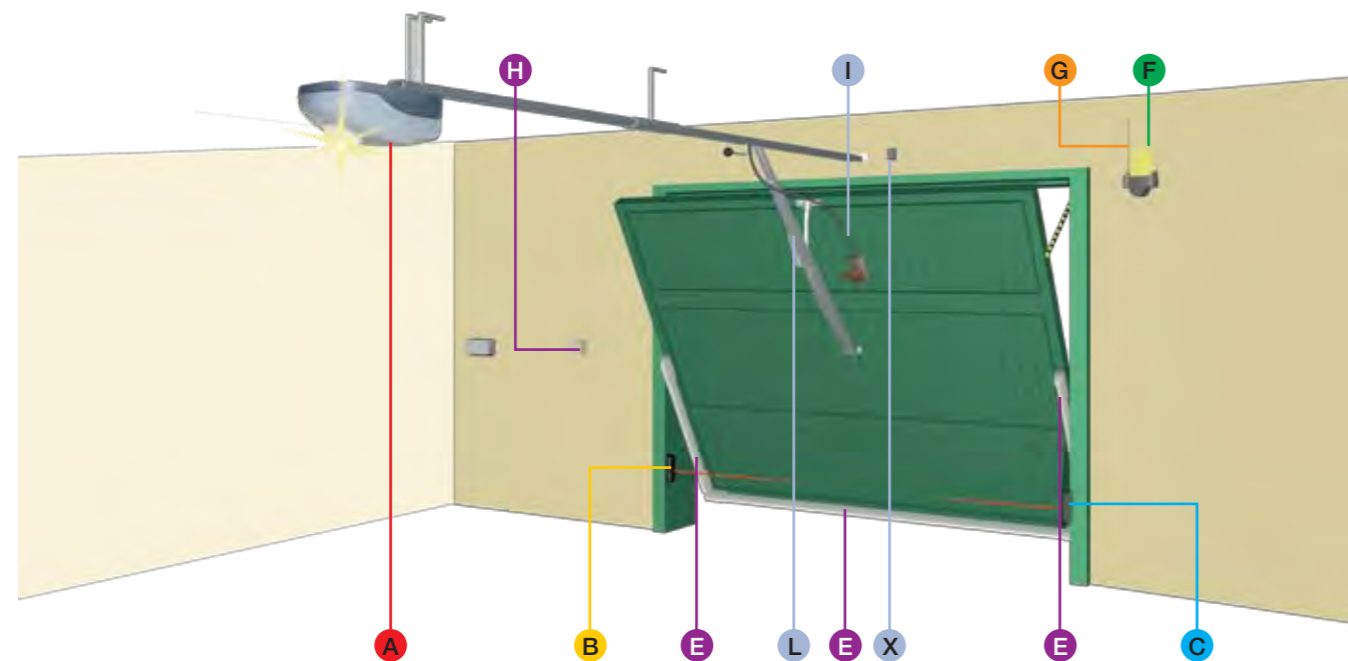
Remote controlled operation is often the desired activation method, this needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (i.e. the passage zone) and the "secondary edge" (the zone behind the door).

**Current legislation requires the C + D type minimal solutions (ref. page 8):**  
employing sensitive safety edges and infrared beam photocells.



### Important

If using EN12445 – EN12453 tested operators and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation the engineer responsible) are compliant with the parameters dictated by the Standards.



This diagram applies to all VER series operators applied on overhead, counterweighted doors, or those having vertical runner guides.

### Standard issue

- A** Operator with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- E** Safety sensitive edge
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Cord-operated release device
- L** Adapter arm

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Commands	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32' 8" ft

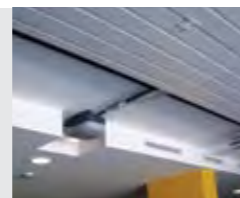
\*n° = see documentation ● European standards ● US standards

### Adapter arm for counterweighted doors



The V201 adaptor arm is necessary when using the Ver series on counterweighted overhead doors and in all doors fitted with vertical runner guides. The installation requires riveting or bolting directly on the overhead door's reinforcing crosspieces.

### 24V with battery backup



The 24V VER operator for sectional and overhead doors automatically detects any lack of power and activates the battery powered emergency mode to open and close the door even during a power cut.

## Sectional RESIDENTIAL installation

TRAINED users and positioned on PUBLIC STREET

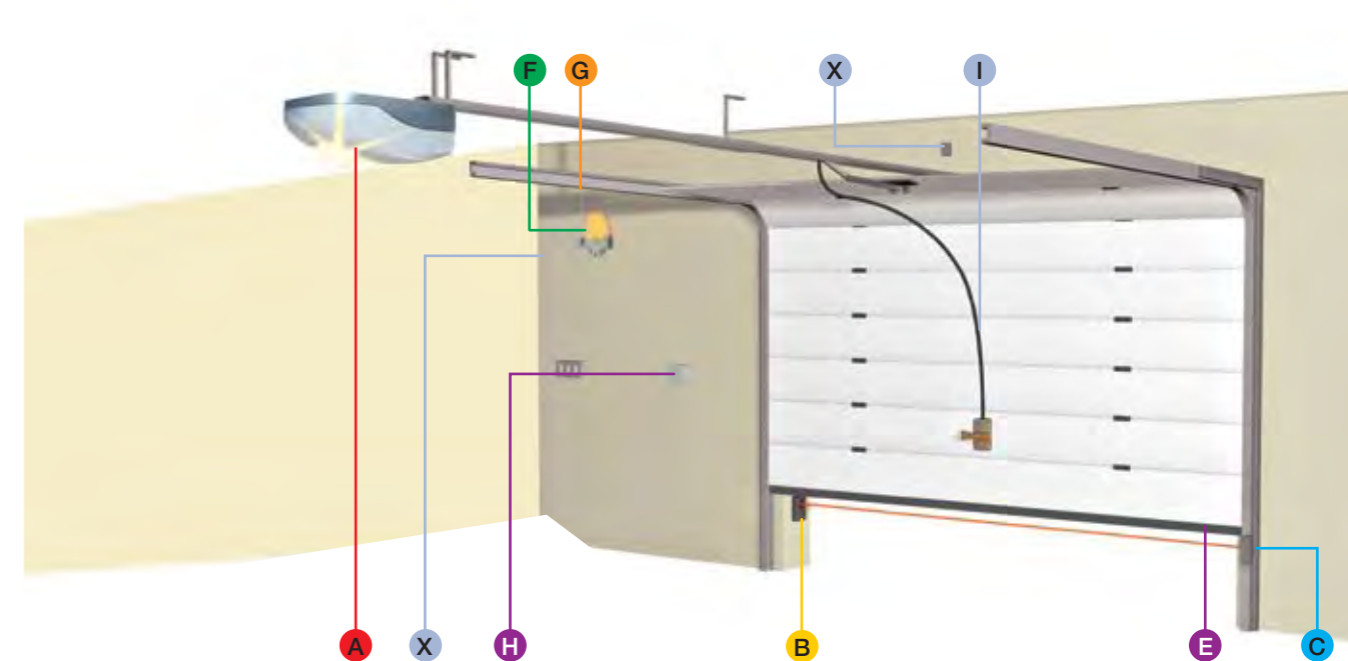
Remote controlled operation is often the desired activation method, this needs to be considered when choosing safety options. This safety should therefore be applied on both the so-called "primary edge" (i.e. the passage zone) and the "secondary edge" (the zone behind the door).

**Current legislation requires the C + D type minimal solutions (ref. page 8):**  
employing sensitive safety edges and infrared beam photocells.



### Important

If using EN12445 – EN12453 tested operators and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation the engineer responsible) are compliant with the parameters dictated by the Standards.



This diagram applies to all VER series operators used on sectional doors.

### Standard issue

- A** Operator
- B** TX Infrared photocells
- C** RX Infrared photocells
- E** Safety sensitive edge
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Cord-operated release device
- X** Shunt box

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Commands	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>	*n°x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32' 8" ft

\*n° = see documentation ● European standards ● US standards

### Chain and belt driven transmission guides



The two solutions are the same in terms of reliability and durability. The transmission belt-guides are more silent during operation, while the chain-guides are more suitable for medium-to-large doors.

### Pull-cord release directly applied to the door's handle



CAME garage door operators allow you to mechanically lock the motor directly from the door handle. This function is fundamental in applications where there is no secondary garage entrance.

# Ver



## Sectional and overhead garage door operators

Automation ready in minutes.

Thanks to the latest VER automation system it is now even easier to automate a garage door. Just couple the transmission rail to the motor and the automation is ready to install. All the Ver series motors are 24V powered, which guarantees safety and reliability.



**EN TESTED.** Thanks to laboratory testing carried out on a door sample, V900E is European Standard EN12445 and EN12453 compliant, in terms of impact forces.



The chain and belt driven transmission guides are adjustable to fit the height of the door requiring motorisation. Being extremely tough and completely silent, they provide a customisable solution for every type of door.



Within the motor unit there is also space for housing emergency batteries, which will power the opening should the mains voltage be cut off.



## Advantages of the VER

The VER is quick to install and will integrate perfectly with an existing garage door, with no modifications required. It is therefore an **easy** and **cost-effective** system.

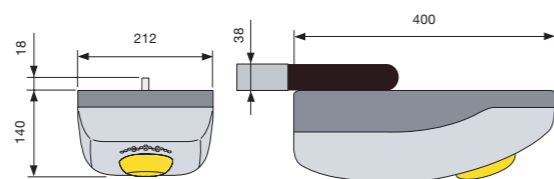
It is simple to use, yet powerful in line with the CAME tradition. It features silent, reliable slide rails and can be fitted with an outer pull-chord release that can be directly applied to the door's standard handle. It comes complete with a courtesy light to aid parking on those dark winter nights.

### Limits to use

Type of door	Overhead counterweighted or spring-loaded extended or partially extended doors (with V201)	Overhead Spring-loaded Extended doors	Sectional Doors
	Traction force (N)	Traction force (N)	Traction force (N)
V700	850	850	850
V900E	500	500	500

● 24V D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

**24V** 24 Volt only

Ver 24V technology allows for total control of the gate movement. V900E is European standard EN12445 and EN12453 compliant, in terms of impact forces.

### Technical features

Type	V700	V900E
Protection rating	IP40	IP40
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.
Current draw (A)	11 Max	6 Max
Power (W)	260	130
Manoeuvre speed 90° (s)	6	6
Duty cycle (%)	50	50
Traction force (N)	850	500
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 24V D.C.



## The complete range

### Complete automation system with 24V D.C. motor

**001V900E** Complete automation system with encoder-based control panel, for overhead counterweighted, spring-loaded and sectional doors (Traction force: 500N).



### Complete automation system with 24V D.C. motor

**001V700E** Complete automation system with control panel, for overhead counterweighted, spring-loaded and sectional doors (Traction force: 850N).



### Accessories

**001V0670** Card for connecting two 12V – 1.2 Ah emergency batteries with rack.



**001V005** 142cm chain guide extension for guide types: V0679 - V0682 - V0683 - V0684.

**001V121** Cord release device to apply to the door handle. (3 metres long)

**001V122** Transmission arm for sectional doors, with distance between the upper edge of the door and springs-pole assembly between 30 and 60 cm

**001V201** Transmission adapter arm for partially extended counterweighted overhead doors. Max door height: 2.4 m

**001V0679** Chain guide. Length = 3.02 m  
Max door height: BC = 2.4 m BM = 2.25 m STA = 2.1 m STB = 2.2 m

**001V0682** Chain guide. Length = 3.52 m  
Max door height: BC = 2.75 m BM = 2.6 m STA = 2.7 m STB = 2.2 m

**001V0683** Chain guide. Length = 4.02 m  
Max door height: BC = 3.25 m BM = 3.1 m STA = 3.2 m STB = 2.2 m

**001V0684** Chain guide. Length = 3.02 m  
Max door height: BC = 2.4 m BM = 2.25 m STA = 2.1 m STB = 2.2 m

**001V0685** Belt guide. Length = 3.02 m  
Max door height: BC = 2.4 m BM = 2.25 m STA = 2.1 m

**001V0686** Belt guide. Length = 3.52 m  
Max door height: BC = 2.75 m BM = 2.6 m STA = 2.7 m

**001V0688** Belt guide. Length = 4.02 m  
Max door height: BC = 3.25 m BM = 3.1 m STA = 3.2 m

**001V0687** Belt guide. Length = 3.02 m  
Max door height: BC = 2.4 m BM = 2.25 m STA = 2.1 m STB = 2.2 m

NOTE: BC = Counter-weighted-Overhead - BM = Spring-loaded Overhead - STA = Type A Sectional A - STB = Type B Sectional (see pg.78)

**Complete Kits**

**Garage Door Kits** page 28

**Accessories**

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189



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## Parking Barriers

## The models

Parking barriers are today one of the most sought after types of automation for controlling the vehicle traffic in public car parks, private entrances, and blocks of flats. The CAME range includes both 230V A.C. and 24V D.C. models, and a special stainless steel version when corrosion might be an issue. Any type of throughway can be controlled, from small, narrow passages with quick barriers, to very wide passages of up to 12 m / 39'4" of net span. A vast range of dedicated accessories is also available, all designed to complement the system even when special requests are involved, such as with jointed arms or anti-panic systems.

Two other useful solutions to guarantee a parking space are Unipark and Cat; Automatic barriers for controlling single or multiple private parking spaces.

They are simple to install and use, and extremely durable over time thanks to the best materials and technologies employed. The table below details the complete range of parking barriers according to the width of the road or parking space, the limitations of use and the suggested application setting.

Use	RESIDENTIAL	APARTMENTS	INDUSTRIAL	INTENSIVE USE
Series	Model	Max width of opening (m / ft)		
Gard	G2500	2.5 / 8'2"		
Gard	G4000	4 / 13'		
Gard	G4001	4 / 13'		
Gard4	G4040Z	3.75 / 12'3"		4 / 13'
Gard4	G4040IZ	3.75 / 12'3"		4 / 13'
Gard	G6000	6.5 / 22'		
Gard	G6001	6.5 / 22'		
Gard4	G4041Z	3.75 / 12'3"		4 / 13'
Gard8	G2080Z	7.6 / 25'		8 / 26'
Gard8	G2080IZ	7.6 / 25'		8 / 26'
Gard8	G2081Z	7.6 / 25'		8 / 26'
Gard12	G12000	12 / 40'		
Series	Model	Max width of a parking space (m / ft)		
Unipark	*UNIP	ARK 1 - 2 / 6'5"	ARK 1 - 2 / 6'5"	ARK 1 - 2 / 6'5"
		ARK 2 - 2.2 / 8'2"	ARK 2 - 2.2 / 8'2"	ARK 2 - 2.2 / 8'2"
Series	Model	Type of chain (mm) - Max width of entrance (m)		
Cat	CAT-X	5 / 16 - 9 / 8		
Cat	CAT-X24	5 / 16 - 9 / 8		

\* Unip is combined with ARK1 or ARK2

● 230V A.C. ● 24V D.C

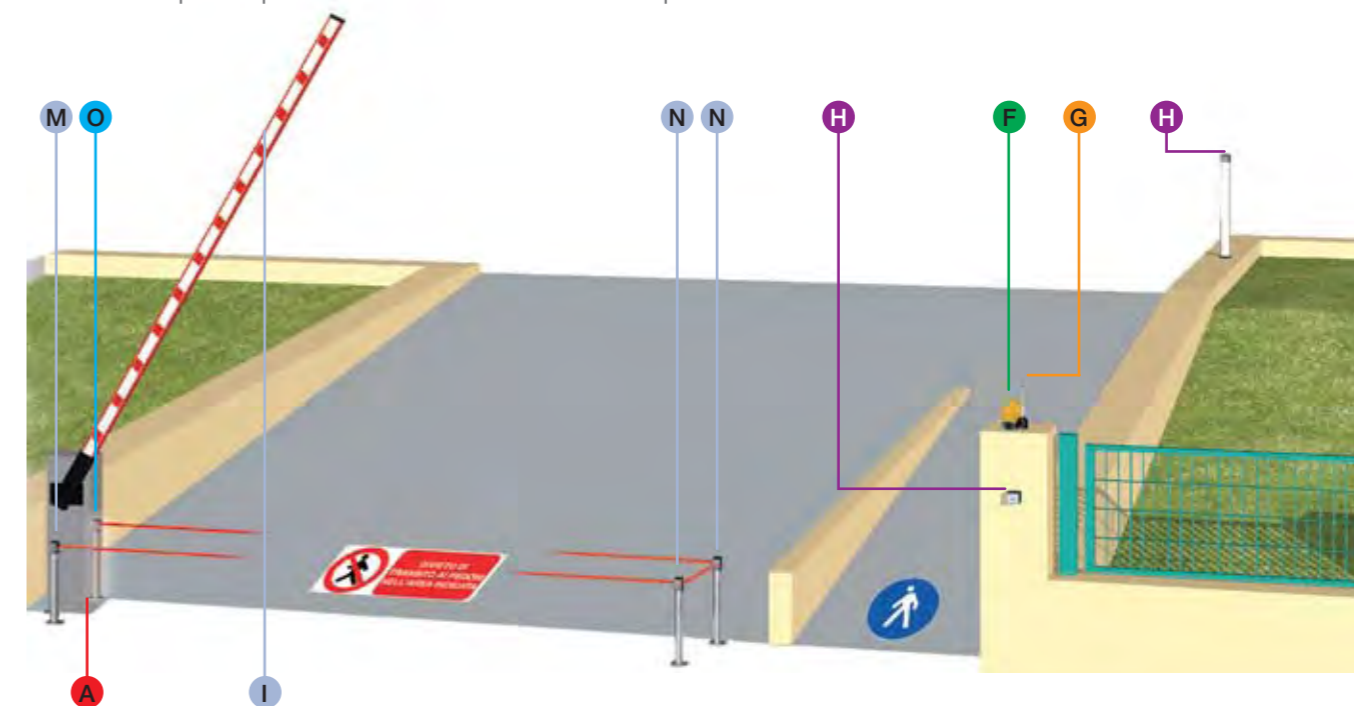
## Standard RESIDENTIAL installation

TRAINED users and positioned on PUBLIC STREET

Barriers that only allow vehicle passage are excluded from the scope of the European Standards. However, in the interests of safety we strongly recommend identifying and demarcating any adjacent pedestrian passages, and setting up devices to detect vehicle traffic.

### Important

The Db Wireless photocells are designed to be applied when parking barriers also have adjacent pavements, to provide protection in the event of unauthorised pedestrian traffic.



### Standard issue

- A** Parking barrier
- M** TX wireless photocells
- N** TX/RX wireless photocells
- O** RX wireless photocells
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Bar with red adhesive reflecting strips

Cable length (m)	<10	10 - 20	20 - 30	30 - 40
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"	98' 4" - 131' 2"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2GxAWG13
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20
● Flashing light 24V A.C. -D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20
● Antenna		RG58 Max 10m	32' 8" ft	

\*n° = see documentation ● European standards ● US standards

### Complete safety



The Db series wireless photocells are a revolutionary way to ensure safety, even when not initially planned for. This saves on expensive digging and masonry work. Db means you can install less components while increasing the level of safety.

### Flashing light



The KIARON and KIARON24IN can be set to flash after the operator has performed 5,000, 10,000, 20,000 or 50,000 operations. It is an automatic solution for programming the system's ordinary maintenance schedule.

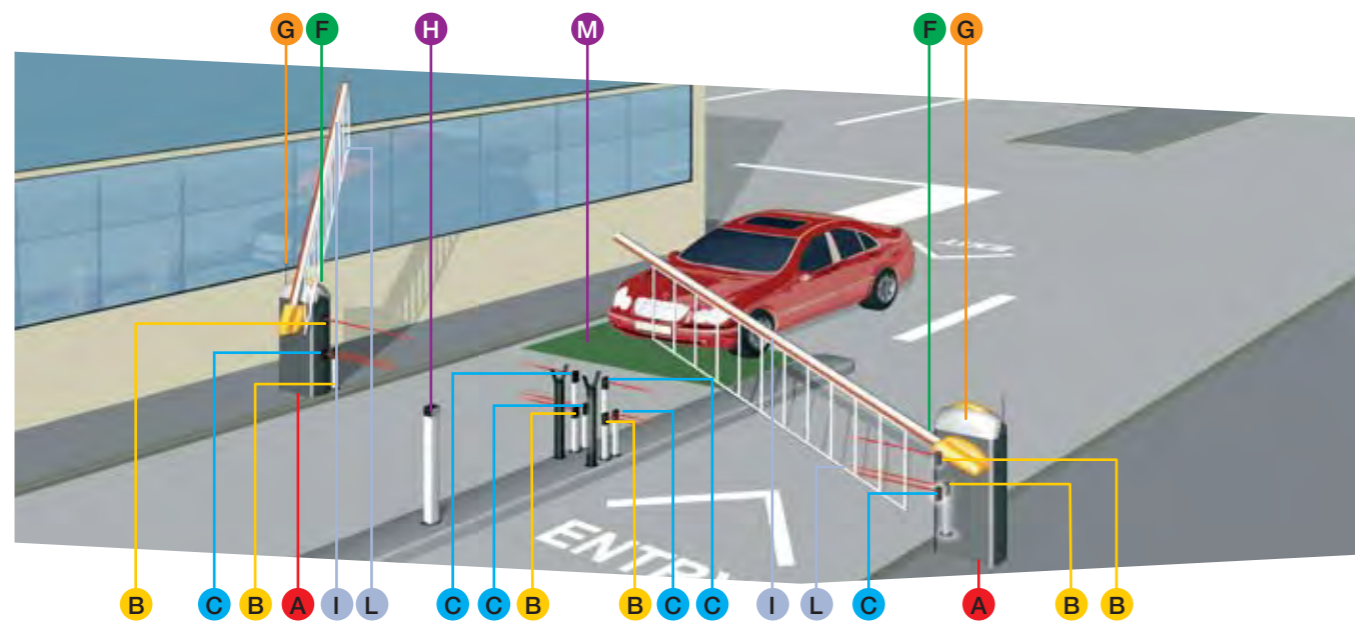
## Standard INDUSTRIAL installation

TRAINED users and positioned on PUBLIC STREET

Barriers that only allow vehicle passage are excluded from the scope of the European Standards. However, in the interests of safety we strongly recommend identifying and demarcating any adjacent pedestrian passages, and setting up devices to detect vehicle traffic.

### Important

It is possible to install systems with opposing barriers that have independent safety devices. These barriers can be complimented by magnetic induction loop sensors that can work both as a command function or as an added safety feature (placed next to the bar).



### Standard Issue

- A** Parking barrier
- B** TX Infrared photocells
- C** RX Infrared photocells
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Bar with luminous cord
- L** Rack
- M** Induction Loop Sensor

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup> 4GxAWG15
Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup> 2xAWG15
Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
Antenna	RG58 Max 10m	32' 8" ft	

\*n° = see documentation ● European standards ● US standards

### Special accessories: joint for bar



If there is not enough room for the barrier arm's normal rotation, such as in indoor car parks, there are special jointed bars available which take up less vertical space during opening but do not take away from the horizontal coverage of the barrier arm.

### Wireless digital keypad



The S9000 wireless keypad is designed to solve issues when the installation requires minimal disruption or where it is difficult to lay cables. The code is protected by millions of combinations and by an "electronic anti-burglary" system which prevents tampering.

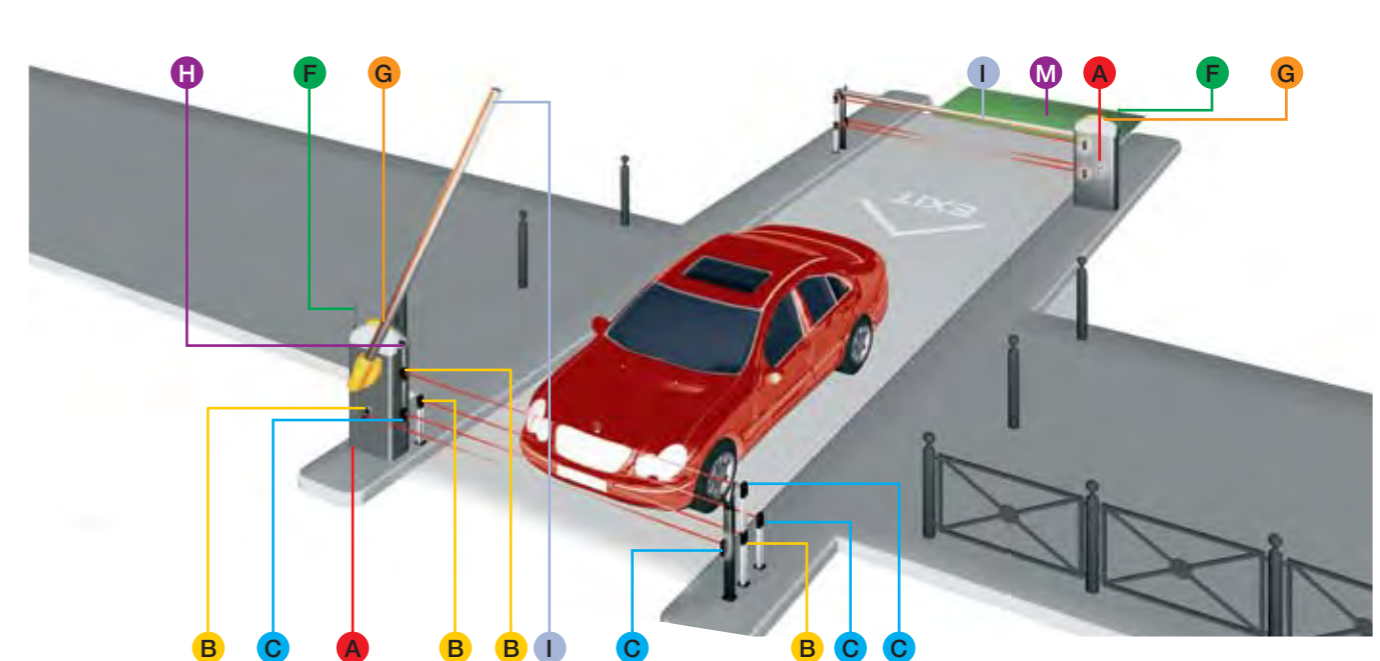
## Standard PARKING installation

TRAINED users and positioned on PUBLIC STREET

Barriers that only allow vehicle passage are excluded from the scope of the European Standards. However, in the interests of safety we strongly recommend identifying and demarcating any adjacent pedestrian passages, and setting up devices to detect vehicle traffic.

### Important

Systems with barriers featuring "Master & Slave" multi-directional functionality may also be installed. This guarantees maximum control of vehicular transit even with two-way passages (i.e. vehicles travelling in opposite directions) but with only one lane.



### Standard issue

- A** Parking barrier
- B** TX Infrared photocells
- C** RX Infrared photocells
- F** Flashing light
- G** Reception antenna
- H** Selector switch (key - code - card)
- I** Bar with luminous cord
- L** Rack for bars
- M** Induction Loop Sensor

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup> 2xAWG15
Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
Antenna	RG58 Max 10m	32' 8" ft	

\*n° = see documentation ● European standards ● US standards

Photocells are fitted onto the indoor barrier in the same exact way that they are fitted on the outdoor barrier.

### Also for pay-to-park systems



24V D.C. CAME barriers are ideal for automatic parking installations. We recommend the special stainless steel (rust proof) cabinet. Ideal for sites near the sea or in high traffic areas.

### Total entry control



Parking barriers may be connected to the different access control systems to identify, memorise, clear for entrance and exit only authorised personnel. This lets you manage transit in different company departments or other types of collective structures.

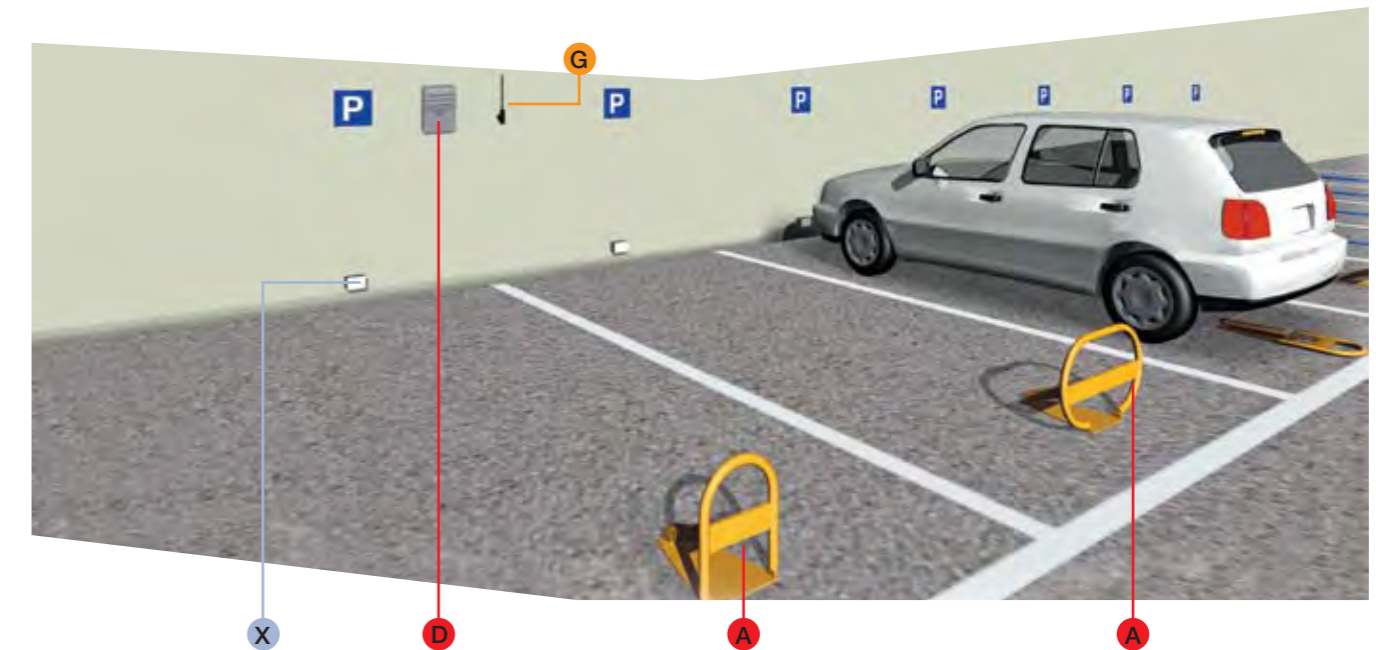
## Standard UNIPARK installation

TRAINED users and positioned on PUBLIC STREET

Remote controlled operation is often the desired activation method. At the present time, this type of installation does not require any additional safety devices to conform with the European standards.

### Important

Multiple installations can be set up, using a single control panel to control 4 Unipark barriers.



### Standard issue

- A** Operators
- D** Control panel
- G** Antenna
- I** Shunt box

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*nx0.5mm <sup>2</sup> n°xAWG20
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Antenna		RG58 Max 10m	32' 8" ft

\*n° = see documentation ● European standards ● US standards

### Small and multi-user



TAM-432SA is the ideal transmitter to combine with Unipark and Cat. Its small size and multiuser features make it both practical and multi-functional. The same transmitter can be used for the parking space as well as for another common function.

### Practical, solid and safe!



Unipark is a smart automation that combines easy installation and user-friendliness within a solid, resistant structure. It offers maximum safety to the user thanks to the amperometric sensor which detects any obstacles.

## Standard CAT barrier installation

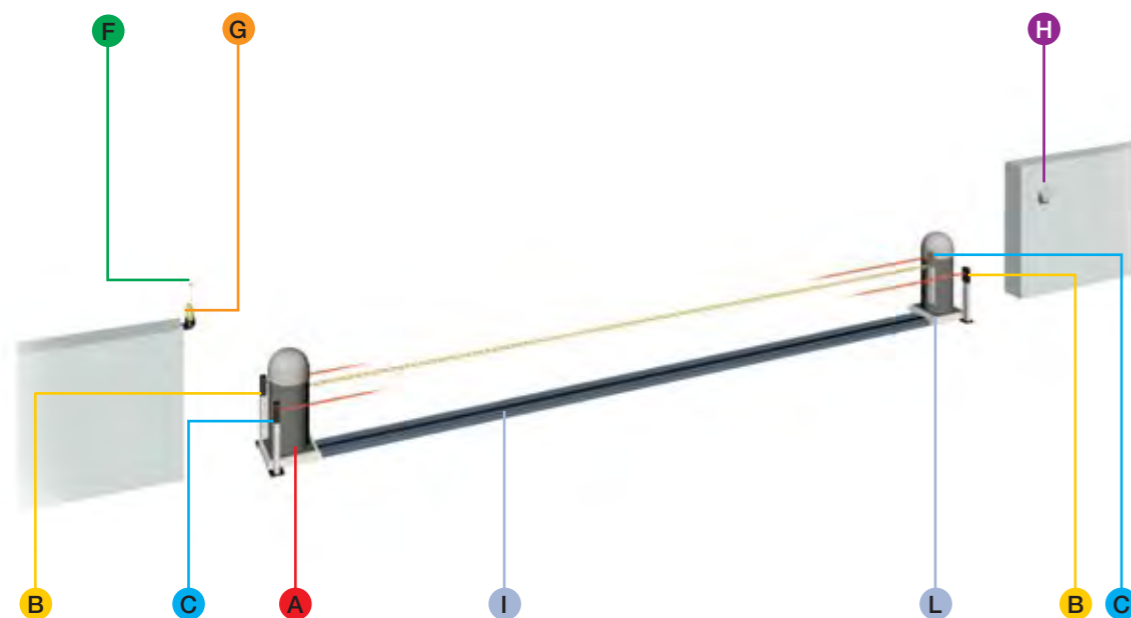
TRAINED users and positioned on PUBLIC STREET

Remote controlled operation is often the desired activation method, which needs to be considered when choosing safety options. At the present time this type of installation does not require any additional safety devices to conform with the European standards. However, given that there is no specific legislation on this matter, for the purposes of user safety we believe it necessary to apply our safety devices in accordance with the results of careful risk analysis we have conducted.



### Important

The Cat chain barriers are an exclusive CAME patent and can integrate aesthetically with the architectural look of historical town centres where, stylish, low profile installations are requested.



### Standard issue

- A** Bollard with operator and built-in control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Floor-level chain-protection guide
- L** Bollard with counterweights and chain coupling

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*nx0.5mm <sup>2</sup> n°xAWG20
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Antenna		RG58 Max 10m	32' 8" ft

\*n° = see documentation ● European standards ● US standards

### DIR: The synchronised photocell



The DIR photocells' operation principle consists of auto-synchronising the infrared beams between receiver and transmitter. This function allows for multiple installation requirements that are typical in industrial settings, where devices need to be placed at two different heights.

### Total entry control



Automatic chain barriers may be connected to different access control systems to identify, memorise, clear for entrance and exit only authorised personnel. This lets you manage transit in different company departments or other types of collective structures.



## GARD2S kit

Complete 230V A.C. barrier kit for road widths of up to 2.5 metres

2.5m

	Qty		Qty
001G2500 Barrier unit with control panel	1	001DOC-I Pair flush mount photocells	1
001G0251 Aluminium bar. 2.7m long	1	001DOC-LN Column for photocell (black)	1
001G0461 Red phosphorescent strips	1		



## GARD4S kit

Complete 24V D.C. barrier kit with **square** barrier arm. For road widths of up to 4 metres

4m

	Qty		Qty
001G4000 Barrier unit with control panel	1	001DOC-I Pair flush mount photocells	2
001G0401 Aluminium bar. 4.2m long	1	001DOC-LN Column for photocell (black)	1
001G0461 Red phosphorescent strips	1		

**NOTE:** In areas that may be subject to windy conditions we strongly recommend that this square arm kit is NOT installed. Please choose the tubular arm version (below) instead.



## GARD4T kit

Complete 24V D.C. barrier kit with **tubular** barrier arm. For road widths of up to 4 metres

4m

	Qty		Qty
001G4000 Barrier unit with control panel	1	001DOC-I Pair flush mount photocells	1
001G0402 Aluminium bar. 4.2m long	1	001DOC-LN Column for photocell (black)	1
001G0405 Fitting for G0402 bar	1	001G0461 Red phosphorescent strips	1



## GARD6S kit

Complete 24V D.C. barrier kit with **square** barrier arm. For road widths of up to 6.5 metres

6.5m

	Qty		Qty
001G6000 Barrier unit with control panel	1	001DOC-I Pair flush mount photocells	1
001G0601 Aluminium bar. 6.8m long	1	001DOC-LN Column for photocell (black)	1
001G0461 Red phosphorescent strips	1		

**NOTE:** In areas that may be subject to windy conditions we strongly recommend that this square arm kit is NOT installed. Please choose the tubular arm version (below) instead.



## GARD6T kit

Complete 24V D.C. barrier kit with **tubular** barrier arm. For road widths of up to 6.5 metres

6.5m

	Qty		Qty
001G6000 Barrier unit with control panel	1	001DOC-I Pair flush mount photocells	1
001G0602 Aluminium bar. 6.8m long	1	001DOC-LN Column for photocell (black)	1
001G0605 Fitting for G0602 bar	1	001G0461 Red phosphorescent strips	1

**NOTE:** For greater flexibility, no activation accessories are included in these standard kits. All barrier kits can be controlled using any of the standard CAME accessories, including PS parking systems, digital keypads, radio remote controls and magnetic induction loops.





## G4230ST 230v kit

Standard 230V A.C. Gard4 barrier kit for road widths of up to 3.75 metres

3.75m

Qty	Item	Qty
1	001G4041Z 230v barrier unit with built-in control panel - 001ZG6	1
1	001G03752 Aluminium bar. 4m long	1
1	001G06080 55mm balancing spring (RED)	1



## G424VST 24v kit

Standard 24V D.C. Gard4 barrier kit for road widths of up to 3.75 metres

3.75m

Qty	Item	Qty
1	001G4040Z 24v barrier unit with built-in control panel - 001ZL38	1
1	001G03752 Aluminium bar. 4m long	1
1	001G06080 55mm balancing spring (RED)	1



## G4230DX 230v kit

**Deluxe** 230V A.C. Gard4 barrier kit for road widths of up to 3.75 metres

3.75m

Qty	Item	Qty
1	001G4041Z 230v barrier unit with built-in control panel - 001ZG5	1
1	001G03750 4m barrier arm with soft profile	1
1	001G06080 55mm balancing spring (RED)	1
1	001G02807 Fixed support for bar	1
1	001G02809 Pack of 20 red sticker strips	1
1	001G02801 Flashing light	1
1	001DIR10 Pair of safety photocells	1
1	001G02802 Support bracket for photocells	1
9m	001G02803 Lighting strip for bar	9m
1	001G02804 Lighting strip cable	1



## G424VDX 24v kit

**Deluxe** 24V D.C. Gard4 barrier kit for road widths of up to 3.75 metres

3.75m

Qty	Item	Qty
1	001G4040Z 24v barrier unit with built-in control panel - 001ZL38	1
1	001G03750 4m barrier arm with soft profile	1
1	001G06080 55mm balancing spring (RED)	1
1	001G02807 Fixed support for bar	1
1	001G02809 Pack of 20 red sticker strips	1
1	001G02801 Flashing light	1
1	001DIR10 Pair of safety photocells	1
1	001G02802 Support bracket for photocells	1
9m	001G02803 Lighting strip for bar	9m
1	001G02804 Lighting strip cable	1



## G6230ST 230v kit

Standard 230V A.C. Gard8 barrier kit for road widths of up to 5.6 metres

5.6m

Qty	Item	Qty
1	001G2081Z 230v barrier unit with built-in control panel - 001ZG6	1
1	001G02807 Fixed support for bar	1
1	001G06080 55mm balancing spring (RED)	1
1	001G04060 50mm balancing spring (GREEN)	1



## G624VST 24v kit

Standard 24V D.C. Gard8 barrier kit for road widths of up to 5.6 metres

5.6m

Qty	Item	Qty
1	001G2080Z 24v barrier unit with built-in control panel - 001ZL38	1
1	001G02807 Fixed support for bar	1
1	001G06080 55mm balancing spring (RED)	1
1	001G04060 50mm balancing spring (GREEN)	1



## G6230DX 230v kit

**Deluxe** 230V A.C. Gard8 barrier kit for road widths of up to 5.6 metres

5.6m

Qty	Item	Qty
1	001G2081Z 230v barrier unit with built-in control panel - 001ZG5	1
1	001G06000 Aluminium bar. 6m long	1
1	001G06080 55mm balancing spring (RED)	1
1	001G04060 50mm balancing spring (GREEN)	1
1	001G02807 Fixed support for bar	1
2	001G02809 Packs of 20 red sticker strips	2
1	001DIR10 Pair of safety photocells	1
1	001G02802 Support bracket for photocells	1
13m	001G02803 Lighting strip for bar	13m
1	001G02804 Lighting strip cable	1
1	001G02801 Flashing light	1

NOTE: Battery back-up is also available for this kit. See page 107 for more information.



## G624VDX 24v kit

**Deluxe** 24V D.C. Gard8 barrier kit for road widths of up to 5.6 metres

5.6m

Qty	Item	Qty
1	001G2080Z 24v barrier unit with built-in control panel - 001ZL38	1
1	001G06000 Aluminium bar. 6m long	1
1	001G06080 55mm balancing spring (RED)	1
1	001G04060 50mm balancing spring (GREEN)	1
1	001G02807 Fixed support for bar	1
2	001G02809 Packs of 20 red sticker strips	2
1	001DIR10 Pair of safety photocells	1
1	001G02802 Support bracket for photocells	1
13m	001G02803 Lighting strip for bar	13m
1	001G02804 Lighting strip cable	1
1	001G02801 Flashing light	1

NOTE: Battery back-up is also available for this kit. See page 107 for more information.

**Accessories**

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

Certain items listed in the kits on these pages, namely control board, remote controls or safety photocells, may be substituted without prior notice for a comparative alternative if the advertised item code is temporarily out of stock.





## G8230ST 230v kit

Standard 230V A.C. Gard8 barrier kit for road widths of up to 7.6 metres



Qty	Qty
001G2081Z 230v barrier unit with built-in control panel - 001ZG6	1
001G04000 Aluminium bar. 4m sections	2
001G02807 Fixed support for bar	1
001G06080 55mm balancing spring (RED)	2
001G06803 Arm section connecting joint	1



## G824VST 24v kit

Standard 24V D.C. Gard8 barrier kit for road widths of up to 7.6 metres



Qty	Qty
001G2080Z 24v barrier unit with built-in control panel - 001ZL38	1
001G04000 Aluminium bar. 4m sections	2
001G02807 Fixed support for bar	1
001G06080 55mm balancing spring (RED)	2
001G06803 Arm section connecting joint	1



## G8230DX 230v kit

Deluxe 230V A.C. Gard8 barrier kit for road widths of up to 7.6 metres

NOTE: Battery back-up is also available for this kit. See page 107 for more information.



Qty	Qty
001G2081Z 230v barrier unit with built-in control panel - 001ZG5	1
001G04000 Aluminium bar. 4m sections	2
001G06080 55mm balancing spring (RED)	2
001G06803 Arm section connecting joint	1
001G02807 Fixed support for bar	1
001G02809 Packs of 20 red sticker strips	2
001DIR10 Pair of safety photocells	1
001G02802 Support bracket for photocells	1
001G02803 Lighting strip for bar	17m
001G02804 Lighting strip cable	1
001G02801 Flashing light	1



## G824VDX 24v kit

Deluxe 24V D.C. Gard8 barrier kit for road widths of up to 7.6 metres

NOTE: Battery back-up is also available for this kit. See page 1047 for more information.



Qty	Qty
001G2080Z 24v barrier unit with built-in control panel - 001ZL38	1
001G04000 Aluminium bar. 4m sections	2
001G06080 55mm balancing spring (RED)	2
001G06803 Arm section connecting joint	1
001G02807 Fixed support for bar	1
001G02809 Packs of 20 red sticker strips	2
001DIR10 Pair of safety photocells	1
001G02802 Support bracket for photocells	1
001G02803 Lighting strip for bar	17m
001G02804 Lighting strip cable	1
001G02801 Flashing light	1

### Parking barriers

OPERATORS – SERIES	G2500	G4000 G4001 G6000 G6001	GARD4 GARD8	GARD4 GARD8	G12000	CAT-X	CAT-X24	UNIPARK
CARD – PANEL	ZG2	ZL37	ZG5	ZL38	ZL37B	ZC2-C	ZL37C	ZL22
<b>FUNCTIONAL FEATURES</b>								
SELF-DIAGNOSIS of active safety devices function								
Opening and closing PREFLASHING function								
REOPENING during closing function								
RECLOSING during opening function								
Obstacle STALL function								
TOTAL STOP function								
PARTIAL STOP of the gate-leaf function								
OBSTACLE DETECTION function on photocells								
ENCODER operation								
MOVEMENT CONTROL and obstacle detection device								
AMPEROMETRIC DETECTION function								
1 leaf PEDESTRIAN OPENING function								
1 leaf PARTIAL OPENING function								
TRANSMITTER OPEN ONLY function								
OPEN ONLY button connection function								
CLOSE ONLY button connection function								
OPEN-STOP-CLOSE-STOP button connection function								
OPEN-CLOSE-REVERSE button connection function								
MAINTAINED ACTION command function								
1st leaf DELAYED CLOSING function								
2nd leaf DELAYED CLOSING function								
IMMEDIATE CLOSING function								
EMERGENCY RELEASE function from the remote control								
FLASHING LIGHT connection								
CYCLE LAMP connection								
COURTESY LAMP connection								
Antenna connection								
24V ACCESSORIES connections								
OPEN WARNING LIGHT connection								
CLOSED WARNING LIGHT connection								
Contact output for 2nd RADIO CHANNEL								
Adjusting RUNNING TIME								
EXTRACTABLE, NUMBERED connection terminals								
SELF-LEARNING function of the transmitter's RADIO code								
RAM BLOW function to aid the release of the electrolock								
Adjustable AUTOMATIC RE-CLOSING TIME function								
ELECTROLOCK/ELECTRORELEASE connection output								
OPENING AND/OR CLOSING deceleration								
EMERGENCY-BATTERY operation (optional)								
MASTER-SLAVE operation mode								
Adjustable RUNNING SPEED AND DECELERATION function								
Warning DISPLAY								
Electronic BRAKE								
CONTROL and warning led								
SELF-LEARNING function of the opening and closing endstops								

● 230V A.C. ● 24V D.C.

**Accessories**  
**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

# Gard

## Parking barriers

The fast automatic barriers.

For road widths of 2.5m, 4m and up to 6.5 metres, the Gard series of automatic barriers are the ideal solution for private or public zones of high passage intensity.



**The versatile solution.**  
The Gard series barriers can be installed on either the right or left of the roadway. Installation is quick and easy, and no pre-assembly is required.



**Also in stainless steel.**  
The G4001 model comes with a stainless steel cabinet for installations located in particularly exposed areas.



**Absolute modularity.**  
Safety accessories such as flashing light and photocells are applied directly onto the cabinet.



for road widths of 2.5 - 4 - 6.5 m  
for road widths of 8'2" - 13'1" - 21'3" ft



## Advantages of Gard

Easy to install, they come complete with a full range of accessories such as various-section bars, lamps, racks, fixed supports.

They do not require any additional assembly and, when installed in conjunction with the appropriate safety accessories, comply with the requirements of modern system engineering.

The G2500 fast opening model is powered by 230V while the G4000 and G6000 models (including stainless steel versions) are fitted with a 24V D.C. operator and suitable for intensive use. Once installed, they do not require frequent periodic maintenance.

### Limits to use

Model	G2500	G4000 - G4001	G6000 - G6001
Composition of the bar	Max width of road (m / ft)		
Standard bar	2.5 / 8'2"	4 / 13'	6.5 / 22'
Bar with G0403 rubber and G0460 lamps	-	3.5 / 11'	6 / 20'
Bar with G0463 mobile support	-	3.5 / 11'	6 / 20'
Bar with G0403 rubber, G0460 lamps and G0465 rack or G0463 mobile support	-	2.5 / 8'2"	6 / 20'
Bar with G0465 rack and G0463 mobile support	-	2 / 6'5"	-
Bar with G0403 rubber, G0460 lamps and G0465 rack and G0463 mobile support	-	-	5.5 / 18'

● 230V A.C. ● 24V D.C.

## 24V models

The Gard series features models with 24V D.C. motors, which always yield maximum performance without compromising safety. These models are suitable for all settings that have intensive use requirements.



## Technical features

Type	G2500N	G4000	G4001	G6000	G6001
Protection rating	IP54	IP54	IP54	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60Hz	24 D.C.	24 D.C.	24 D.C.	24 D.C.
Current draw (A)	1	15 Max	15 Max	15 Max	15 Max
Power (W)	120	300	300	300	300
Duty cycle (%)	30	Intensive use	Intensive use	Intensive use	Intensive use
Torque (Nm)	70	200	200	600	600
Opening time 90° (s)	2	2 - 6	2 - 6	2 - 6	2 - 6
Motor's thermo-protection (°C/°F)	150/302	-	-	150/302	-
Operating temperature (°C/°F)	-	-20 °C to 55 °C	-4 °F to 131 °F	-	-

● 230V A.C. ● 24V D.C.

## The complete range

### Parking barrier with 230V A.C. operator and control panel

001G2500 Galvanized and painted steel barrier complete with control panel. Opening time: 2 s.

### Parking barriers with 24V D.C. operator and control panel

001G4000 Galvanized and painted steel barrier cabinet complete with control panel and fitted to take additional accessories.



001G4001 Stainless steel barrier cabinet with satin finish, complete with control panel and fitted to take additional accessories.



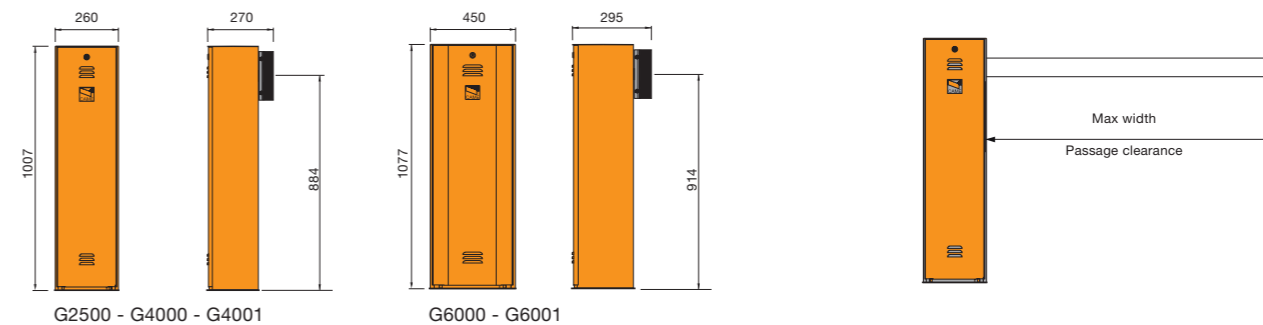
001G6000 Galvanized and painted steel barrier cabinet complete with control panel and fitted to take additional accessories.



001G6001 Stainless steel barrier cabinet with satin finish, complete with control panel and fitted to take additional accessories.



## Dimensions



**Colour :**  
G2500 - G4000 - G6000 colour RAL1028

Dimensions in millimetres (25.4 mm = 1 in)

**Accessories**  
Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189

## The complete range

### Accessories for Parking barrier with 230V A.C. operator

001G0251 White painted aluminium bar. Section: 60 x 40 x 2700 mm.

001G0257 Joint for bar.

### Accessories for Parking barriers with 24V D.C. operator

002LB38 Card for connecting 3 x 12V-7Ah emergency batteries for: G4000 - G4001 - G6000 and G6001 barriers.



### Accessories for Parking barriers

001G0401 White painted aluminium bar for G4000 and G4001 barriers. Section: 60 x 40 x 4200 mm

001G0402 White painted aluminium bar for G4000 and G4001 barriers. Section: Ø 60 x 4200 mm (for areas subject to strong wind).

001G0461 Red adhesive refracting strips for bars (24-pieces package)

001G0405 Fitting for G0402 bar.

001G0403 Impact-resistant red protective rubber, complete with stoppers for G0601 bar.

001G0460 Package of 6 x 24V signalling lamps for G0401 bars.

001G0465 Skirt for painted aluminium bar for G4000 - G4001 - G6000 - G6001 barriers (2 m / 6'6" ft modules).  
Note: We do not recommend that this skirt is fitted in areas that may be subject to windy conditions.

001G0467 Joint for bars. For G4000 - G4001 - G6000 - G6001 barriers.

001G0462 Fixed support for bar. For G2500 - G4000 - G4001 - G6000 - G6001 barriers.

001G0463 Mobile support for bar. For G4000 - G4001 - G6000 - G6001 barriers.

001G0468 Support for applying Doc series photocells on the cabinet. For G4000 - G4001 - G6000 - G6001 barriers.

## The complete range

001G0601 Rectangular-section aluminium bar 40 x 100 x 6850 mm For G6000 - G6001 barriers.

001G0603 Impact-resistant red protective rubber, complete with stoppers for G0601 rectangular bars.

001G0602 Tubular aluminium bar Ø 100 x 6850 mm For G6000 - G6001 barriers (special accessory for areas subject to strong winds).

001G0605 Fitting for G0602 tubular bar.

001G04601 Adapter for application of the Kiaro flashing lights.

CGE Coin operator unit.

GET-2 1 x double grooved token coin for coin reader

GET-2-50 50 x double grooved token coins for coin reader

GET-2-100 100 x double grooved token coins for coin reader

GET-3 1 x triple grooved token coin for coin reader

GET-3-50 50 x triple grooved token coins for coin reader

GET-3-100 100 x triple grooved token coins for coin reader

# Gard4

## Parking barriers

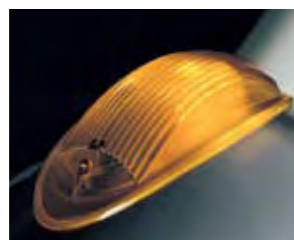
A new concept of automatic barriers.

Gard4 is the new automatic parking barrier, engineered to manage vehicle access in both residential and commercial situations.

Soft profiles and rounded corners counteract the sail effect in a barrier that integrates perfectly into a variety of installation contexts.



**Design, materials, technology.**  
The exclusive built-in flashing lamp with lighted LED diffuser needs no special maintenance and ensures complete visibility of the warning light.



The protective guard on the bar is a standard feature protecting the user from possible risk when the bar is in motion.



**Modular design.**  
Both the flashing lamp and photocells are installed directly onto the cabinet and integrate harmoniously and aesthetically with the system.



## 24V models

The Gard series also features models with 24V D.C. motors, which always yield maximum performance without compromising safety.

for road widths up to 3.75 m  
for road widths up to 12 ft



## Advantages of Gard4

Designed for a range of road widths up to 3.75m (12 ft), the new Gard barriers are the ideal solution for control of access to roads and parking areas in industrial and public settings.

The Gard series is available in the 230V A.C. motor and the 24V D.C. motor versions and in a special version with stainless steel cabinet for those installations where high durability is important, such as in coastal areas with high salt content in the air.

### Limits to use

Model	G4041Z - G4040Z - G4040IZ
Composition of the bar	Max width of road (m / ft)
Bar with shock-resistant profile	3.75 / 12'3"
G02803 bar with shock-resistant profile and luminous cord	3.75 / 12'3"
Bar with G0465 rack	3.75 / 12'3"
Bar with G02803 luminous cord and G0465 rack	3.75 / 12'3"
Bar with shock-resistant profile and G02808 mobile support	3.75 / 12'3"
Bar with shock-resistant profile, G02803 luminous cord and G02808 mobile support	3.75 / 12'3"
Bar with G0465 rack and G02808 mobile support	3.5 / 11'5"
Bar with G02803 luminous cord, G0465 rack and G02808 mobile support	3.5 / 11'5"

● 230V A.C. ● 24V D.C.

## Technical features

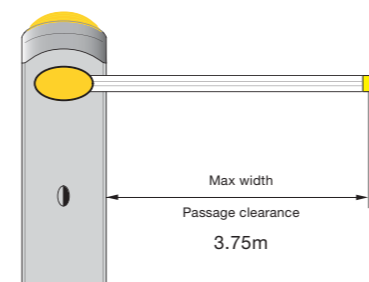
Type	G4041Z	G4040Z - G4040IZ
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60Hz	24 D.C.
Current draw (A)	1	15 Max
Power (W)	120	300
Duty cycle (%)	30	Intensive use
Torque (Nm)	220	400
Opening time 90° (s)	8	2 - 6
Motors thermo-protection (°C/°F)	150/302	-
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 230V A.C. ● 24V D.C.

## Accessories and Installation

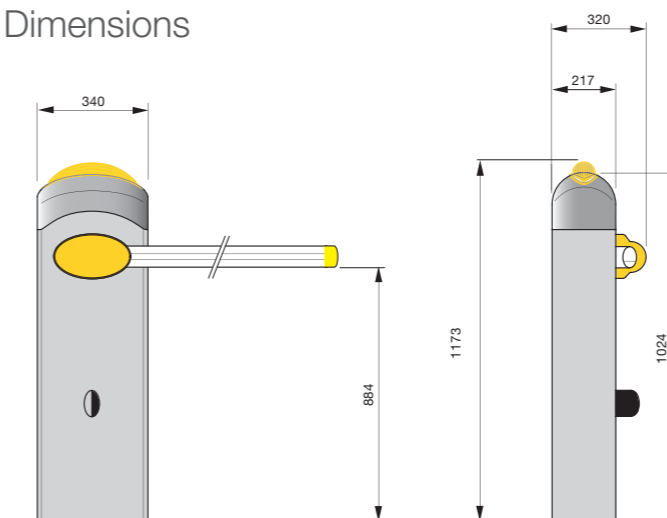
Depending on the configuration of the accessories required for mounting the boom, different kinds of springs are available to provide the best possible balance of movement. The table shows the possible combinations of the various accessories and the maximum length of the moving boom. Standard issue booms come with transparent profiles and head cap.

Composition of the bar	Max width of road (m)	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75
	Max width of road (ft)	5'	5'7"	6'6"	7'4"	8'2"	9'	9'8"	10'7"	11'5"	12'
Bar with shock-resistant profile		●	●	●	●	●	●	●	●	●	●
G02803 bar with shock-resistant profile and luminous cord		●	●	●	●	●	●	●	●	●	●
Bar with G0465 rack		●	●	●	●	●	●	●	●	●	●
Bar with G02803 luminous cord and G0465 rack		●	●	●	●	●	●	●	●	●	●
Bar with shock-resistant profile and G02808 mobile support		●	●	●	●	●	●	●	●	●	●
Bar with shock-resistant profile, G02803 luminous cord and G02808 mobile support		●	●	●	●	●	●	●	●	●	●
Bar with G0465 rack and G02808 mobile support		●	●	●	●	●	●	●	●	●	-
Bar with G02803 luminous cord, G0465 rack and G02808 mobile support		●	●	●	●	●	●	●	●	●	-



- G02040 balancing spring - ø 40 mm
- G04060 balancing spring - ø 50 mm
- G06080 balancing spring - ø 55 mm

## Dimensions



**Colour :**  
CABINET Grey textured cod. 053 0837 - COVER RAL9006

Dimensions in millimetres (25.4 mm = 1 in)



# Gard4

for road widths up to 3.75 m  
for road widths up to 12 ft





## The complete range

**Parking barrier with 230V A.C. operator and control panel**


001G4041Z Galvanized and painted steel barrier cabinet **complete with control panel** and fitted to take additional accessories.

**Parking barriers 24V D.C. operator and control panel**

001G4040Z Galvanized and painted steel barrier cabinet **complete with control panel** and fitted to take additional accessories. 

001G4040IZ Satin finish stainless steel barrier cabinet **complete with control panel** and fitted to take additional accessories. 

**Accessories for Parking barriers with 24V D.C. operator**

002LB38 Card for connecting 3 x 12V-7Ah emergency batteries. 

001G03751 Emergency battery rack.

001G02808 Mobile support for bars.

**Accessories for Parking barrier with 230V A.C. operator**

002RSE Enables "Master & Slave" functionality for a pair of barriers. (for ZG5)

**Accessories for Parking barriers with 230V A.C. and 24V D.C. operator**

001G02040 Balancing spring ø 40 mm

001G04060 Balancing spring ø 50 mm

001G06080 Balancing spring ø 55 mm

001G02801 Dome-shaped flashing light.

001G02802 Support for series Dir photocells.  
Do not use with barriers with G0465 rack and/or G02808 mobile support.

001G03750 White painted semi-oval aluminium bar with slot cover and impact-resistant profiles. Length = 4 m / 13'1" ft.

**Accessories**  
**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

## The complete range

001G03752 White painted oval aluminium bar with slot cover profile L = 4 m / 13'1" ft.

001G03753 Securing flange for G03752 oval bar.

001G02803 Lighting strip for bar.

001G02804 Lighting strip cable.

001G0465 Skirt for painted aluminium bar (2 m / 6'6" ft modules).  
Note: We do not recommend that this skirt is fitted in areas that may be subject to windy conditions.

001G02807 Fixed support for bar.

001G02809 Red adhesive reflective strips for bars (pack of 20)

CGE Coin operator unit.

GET-2 Grooved token coins for coin reader. Available with double or triple groove pattern.  
GET-3 Order in packs of 1, 50 and 100.

### Also in stainless steel



Gard4 barriers can also be fitted with a stainless steel cabinet, for applications when tougher weather conditions make it necessary to protect the durability of the system.

### Easy maintenance



The control panel is positioned horizontally on the upper part of the cabinet. Just remove the small dome-shaped cover to gain immediate, easy access when performing any scheduled maintenance operations.

# Gard8

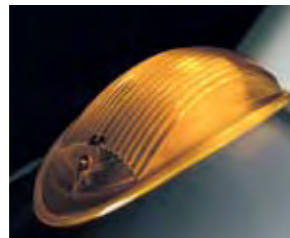
## Parking barriers

A new concept of automatic barriers.

The Gard8 automatic barrier is the ideal solution for control of access to roads and parking areas in private or public zones of high passage intensity. Soft profiles and rounded corners counteract the sail effect in a barrier that integrates perfectly into a variety of installation contexts.



**Design, materials, technology.**  
The exclusive built-in flashing lamp with lighted LED diffuser needs no special maintenance and ensures complete visibility of the warning light.



The protective guard on the bar is a standard feature protecting the user from possible risk when the bar is in motion.



**Modular design.**  
Both the flashing lamp and photocells are installed directly onto the cabinet and integrate harmoniously and aesthetically with the system.



for road widths up to 7.6 m  
for road widths up to 25 ft



## Advantages of Gard8

Designed for larger road widths up to 7.6m (25 ft), the Gard series of barriers are the ideal solution for control of access to roads and parking areas in industrial and public settings.

The Gard series is available in the 230V A.C. motor and the 24V D.C. motor versions and in a special version with stainless steel cabinet for those installations where high durability is important, such as in coastal areas with high salt content in the air.

### Limits to use

Model	G2081Z - G2080Z - G2080IZ
Composition of the bar	Max width of passage clearance (m / ft)
Standard bar	7.6 / 25'
Bar with G02808 mobile support	7 / 23'
Bar with G02803 luminous cord	7.6 / 25'
Bar with G02808 mobile support and G02803 luminous cord	7 / 23'
Bar with G0465 rack	7 / 23'
Bar with G0465 rack and G02803 luminous cord	7 / 23'

● 230V A.C. ● 24V D.C.

## 24V models

The Gard series also features models with 24V D.C. operators, which always yield maximum performance without compromising safety.



## Technical features

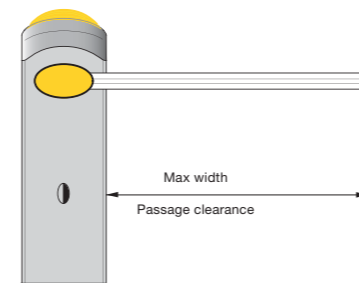
Type	G2081Z	G2080Z - G2080IZ
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60Hz	24 D.C.
Current draw (A)	2.8	15 Max
Power (W)	330	300
Duty cycle (%)	30	Intensive use
Torque (Nm)	250	600
Opening time 90° (s)	8	4 - 8
Motor's thermo-protection (°C/°F)	150/302	-
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 230V A.C. ● 24V D.C.

## Accessories and Installation

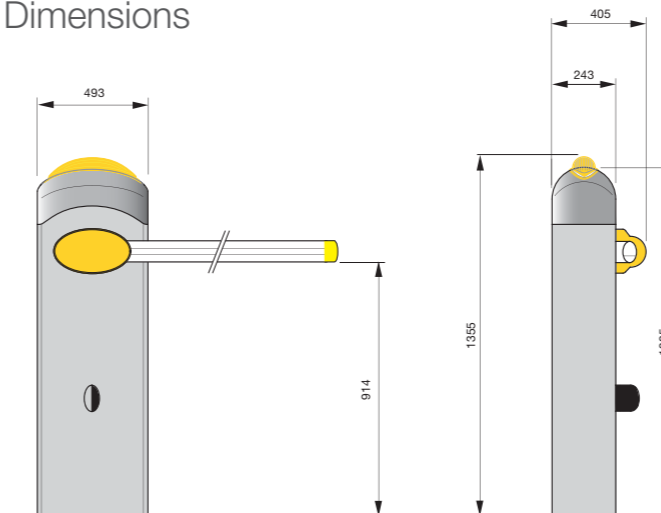
Depending on the configuration of the accessories required for mounting the arm, different kinds of springs are available to provide the best possible balance of movement. The table shows the possible combinations of the various accessories and the maximum length of the moving boom. Standard issue arms come with transparent profiles and end cap.

Composition of the bar	Max width of road (m)	2	2.5	3	3.5	4	4.5	5	5.5	6.5	7	7.6
	Max width of road (ft)	6'6"	8'2"	9'8"	11'5"	13'1"	14'8"	16'4"	18'	21'3"	23'	25'
Standard bar		●	●	●	●	●	●	●	●	●	●	●
Standard bar and G02808 mobile support		●	●	●	●	●	●	●	●	●	●	-
Standard bar and G02803 luminous cord		●	●	●	●	●	●	●	●	●	●	●
Bar with G02808 mobile support and G02803 luminous cord		●	●	●	●	●	●	●	●	●	●	-
Standard bar and G0465 rack		●	●	●	●	●	●	●	●	●	●	-
Standard bar, G0465 rack and G02803 luminous cord		●	●	●	●	●	●	●	●	●	●	-



- G02040 balancing spring - ø 40 mm
- G04060 balancing spring - ø 50 mm
- G06080 balancing spring - ø 55 mm

## Dimensions



**Colour :**  
CABINET Grey textured cod. 053 0837 - COVER RAL9006

Dimensions in millimetres (25.4 mm = 1 in)



# Gard8

for road widths up to 7.6 m  
for road widths up to 25 ft



## The complete range



**Parking barrier with 230V A.C. operator and control panel**

001G2081Z Galvanized and painted steel barrier **complete with control panel** and fitted to take additional accessories.

**Parking barriers 24V D.C. operator and control panel**

001G2080Z Galvanized and painted steel barrier **complete with control panel** and fitted to take additional accessories. 24V

001G2080IZ Satin finish stainless steel barrier cabinet **complete with control panel** and fitted to take additional accessories. 24V

**Accessories for Parking barriers with 24V D.C. operator**

002LB38 Card for connecting 3 x 12V-7Ah emergency batteries. 24V

001G02805 Emergency battery rack.

**Accessories for Parking barrier with 230V A.C. operator**

002RSE Enables "Master & Slave" functionality for a pair of barriers. (for ZG5)

**Accessories for Parking barriers with 230V A.C. and 24V D.C. operator**

001G02040 Balancing spring  $\varnothing$  40 mm

001G04060 Balancing spring  $\varnothing$  50 mm

001G06080 Balancing spring  $\varnothing$  55 mm

001G02801 Dome-shaped flashing light.

001G02802 Support for series Dir photocells.  
Do not use with barriers with G0465 rack and/or G02808 mobile support.

001G02000 White painted aluminium tubular bar  $\varnothing$  100 mm complete with slot cover profile.  
Length = 2 m / 6'6" ft.

001G04000 White painted aluminium tubular bar  $\varnothing$  100 mm complete with slot cover profile.  
Length = 4 m / 13'1" ft.

001G06000 White painted aluminium tubular bar  $\varnothing$  100 mm complete with slot cover profile.  
Length = 6 m / 19'8" ft. new

**Accessories** **Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

## The complete range



001G06803 Joint for bar complete with additional insert to attach bar.

001G02803 Luminous cord for bar.

001G02804 Luminous cord cable.

001G0465 Skirt for painted aluminium bar (2 m / 6'56" ft modules).  
Note: The maximum length of a skirt on a Gard8 barrier is 7 metres.  
We do not recommend that this skirt is fitted in areas that may be subject to windy conditions.

001G02807 Fixed support for bar.

001G02808 Mobile support for bars.

001G02809 Red adhesive reflective strips for bars (pack of 20)

001G028011 Break-away fitting for bar.

CGE Coin operator unit.

GET-2 Grooved token coins for coin reader. Available with double or triple groove pattern.  
GET-3 Order in packs of 1, 50 and 100.

### Also in stainless steel



Gard4 barriers can also be fitted with a stainless steel cabinet, for applications when tougher weather conditions make it necessary to protect the durability of the system.

### Easy maintenance



The control panel is positioned horizontally on the upper part of the cabinet. Just remove the cover to gain immediate, easy access when performing any scheduled maintenance operations.

# Gard12

for road widths up to 12 m  
for road widths up to 40 ft

## Parking barriers

High performance barriers for special applications.

The G12000 model is suitable for large industrial and high intensity use passages.

CAME automatic parking barriers are carefully designed to ensure utmost reliability and specialist features suitable for the application context. For broad openings of up to 12 metres the exceptional G12000 barrier outperforms all others.



**Double motor, double lasting power.**  
G12000 is equipped with two operators, which are installed along the same axis and provide remarkable torque.



**Counterweighted balance.**  
For a safe, reliable boom movement, the system uses a modular counterweighted balancing system, which needs to be set up according to the length of the arm.



**Integration and modularity.**  
A special automation system which perfectly integrates with all the CAME command and safety accessories.



## Applications for Gard12

Two low voltage operators and industrial assembly structure make G12000 the ideal solution for controlling car and lorry parks, work passage areas, loading bays, cargo terminals, motorways and all other applications where fast, safe automation is necessary for large roadways.

A tube bar of different sections allows a 12 m / 40 ft passageway be opened and closed in just 10 seconds, as is often required in loading and unloading situations.

### Limits to use

Model	G12000
Max width of passage clearance (m / ft)	12 / 40

● 24V D.C.

## 24 Volt only

The 24V technology provides Gard12, despite the considerable size of the boom that needs to be moved, with the same standard of guarantee and safety provided by the CAME models that run on continual current.

### Technical features

Type	G12000	
Protection rating	IP54	
Power supply (V) (50/60Hz)	230 A.C.	
Motor power supply (V)	24 D.C.	
Current draw (A)	15 Max	
Power (W)	300	
Manoeuvre speed 90° (s)	10	
Duty cycle (%)	50	
Torque (Nm)	600	
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 24V D.C.



## The complete range

### Barrier with 24V D.C. operators

001G12000 Painted galvanized steel barrier complete with control panel.



### Accessories

001G0121 White painted tubular bar composed of:  
1 x fixed support  
1 x tubular bar L = 6200 mm ø = 120 mm  
1 x tubular bar L = 6000 mm ø = 120 mm  
1 x accessory kit for bar extension.



001G0461 Pack of 24 red adhesive phosphorescent reflecting strips for bars



002LB38 Card for connecting 3 x 12V-7Ah emergency batteries.

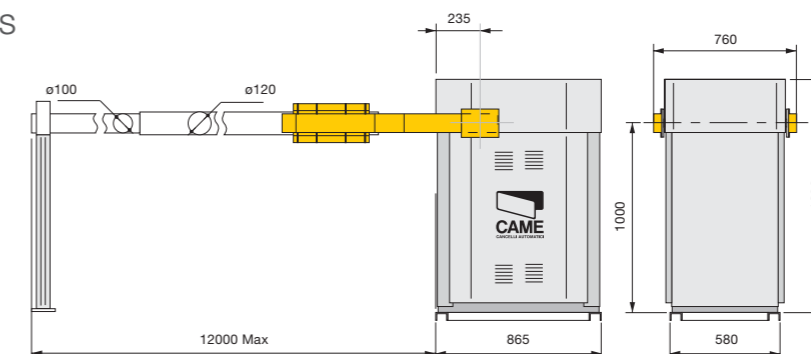


CGE Coin operator unit.



GET-2 Grooved token coins for coin reader. Available with double or triple groove pattern.  
GET-3 Order in packs of 1, 50 and 100.

## Dimensions



**Colour :**  
CABINET Grey textured cod. 053 0837 - COVER RAL9006

Dimensions in millimetres (25.4 mm = 1 in)

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Unipark

## Parking-space savers

Reserving your parking space is now possible. The Unipark automatic barrier is CAME's innovative solution to reserving a private parking space in any residential or business context. Convenient and practical, it is made out of galvanised steel and varnished to ensure resistance to corrosion. A command from the radio transmitter makes the bar rise and lower automatically, so there's no need to get out of the vehicle.



Two models to meet all needs. Besides the ARK1 version with the standard barrier, the system is also available with the larger ARK2 barrier, to better cover the area that needs to be reserved. Usually for parking spaces wider than 2 m / 6'6" ft.



Private parking spaces. An innovative idea to reserve ones parking space. Ideal for a range of situations, from inner-city apartment complexes to business premises.



One control panel for 4 parking spaces. With a motor expansion card it is possible to connect up to 4 Uniparks to the same control panel.



## Advantages of Unipark

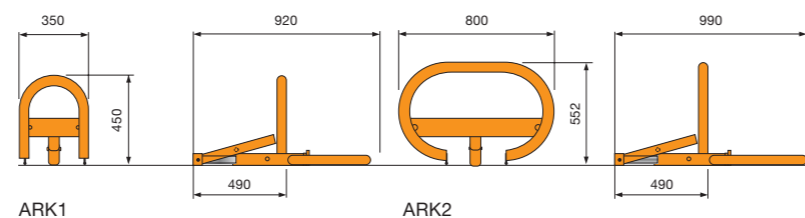
Designed for easy ground installation, Unipark is ideal for all those situations that require private or staff parking spaces to be safeguarded, for any residential or workplace application. It makes it possible to raise and lower the bar by simply using the radio transmitter. It comes in two different models that adapt to one low-voltage 24v operator, featuring obstacle detection and movement reversal. Unipark offers long-lasting reliability over time.

### Limits to use

Model	ARK1	ARK2
	Max width of parking space (m / ft)	Max width of parking space (m / ft)
Unip	2 / 6'5"	2.5 / 8'2"

● 24V D.C

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	UNIPARK	
Protection rating	IP54	
Power supply (V) (50/60 Hz)	230 A.C.	
Motor power supply (V)	24 D.C.	
Current draw (A)	1.7 Max	
Power (W)	20	
Manoeuvre time (s)	10	
Duty cycle (%)	Intensive use	
Resistance to crushing (Kg/cm <sup>2</sup> / lb/in <sup>2</sup> )	2.5/0.85	
Colour	RAL 1028	
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 24V D.C.

## The complete range

### Parking space saver barrier with a 24V D.C. operator.

001UNIP Self-locking operator complete with fixing plate.



### Accessories

001ARK1 Small barrier.

001ARK2 Large barrier.

### 24V D.C. control panel

002ZL22 Control panel for one barrier with built-in radio decoder. Possibility of controlling up to 4 barriers with 3 additional LM22 cards.



### Accessories

002LM22 Motor-management extension card.



002LB22 Card for connecting 2 x 12V-1.2Ah emergency batteries with rack.

## 24 Volt only

Unipark's 24V technology enhances the system's safety level, thanks to its electronic, obstacle detection feature, which blocks movement of the barrier if it touches the vehicle while closing.

### Accessories

Access control pages 160-165  
 Safety pages 166-175  
 Radio control pages 176-189



# Cat

## Chain parking barriers

**Innovative technology. Reliable performance.**

CAT is a unique, patented, high-technology product designed to blend harmoniously into a range of architectural environments, both historical and contemporary. Cat is an innovative idea to reserve a parking space or spaces, in any setting, whether residential, industrial or commercial.



**Perfect integration.** Thanks to its design, CAT is the ideal solution for historically sensitive locations and exclusive residential areas.



**An additional service as well.** The chain barrier is the ideal solution to limit access to parking areas in order to restrict their use by unauthorised personnel or outside of regular hours.



**Top level performance.** Made entirely of steel, it can withstand accidental impacts and its ground guides guarantee excellent protection to the lowered barrier chain.



for openings of up to 8 m and 16 m  
for openings of up to 26 ft and 52'5"



## Advantages of CAT

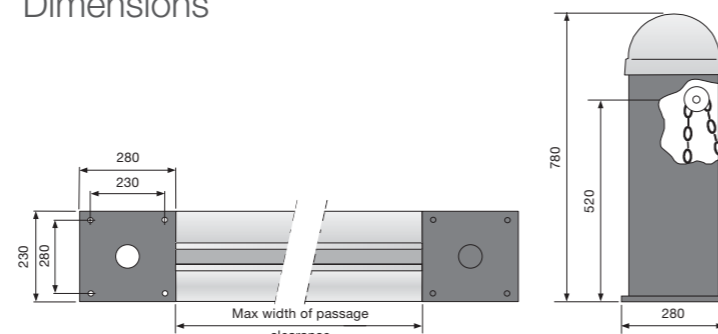
CAT is a unique operator and is available in both the 230V and 24V versions. The great installation flexibility allows for creating automatic chains up to a maximum of 16 metres long with only two bollards and a single chain. One bollard (with built-in control panel and motor) is joined by a chain to the other bollard (with the counterweight). The chain lowers automatically and disappears into the ground guide. CAT is easy to install, can be fitted anywhere and does not require any prior assembly.

### Limits to use

Model	CAT-X	CAT-X24
Type of chain	Max width of passage clearance (m / ft)	Max width of passage clearance (m / ft)
9 mm	8 / 26'	8 / 26'
5 mm	16 / 53'	16 / 53'

● 230V A.C. ● 24V D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	CAT-X	CAT-X24
Protection rating	IP54	IP54
Power supply (V) (50/60 Hz)	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	24 D.C.
Current draw (A)	2.7	20 Max
Power (W)	300	240
Manoeuvre time (s)	11	9 - 14
Duty cycle (%)	30	Intensive use
Traction force (Kg/lb)	50/110	50/110
Colour	CABINET Grey textured cod. 053 0837 - COVER RAL9006	
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F	

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. chain barrier

001CAT-X Bollard with built-in operator and control panel.

### 24V D.C. chain barrier

001CAT-X24 Bollard with built-in operator and control panel.

### Chain barrier bollard

001CAT-I Bollard with counterweights and chain hooking.

### Accessories

002LB38 Card for connecting 3x 12V-7Ah emergency batteries (for CAT-X24).

001CAT-5 9 mm chain for clearances up to 8 m.

001CAT-15 5 mm chain for clearances up to 16 m.

001CAR-2 Floor-level chain-protection guide. Length = 2 m.

001CAR-4 Underground chain-protection guide. Length = 2 m.

## 24V models

CAT is available with 24V D.C operators, which always yield maximum performance without compromising safety, thanks to its electronic obstacle detection and chain-speed movement adjustment features.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189





A world of [safe automation](#)

[www.cameuk.com](http://www.cameuk.com)



Parking systems  
and access control

## The models

The **Ps** is a complete system designed to manage car parking in small, medium and large commercial settings. The entrance and exit units, together with the cash pay station, are specifically engineered to manage access for both occasional and membership-status users. The system can be set-up to be used with tokens, cards, transponder key-fobs, and coins (in the case of occasional users).

Systems can be configured to have several entrances and exits as well, over a number of floor levels, up to a maximum of 10,000 parking spaces.

The **RBM21** is a SIMPLIFIED system for card-based access control for up to 500 users.

The **RBM84** is an EVOLVED access control system.

It works with many types of commands including radio transmitters. Through its dedicated software it can manage up to 5500 users of varying types including member-status users. It is suitable for use in multi-story car parks, company facilities, service centres and many other types of parking facilities. The table below lists the complete range of access control and automatic parking systems to help you quickly choose the right product for the job.

Use			INTENSIVE USE
Series	Model	Places car	
Ps	Barcode	10,000	YES
Ps	Token	10,000	YES
Ps	Easy	-	YES
Series	Model	Users	
Rbm84	RBM84	5500	YES
Rbm21	RBM21	500	YES

● 230V A.C.



**Note:** The PS parking system is under continual on-going improvement. Please contact us before quoting a CAME parking system to ensure you have the latest product information.



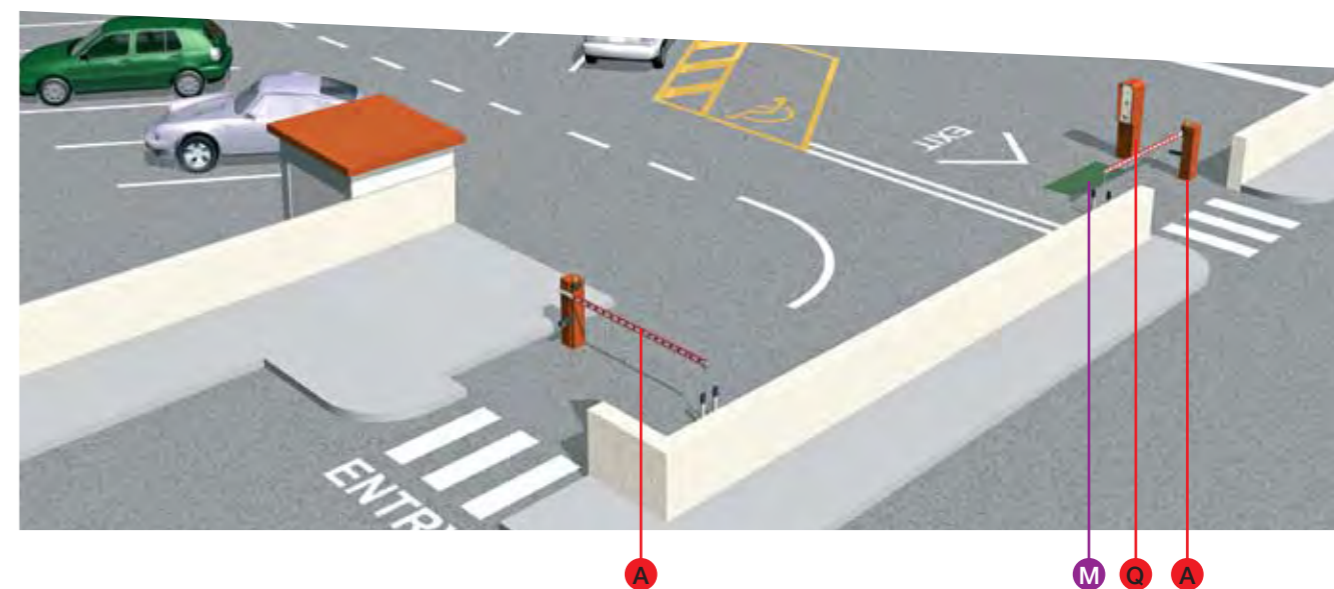
## SIMPLIFIED standard installation

TRAINED users and positioned on PUBLIC STREET

The example below is indicative of simplified car parking systems where users enter freely, park their vehicles and pay a fixed, standard rate, using coins, at the exit.

### Important

The equipment shown in the diagram is for information purposes only and the command accessories, such as photocells and induction loop sensors, must be evaluated according to the actual needs of the installation. Standard-issue safety equipment for barriers is shown in the section dedicated to traffic barriers in this catalogue.



### Standard Issue

- A** Parking barriers
- M** Magnetic induction loop sensor
- Q** Simplified cashier for toll - no change given

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>
● Flashing light 24V A.C. -D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32' 8" ft

\*n° = see documentation ● European standards ● US standards

### Automatic Gard barriers



The Gard series of automatic barriers naturally complement our automatic parking system. Available with 230V A.C. and 24V D.C. motors, they fit perfectly with the entrance and exit units and allow for quick passage selection.

### The new simplified parking system



The PSM5000 is the new, simplified, parking management system, where the parking rate is fixed and payable in coins. The unit comes with a coin reader and display, and can be integrated with a transponder card reader which could manage pre-paid subscription passes for the facility.

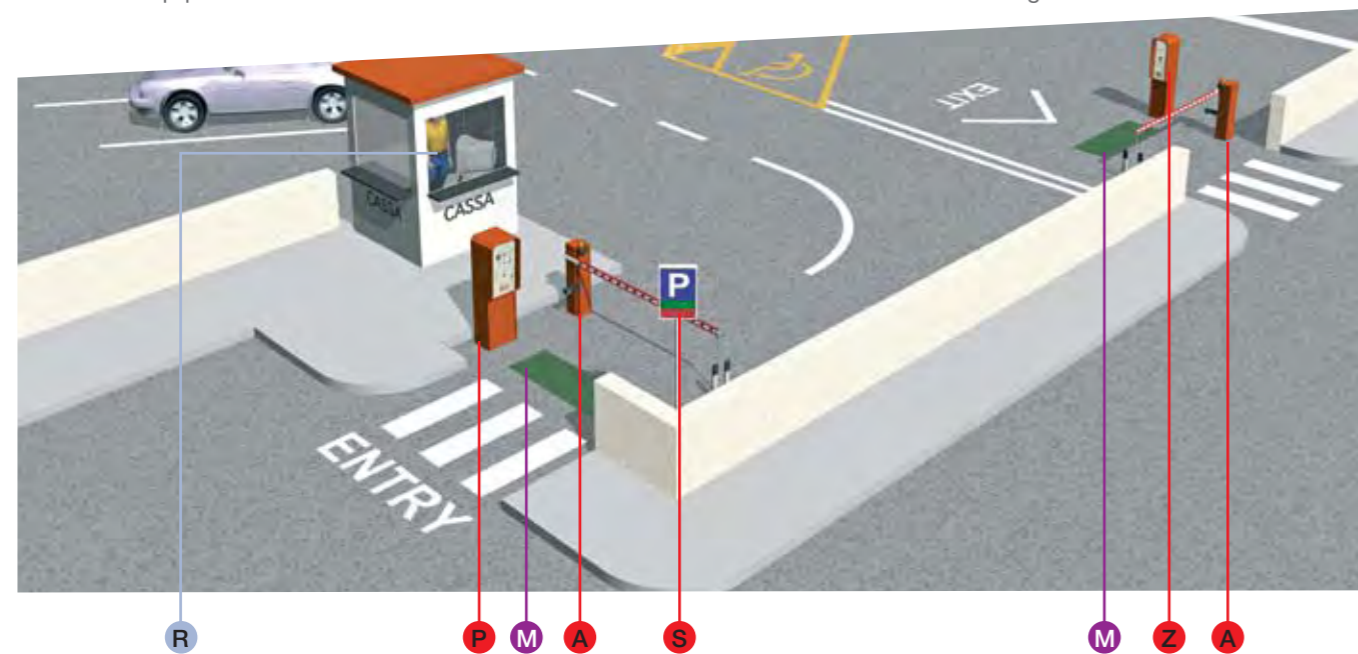
# Standard installation with MANUAL CASHIER

TRAINED users and positioned on PUBLIC STREET

The example shown is indicative of an attended parking system with manual toll management.

### Important

The equipment shown in the diagram is for information purposes only and the command accessories, such as photocells and induction loop sensors, must be evaluated according to the actual needs of the installation. Standard-issue safety equipment for barriers is shown in the section dedicated to traffic barriers in this catalogue.



### Standard Issue

- A** Parking barriers
- M** Magnetic induction loop sensor
- Z** Exit unit
- P** Entry unit
- R** Attended manual cashier
- S** Free / Full luminous sign

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32' 8" ft

\*n° = see documentation ● European standards ● US standards

### The auxiliary manual cashier



The PSC1 auxiliary manual cashier can be integrated into the Ps automatic parking system, to create a manned paystation, even without a direct PC connection.

### The FREE - FULL sign



When installed in conjunction with the parking system, a FREE-FULL sign can notify when parking spaces are available. This is especially useful in busy city-centre carparks, as it avoids unnecessarily blocking entrance lanes when full and encourages visitors when not.

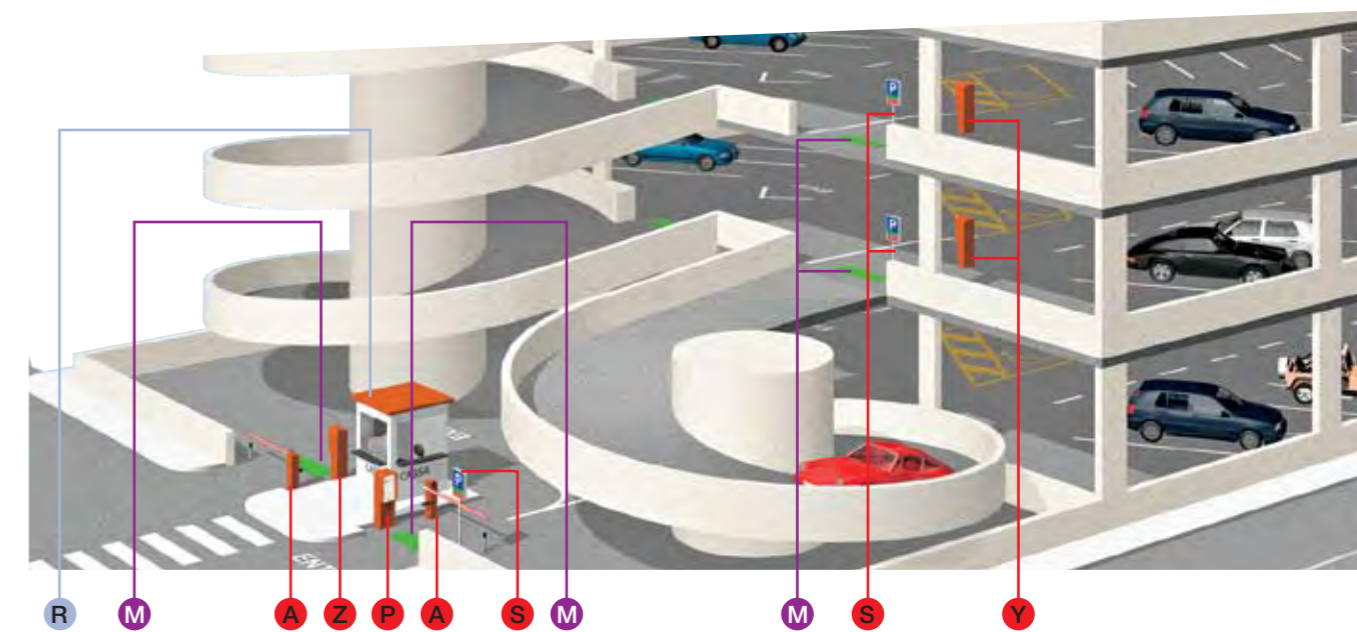
# Standard installation MULTI-FLOORS

TRAINED users and positioned on PUBLIC STREET

The example shown is indicative of a multi-level parking with automatic cashiers at any level and attended paystation at the exit.

### Important

The equipment shown in the diagram is for information purposes only and the command accessories, such as photocells and induction loop sensors, must be evaluated according to the actual needs of the installation. Standard-issue safety equipment for barriers is shown in the section dedicated to traffic barriers in this catalogue.



### Standard Issue

- A** Parking barriers
- M** Magnetic induction loop sensor
- Z** Exit unit
- P** Entry unit
- R** Attended manual cashier
- S** Free / Full luminous sign
- Y** Automatic pay-stations

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32' 8"	32' 8" - 65' 6"	65' 6" - 98' 4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>	4Gx1.5mm <sup>2</sup>
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>	2Gx2.5mm <sup>2</sup>
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● TX Photocell	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32' 8" ft

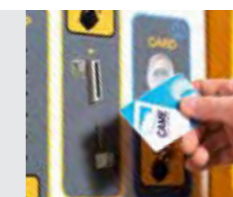
\*n° = see documentation ● European standards ● US standards

### The new touch screen cashier



PSC6001 and PSC7001 automatic paystations gives customers the option to pay by coins and notes. Thanks to the coded ticket, the PSC7001 can also manage subscribers that use cards or transponder key fobs.

### Parking subscriptions



The TST01 and TST04 cards are specifically designed to automatically manage car parking. Together with the PCT transponder keyfobs, they assist when managing clients with subscriber membership status.



# Ps Barcode

## Parking systems

The barcode ticket reader solution for all types of parking, even on multiple levels. Ps is a complete system for managing pay-to-park systems for both occasional and subscribed users. The built-in software allows the system to be personalised for the requirements of the car park manager. It is the most effective solution for parking control in hospitals, shopping centres, airports etc.



**BARCODE tickets.** Tickets are printed out on thermal fanfold paper. The paper roll is an ISO standard size, for easier and cheaper renewal of consumables.



**Integrated graphical display on entrance and exit units.** Provides real-time visual feedback on residual credit and the status of the user's subscription.



**Subscribers or residents.** Built-in transponder technology makes life easier for residents or members with personalised subscriptions. They simply swipe their card past the sensor and the barrier opens.



### new PSC7001 with touch screen

The PSC7001 is the latest automatic stations designed to be integrated into CAME's Ps range of parking systems. The user-friendly touch screen interface is entirely customisable to meet the needs of the application context.

up to 10,000 users



## Advantages of Ps Barcode

The CAME barcode ticket car park management system is the efficient solution to optimise parking efficiency and profits, while simultaneously providing the manager with unparalleled levels of data and ensuring better service, safety and a positive experience for the customer. Each component part has been designed to meet the needs of modern parking areas, while still maintaining maximum integrative modularity with other CAME products, according to a precise policy that frees the system of any limits in terms of further development. The front panel of the entry and exit units can be customised with extra buttons, payment devices and the option to add a 'help' intercom.

### Cables

Max connecting distance	(m)	(ft)
PC - PC50	1.5	4'9"
PC - RBMP1	1,000 Max	3,281 Max
RBMP1 - PSC3000	1,000 Max	3,281 Max
RBMP1 - PSE3000	1,000 Max	3,281 Max
RBMP1 - PSU3000	1,000 Max	3,281 Max
RBMP1 - PSC7001	1,000 Max	3,281 Max

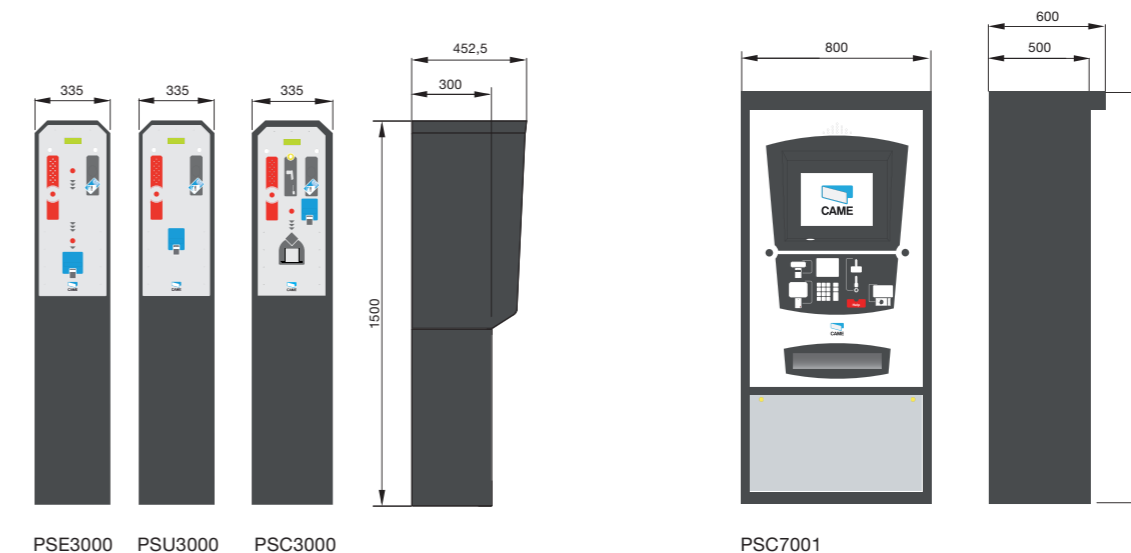
Connecting cables	Type
PC - PC50	Standard issue
PC50 - PSD1	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>
PSD1 - RBMP1	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>
RBMP1 - PSC3000	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>
RBMP1 - PSE3000	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>
RBMP1 - PSU3000	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>
RBMP1 - PSC7001	Shielded Twisted Pair (UTP CAT5 AWG24) min 2x05 mm <sup>2</sup>

**Note:** The PS parking system is under continual on-going improvement. Please contact us before quoting a CAME parking system to ensure you have the latest product information.

## Technical features

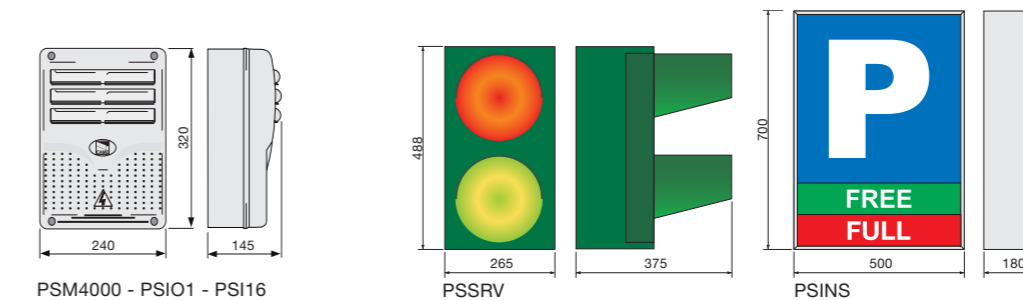
Type	Protection	Model	Dimensions (B x H x P) mm	Power supply (V)	Material / Colour
PSC3000	IP40	Automatic cashier	335 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / cod 053 0837
PSE3000	IP44	Entrance unit	445 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / cod 053 0837
PSU3000	IP44	Exit unit	295 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / cod 053 0837
PSM3000	-	Attended cashier station control unit	-	230 A.C. 50/60 Hz	-
PSC7001	IP40	Attended cashier station control unit	800 x 1755 x 600	230 A.C. 50/60 Hz	Steel / cod 053 0837
PC50	20	PC interface	320 x 240 x 145	-	ABS
PSI16	-	Auxiliary cashiers control	320 x 240 x 145	-	ABS
PSIO1	-	Auxiliary devices control	320 x 240 x 145	-	ABS
PSC3	-	Auxiliary cashier station	320 x 240 x 145	-	ABS
PSD1	-	Display	145 x 185 x 40	-	ABS
RBMP1	-	Control panel	320 x 240 x 145	-	ABS
PSSRV	IP44	Red/green traffic light	-	-	ABS / Polymethacrylate
PSINS	IP44	Free / Full sign	445 x 1500 x 452.5	-	ABS / Polymethacrylate
TST01 - TST04	-	Transponder cards	IS07810-7813	-	-

## Dimensions



PSE3000 PSU3000 PSC3000

PSC7001



PSM4000 - PSIO1 - PSI16

PSSRV

PSINS

Dimensions in millimetres (25.4 mm = 1 in)



## The complete range

### 230V A.C. automatic parking system

001PSE3000 Galvanised and painted steel car park **entry** station. Complete with transponder sensor, barcode ticket dispenser and digital display for showing remaining subscription credit.



001PSU3000 Galvanised and painted steel car park **exit** station. Complete with transponder sensor, barcode ticket reader and digital display for showing remaining subscription credit.



001PSC3000 Galvanised and painted steel **automatic paystation** complete with transponder sensor, barcode ticket reader/dispenser, digital display and coin payment system (No change is given directly, but it prints a receipt).



001PSC7001 **Automatic paystation**, with galvanised and painted cabinet, panel in AISI 304 inox steel with satin finish. Complete with computer hardware and coin / banknote reader with change dispenser. It also prints and reads barcoded tickets.



001PSM3000 Cashier system for human carpark attendant. Comes complete with control station, management software, display and interface to connect to PC50.



002PSIO1 Control unit for auxiliary devices such as PSSRV traffic lights, PSINS luminous signs, magnetic sensors and safety sensors (Max 8 outputs).

001PSI16 Interface to connect up to 16 PSC3 units.

001PSC3 Auxiliary manual cashier with barcode ticket reader. If combined with a PSI16 enables implementation of a payment station without a direct connection to a PC.



## The complete range

### Signalling accessories

001PSINS Two-sided FULL-FREE luminous sign.

001PSSRV Red-green traffic light (ø 200 mm).

### Accessories

009SMA One-channel magnetic loop-detector sensor.

009SMA2 2 channel magnetic loop-detector sensor.

### Easier exit for subscribed users



For car park managers who want to offer a subscription service to their customers, the PSC7001 offer several payment options. Parking can be managed on a hourly, daily or weekly basis. Users can pay by inserting their top-up card into the slot, or by waving their key-ring transponder in front of the sensor (see above). The subscription can be renewed manually by the system administrator, automatically, or by a 'pay-as-you-go' top up scheme. The customisable touch screen user interface guides customers through every step of the process.

## The standard installation

CAME offers a complete solution for small, medium or large scale single and multi-storey car parking operations. PS parking systems are modular, versatile and customisable to meet the requirements of the situation. The most efficient system for management of personal subscription customers and occasional visitors alike, it is possible to connect up to 16 entry stations, 16 exit stations and 16 automatic paystations (8 x PSC3000 and 8 x PSC7001) to a centralised intelligent management system. Due to its modular nature, the system can be expanded and adapted should the need arise.

### PSE3000 entry stations

Driver must press the button and take a ticket, or swipe their membership card/keyfob for the barrier to open.

### PSU3000 exit stations

Accepts and verifies payment of barcode tickets or membership card/keyfob holders, before allowing the customer to leave.

### PSC3000 - PSC7001 automatic paystations

Accepts payment via coins or banknotes. The PSC7001 model can also accept credit card payments.

### PSC3 portable paystation

With hand-held barcode reader to allow the parking attendant to manually scan tickets, without the need to be connected to a PC.



**new**

### Automatic paystation with touch-screen interface

The PCS7001 is the latest automatic paystation designed to be integrated into the CAME Ps range of parking systems. Made of sturdy steel plating, it takes coins, banknote and credit card payments. It is engineered to work with keyfobs and transponder cards, allowing subscribers to recharge their own account directly.

#### The functions:

- Coin and banknote readers are both programmable for local currency.
- Barcode tickets are fed into the reader and verified.
- User friendly touch screen interface gives continual feedback and guidance throughout.
- Real-time SMS text status updates for the system administrator are available.
- Can be fitted with an additional 'HELP' push button, with a direct intercom connection to the car park attendant's office.
- Users can recharge their subscription 'top-up' cards and keyfobs using the automatic paystation. They can simply wave the proximity card or keyfob in front of the transponder sensor, and then increase the balance on their account using one of the available payment options.
- Language selection menu.
- The system administrator can sell or use valuable advertising space on the monitor screen.

### The Software

Simple and user-friendly, the PSS4000 software is designed for the complete management of the parking system. The database can manage access for up to 2500 subscription-based customers and 7500 occasional visitors.



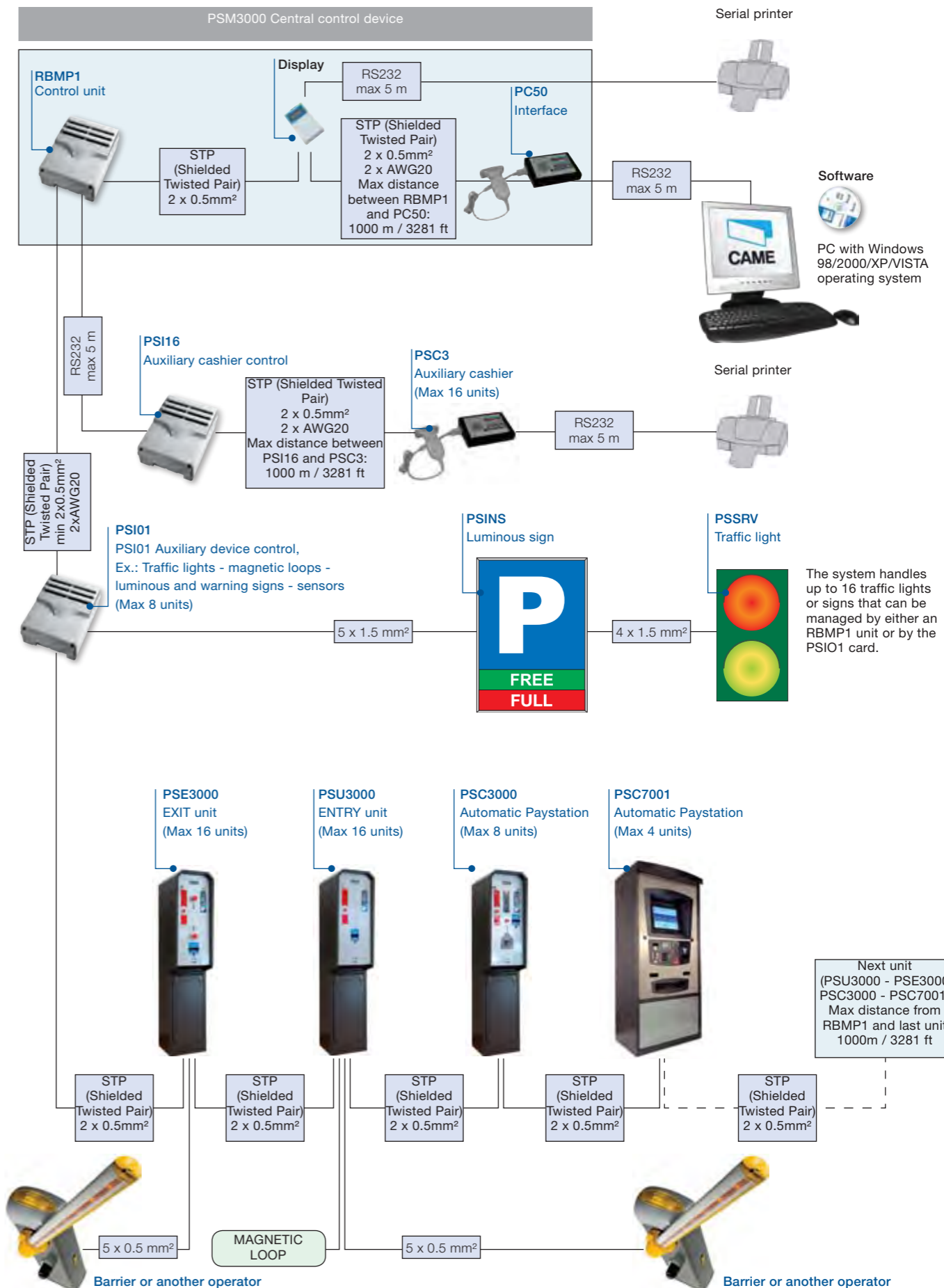
### PSC3 auxiliary manual cashier

The PSC3 manual cashier station enables payments to be managed even when remotely located, without the assistance of a PC. This can be extremely useful in installations such as supermarkets or hotels, where the parking service might be paid at the cash register when shopping, or the parking charge might be waived at reception when checking out. It is also a very useful tool for the multi-storey car park attendant/manager. The top-level configuration can operate up to 16 portable paystations with a PSI16 interface.



**Note:** The PS parking system is under continual on-going improvement. Please contact us before quoting a CAME parking system to ensure you have the latest product information.

## Connection diagram





# Ps Token

up to 10,000 users

## Parking systems

The solution for all types of parking, even on multiple levels.

Ps is a complete system for managing pay-to-park systems both for occasional as well as subscribed users.

The system can be set up with one or more paystations on multiple levels, with outdoor signs displaying the number of available spaces.



The GET transponder token. tokens are the ideal solution for occasional visitors. Besides its exceptional sturdiness, the token is not susceptible to magnetic fields and sun rays, it is small and can be easily stored in a wallet.



CAME transponders. The TST01 - TST04 cards and the PCT key fob are specifically designed to manage parking areas where clients have weekly, monthly or other passes.



Dedicated software. The PSS4000 software can manage a parking system and controls 2,500 subscribed users and 7,500 occasional visitors.



### new PSC6001 with touch screen

The PSC6001 is the latest automatic stations designed to be integrated into CAME's Ps systems. Made of sturdy steel plating, it is engineered to work with tokens, keyfobs and transponder cards. It accepts coin, banknote and prepaid options.

## Advantages of Ps Token

The CAME token-reading car park management system is the efficient solution to optimise parking efficiency and profits, while simultaneously providing the manager with unparalleled levels of data and ensuring better service, safety and a positive experience for the customer.

Each component part has been designed to meet the needs of modern parking areas, while still maintaining maximum integrative modularity with other CAME products, according to a precise policy that frees the system of any limits in terms of further development. The front panel of the entry and exit units can be customised with extra buttons, payment devices and the option to add a 'help' intercom.

## Cables

Max connecting distance	(m)	(ft)
PC - PC30	1.5	4'9"
PC - RBMP1	1,000 Max	3,281 Max
RBMP1 - PSC4000	1,000 Max	3,281 Max
RBMP1 - PSE4000	1,000 Max	3,281 Max
RBMP1 - PSU4000	1,000 Max	3,281 Max
RBMP1 - PSC6001	1,000 Max	3,281 Max

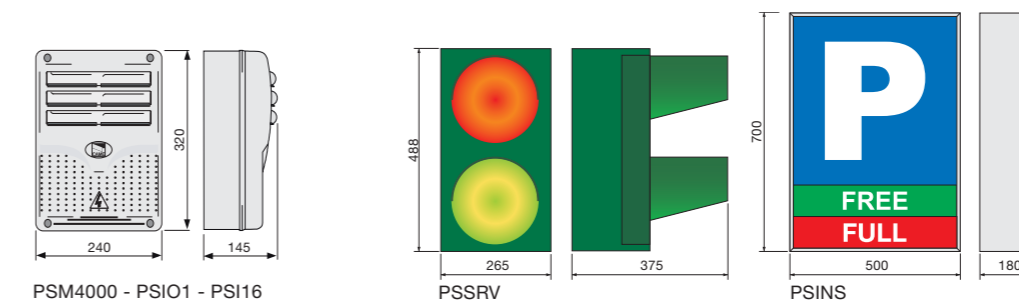
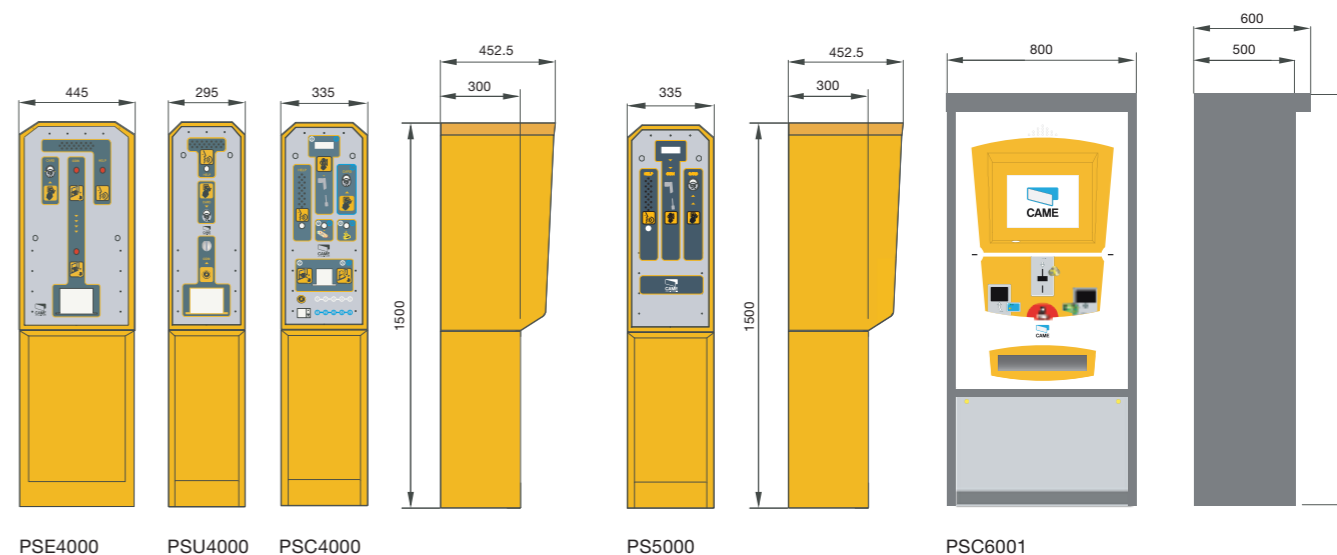
Connecting cables	Type	Type (only for USA)
PC - PC30	Standard issue	Standard issue
PC30 - PSD1	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20
PSD1 - RBMP1	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20
RBMP1 - PSC4000	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20
RBMP1 - PSE4000	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20
RBMP1 - PSU4000	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20
RBMP1 - PSC6001	Shielded Twisted Pair min 2x05 mm <sup>2</sup>	Shielded Twisted Pair min 2xAWG20

**Note:** The PS parking system is under continual on-going improvement. Please contact us before quoting a CAME parking system to ensure you have the latest product information.

## Technical features

Type	Protection	Model	Dimensions (B x H x P) mm	Power supply (V)	Material / Colour
PSC4000	IP40	Automatic cashier	335 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / RAL1028
PSE4000	IP44	Entrance unit	445 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / RAL1028
PSU4000	IP44	Exit unit	295 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / RAL1028
PSM4000	-	Attended cashier station control unit	-	230 A.C. 50/60 Hz	-
PSC6001	IP40	Attended cashier station control unit	800 x 1755 x 600	230 A.C. 50/60 Hz	Steel / cod 053 0837
PC30	IP20	PC interface	320 x 240 x 145	-	ABS
PSI16	-	Auxiliary cashiers control	320 x 240 x 145	-	ABS
PSIO1	-	Auxiliary devices control	320 x 240 x 145	-	ABS
PSC1	-	Auxiliary cashier station	320 x 240 x 145	-	ABS
PSD1	-	Display	145 x 185 x 40	-	ABS
RBMP1	-	Control panel	320 x 240 x 145	-	ABS
PSSRV	IP44	Red/green traffic light	-	-	ABS / Polymethacrylate
PSINS	IP44	Free/Full sign	445 x 1500 x 452.5	-	ABS / Polymethacrylate
TST01 - TST04	-	Transponder cards	ISO7810-7813	-	-
GET	-	Transponder token	ø 30	-	ABS
PS5000	IP44	SIMPLIFIED automatic paystation	335 x 1500 x 452.5	230 A.C. 50/60 Hz	Steel / RAL1028

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)



## The complete range

### 230V A.C. automatic parking system



**001PSE4000** Galvanized and RAL 1028 painted steel **entry** station complete with proximity card and transponder keyfob reader and GET token dispenser.



**001PSU4000** Galvanized and RAL 1028 painted steel **exit** station complete with proximity card and transponder keyfob reader and GET token collector.



**001PSC4000** Galvanized and RAL 1028 painted steel automatic cashier complete with proximity card and transponder keyfob reader, coin payment system, GET token reader and display (No change is given directly, but it prints a receipt).



**001PSC6001** Automatic paystation, with galvanised and painted cabinet and stainless steel panel with satin finish. Complete with computer hardware and coin / banknote reader with change dispenser. (There is no credit card reader in this model.)



**001PSM4000** Attended car park cashier system. Comes complete with control station, management software, display and interface to connect to PC30.



**002PSIO1** Control unit for auxiliary devices such as PSSRV traffic lights, PSINS luminous signs, magnetic sensors and safety sensors (Max 8 outputs).



**001PSI16** Interface to connect up to 16 PSC1 units.



**001PSC1** Auxiliary manual cashier. If combined with a PSI16 enables implementation of a payment station without a direct connection to a PC.

**Note:** The PS parking system is under continual on-going improvement. Please contact us before quoting a CAME parking system to ensure you have the latest product information.

## The complete range

### Control accessories



**009GET** Transponder token.

### Signalling accessories



**001PSINS** Two-sided FULL-FREE luminous sign.



**001PSSRV** Red-green traffic light (ø 200 mm).

### 230V A.C. simplified system for automatic parkings



**001PS5000** Galvanized and RAL 1028 painted steel automatic cashier complete with coin payment system (Fixed toll - doesn't give change).

### Accessories



**009SMA** One-channel magnetic loop-detector sensor.

**009SMA2** 2 channel magnetic loop-detector sensor.

## The standard installation

Small parking facilities can operate with a minimal equipment setup; a PSE4000 entrance unit, a PSU4000 exit unit and a PSM4000 manual cashier system.

Typical applications for this would be the car park of a leisure attraction, a small town centre supermarket, or a hotel car park, where customers might pay for parking at the checkout, or claim back the parking fee at reception, or alternatively they might pay cash directly at a manned parking attendant's booth. This application ensures simple, efficient use while being perfectly expandable if the traffic volume needs were to increase or an automated solution was sought in future.

Alternatively, the PS5000 unit is the ideal solution when pay-to-park facilities require a fixed rate parking fee which can be paid with coins of different denominations. (Note: the PS5000 does not give back change.)



### Automatic station for pay-to-park facilities

The PCS6000 (PSC6001) is the latest automatic paystation designed to be integrated into the CAME Ps range of parking systems. Made of sturdy steel plating, it is engineered to work with tokens, keyfobs and transponder cards. It takes coins, banknote and credit card payments.

#### The functions:

- Coin and banknote readers are both programmable for local currency.
- Secure credit card payment is VisaPED certified.
- Supports customised time-based pricing structure.
- Continual on-screen notification of amount owed and change given.
- GSM Diagnostics with real time system status checking mode.
- Intercom connection to attendant's office with 'HELP' button is available on request.
- Subscriber management through cards, TAGs or transponder keyfobs, which can all be recharged directly at the paystation.
- Language selection menu.
- The system administrator can sell or use valuable advertising space on the monitor screen.



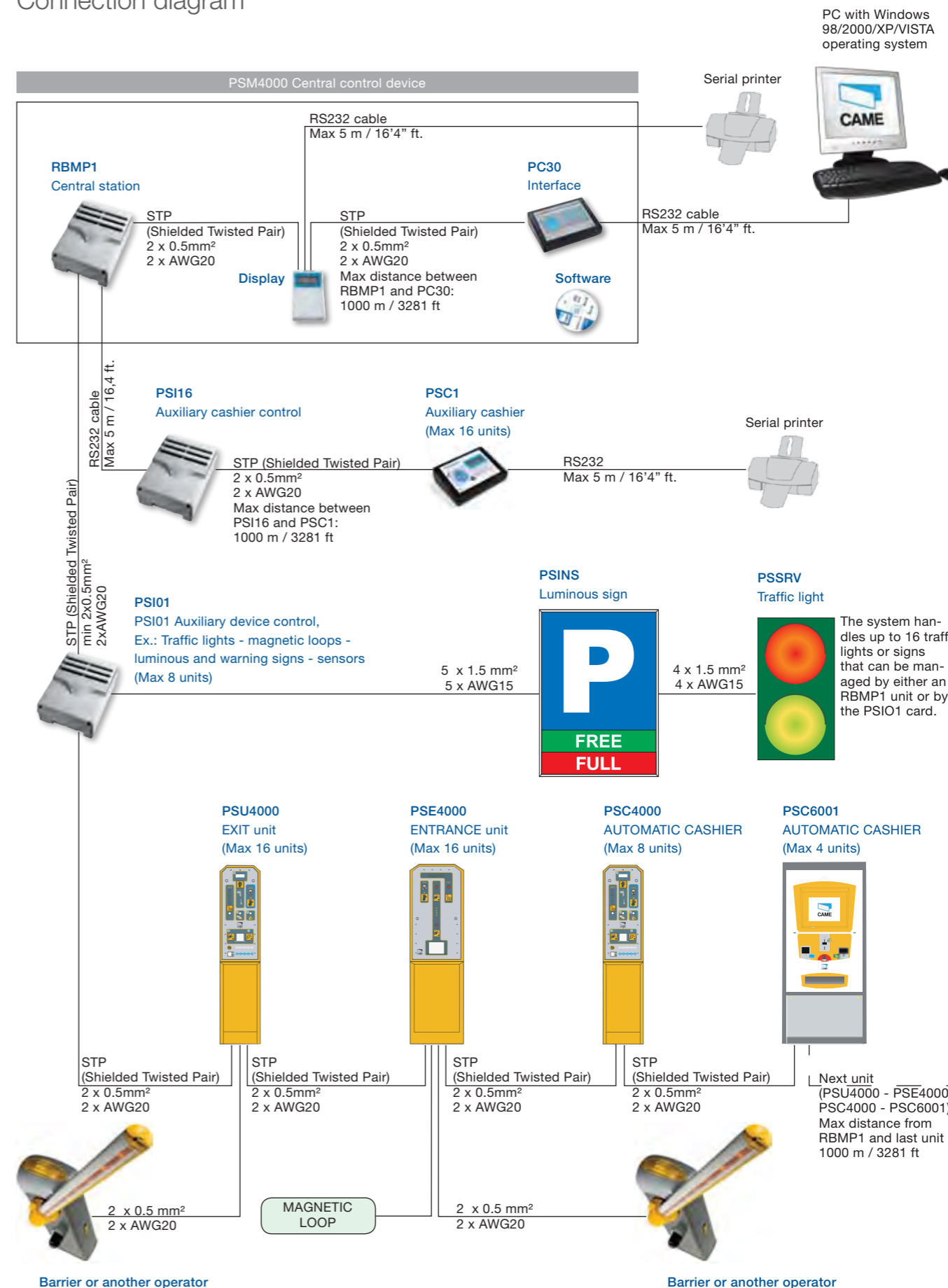
### PSC1 portable paystation

The PSC1 manual cashier station enables payments to be managed even when remotely located, without the assistance of a PC. This can be extremely useful in installations such as supermarkets or hotels, where the parking service might be paid at the cash register when shopping, or the parking charge might be waived at reception when checking out. It is also a very useful tool for the multi-storey car park attendant/manager. The top-level configuration can operate up to 16 portable paystations with a PSI16 interface.

### Parking subscriptions

For customers who choose to subscribe there are several configurable management options, with scalable pricing broken down into time or calendar terms. Access control monitored through transponder cards and key fobs, which are coded and inputted into the system. For systems equipped with automatic cashier paystations, subscriptions can be recharged by the user even when the attendant's office is unattended. Subscriptions may also be directly managed through the software when certain functions need to be activated or deleted from cards already in the system.

## Connection diagram



# Rbm21

up to 500 users

## Access control

**SIMPLIFIED** access control system for up to 500 users.

RBM21 is designed for subscriber parking and is particularly suitable for sporting venues, leisure facilities and small private car parks as well as many other applications. The RBM21 is the ideal solution for managing situations where parking passes are issued allowing access to car parking facilities.



**TSP00 transponder card sensor.**  
The ideal tool for access control. The card is practical and sturdy. It is impervious to sun rays and magnetic fields.



**The LT001 magnetic card sensor.**  
A valid alternative; practical and functional, magnetic card reading is more cost effective when high numbers of subscribers are registered.



**The PSSRV-PSINS traffic light and luminous sign.**  
The natural complement for managing private parking, a FREE / FULL sign provides feedback to drivers on space availability.



## Advantages of Rbm21

The system is suitable for managing up to a maximum of 500 users. It is designed to be used with proximity or magnetic card sensors. It is supplied with dedicated management software, but also works when not permanently connected to a PC.

### Limits to use

Features	RBM21
Max number of users	500
Dedicated software	YES
Use without PC	YES (partial)
Type of PC connection	RS232 - RS485
Max distance between Rbm21 and PC	5 metres without PC40 (RS232) - 1,000 metres with PC40 (RS485)
Max number of connectable sensors	2 inputs + 2 outputs (or 2 inputs/outputs)
Relay outputs for automation control	2 (n.o. - n.c.)
Connection for traffic light or sign	1 (n.o. - n.c.)
Auxiliary Memory card	YES
On board warning display	YES
Magnetic loop connections	2
On-board sensor	YES (only for transponder cards)

● 230V A.C.

## Stand alone

RBM21 can work without a PC. Thanks to its sensor for inserting transponder cards on the control panel, new user cards can be configured into the system, even without a connection to a computer.

## Technical features

Type	RBM21	PC40	TSP00	LT001
Protection rating	IP54	-	IP54	-
Power supply (V)	230 A.C. 50/60 Hz	24 D.C. from RBM21	from RBM21	from RBM21
Dimensions (mm)	320 x 240 x 145	117 x 75 x 26	70 x 70 x 70	90 x 28 x 27
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	

● 230V A.C.



## The complete range

### 230V A.C. control and management units



**001RBM21** Control unit for transponder sensors, magnetic loops and card readers, complete with software.



**001PC40** Interface to remotely connect to the PC (up to 1000 m / 3281 ft).

### Control accessories for proximity cards



**001TSP00** Transponder reader.



**001TST01** Proximity card - ISO7810 - 7813 format.



**001TST04** Re-writable proximity card - ISO7810 - 7813 format.



**009PCT** Proximity key fob.



**009TAG** Glass transponder bulb for TSP01 (It can be housed on TOP-432NA - TOP-434NA - TOP-862NA TOP-864NA - Atomo - Twin - Touch).

### Control accessories and magnetic cards



**001LT001** Magnetic card reader.



**001TST02** ISO 7810 - 7813 format magnetic card.



**001LTT** Reader support.

### Signalling Accessories



**001PSINS** Two-sided FULL-FREE luminous sign.

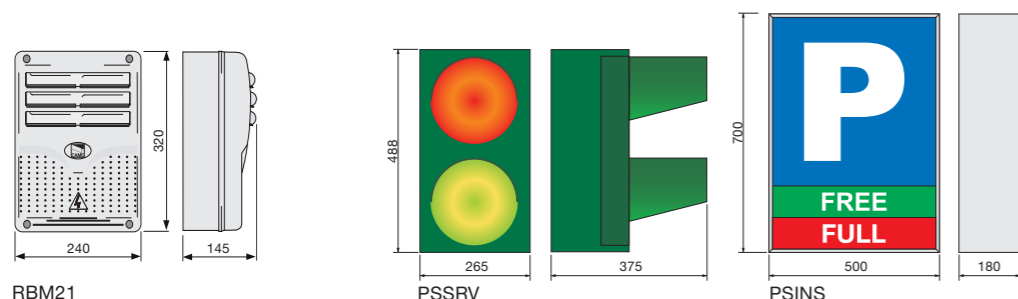


**001PSSRV** Red-green traffic light (ø 200 mm).

## The standard installation

An increasingly commonplace application for the Rbm21 is to manage gyms or leisure facilities, where users access private parking facilities using a single, customised card that also works for additional access within the building. (turnstiles, automatic doors etc.) A simple yet highly capable system is achieved, seamlessly managing users and staff as well as entrances and services. RBM21 lets you manage subscribed membership status clients in a simple, quick way, using the dedicated software and with different membership modes that can be customised onto a single card.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)



## The software

The dedicated software features a simple, user-friendly graphical interface. It runs on all versions of Windows and does not require any special hardware. The system can be easily configured according to system requirements, and enables individual cards to store the parameters of individual users. It also features a "deductible credit" access mode, where values may be adjusted for each single sensor. The opening command for the access control devices may also be given directly from PC if required.

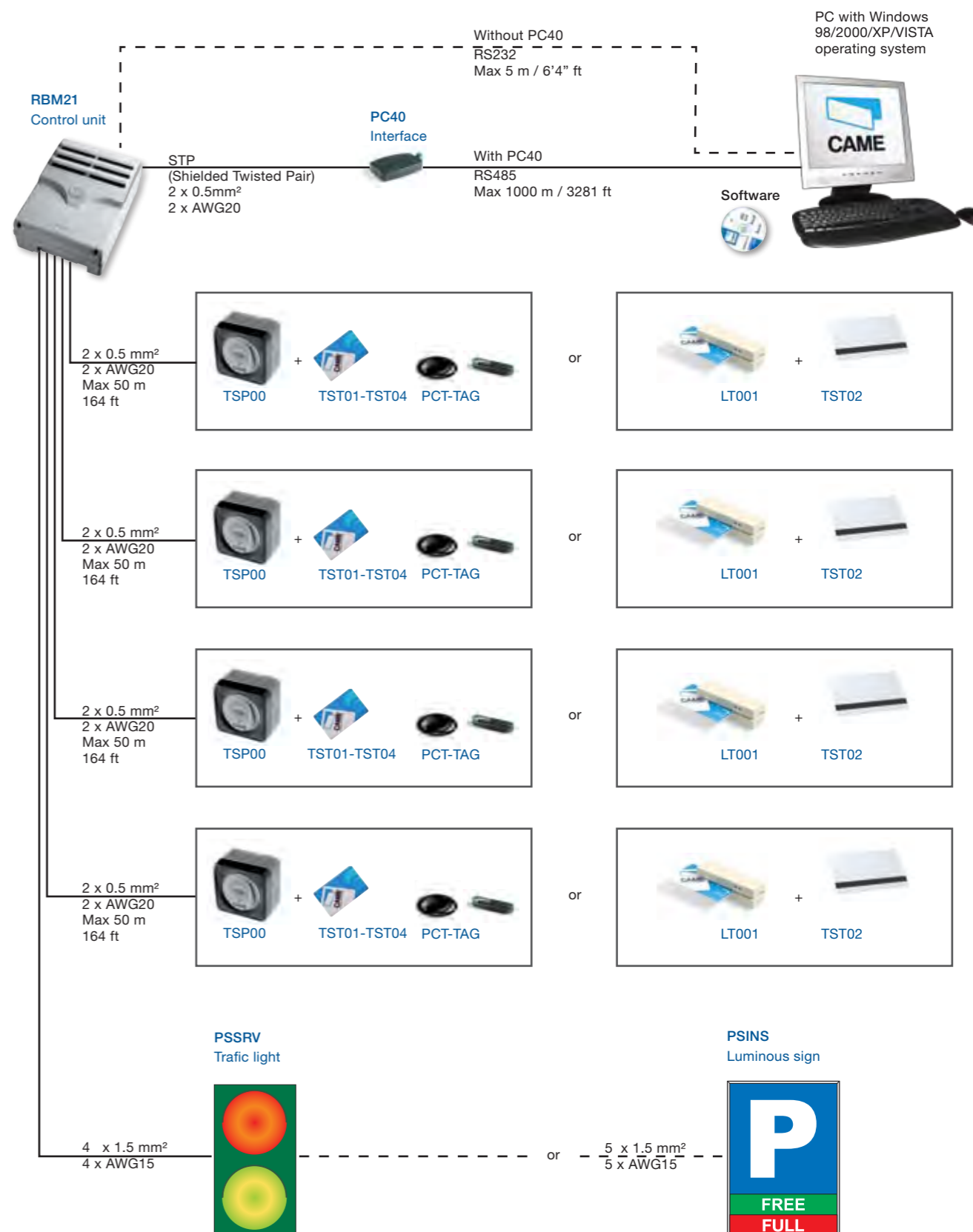
### The functions:

- **Prepaid access**  
Credit is deducted from the user's card at every use. Credits must be assigned at the time the card is added to the system and each sensor may be associated with a different credit value.
- **Prepaid time**  
Credits are deducted from the user's card based on the amount of time spent within the facility.
- **Card blocker**  
At any time the card's operation may be blocked within the system.
- **New User**  
At any time a new user may be added to the system's membership population.
- **Antipassback**  
This prevents more than one user from using the same card at the same time.
- **Antipassback timer**  
This function blocks the use of the card for an adjustable time-period after entry. With this function the card is normally cleared again on exit.

## Parking Control

RBM21 can be used to control access to private, apartment block or company car parks, which are expressly reserved for members, residents or staff members only. This application also includes the possibility of using external signage to inform users about available parking spaces. The system can be coupled with any of CAME's automated operators, including swing and sliding gate motors, Gard traffic barriers, Urbaco retractable bollards and Cat series chain barriers.

## Connection diagram



# Rbm84

## Access control

### Evolved traffic management.

Rbm84 offers dedicated access control solutions to the area where it is applied.

It adapts perfectly to passage selection needs as it wirelessly integrates with numerous access control systems using radio frequency communication. Additional functionality can be implemented with an easy and intuitive software package for customisable management of devices and users.



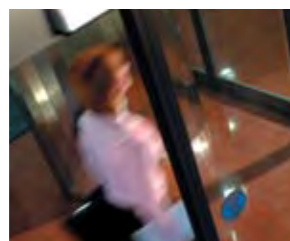
**A powerful microprocessor.**  
The RBM84 is managed by a dedicated microprocessor. Data for each user is stored in the database, and through real-time software, processes the assigned permissions, for access to the controlled area.



**Dedicated software.**  
It can control up to 60 REM units (see opposite), 128 automated operations, 124 command devices, 128 digital inputs and no less than 5,500 users.



**The highest possible level of integration.**  
128 digital inputs (via REM decoder units) allow for a high number of auxiliary sensors to be connected, for completely safe and secure access control.



up to 5,500 users



## Advantages of Rbm84

The system features evolved management control for up to 5500 users by means of transponder cards, proximity cards, keypads and transmitters. The dedicated software registers user traffic throughout the premises and manages any customised clearance levels depending on how each individual user has been programmed into the system.

### Limits to use

Features	RBM84
Max number of users	5,500
Dedicated software	YES
Use without PC	YES
Programming without PC	NO
Type of PC connection	RS232
Max distance between RBM84 and PC	1000 m / 3281 ft with PC30 (RS485)
Max number of connectable sensors	124 (Max. configuration with 60 REM)
Relay outputs for automation control	128 (Max. configuration with 60 REM)
Digital inputs	128
Connection for traffic light or sign	YES
Magnetic loop connections	YES

● 230V A.C.

### Technical features




Type	RBM84	PC30	TSP00	LT001
Protection rating	IP54	-	IP54	-
Power supply (V)	230 A.C. 50/60 Hz	12 A.C. power supply unit	from R700	from R700
Dimensions (mm)	320 x 240 x 145	117 x 75 x 26	70 x 70 x 70	90 x 28 x 27
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	

● 230V A.C.





## The complete range





### 230V A.C. control and management units

- 
**001RBM84** Radio control unit for transponder sensor, magnetic loops and card readers, complete with software.
- 
**001PC30** Interface for Rbm84 control unit management via PC, complete with 12V - 800mA feeder and connection cable.
- 
**001REM** Unit with built-in radio decoder for Rbm84 expansion.

### Control accessories for proximity cards

- 
**001TSP00** Transponder sensor.
- 
**001WA01** Home automation transponder sensor with built-in 433,92 MHz "stand-alone" transmitter (Max 200 users).

### Control accessories and transponder cards




- 
**001TST01** Proximity card - ISO7810 - 7813 format.
- 
**001TST04** Re-writable proximity card - ISO7810 - 7813 format.
- 
**009PCT** Proximity key fob.
- 
**009TAG** Glass transponder bulb for TSP01 (It can be housed on TOP-432NA - TOP-434NA - TOP-862NA TOP-864NA - Atomo - Twin - Touch).

## Also by modem









Connection to the PC can be achieved up to a maximum of 1,000 metres away, or through a modem using GSM technology. The software therefore lets you operate access control throughout a whole premises from one centralised or remote location.

## The complete range



### Control accessories and magnetic cards

	001LT001	Magnetic card reader.
	001TST02	ISO 7810 - 7813 format magnetic card.
	001LTT	Reader support.





### Additional accessories

	001R800	Access control management and decoder card with S5000 - S6000 - S7000 digital selectors.
	001R700	Access control management and decoder card with TSP00 - LT001.
	001R501N	Radio module (to combine with AF43S).
	001S5000	Galvanized and painted steel surface-mounted keypad with illuminated front panel. 16,777,216 combinations.
	001S6000	Flush-mounted keypad. 1,679,616 combinations.
	001S7000	Surface-mounted keypad. 1,679,616 combinations.
	001S0001	One-channel card for S5000 - S6000 - S7000 (1 memorisable code).
	001S0002	2 channel card for S5000 - S6000 - S7000 (2 memorisable codes).

### Signalling Accessories


	001PSINS	Two-sided FULL-FREE luminous sign.
	001PSSRV	Red-green traffic light (ø 200 mm).

### Selectors




	009SMA	One-channel magnetic loop-detector sensor.
	009SMA2	2 channel magnetic loop-detector sensor.
	001CSS	Natural anodized aluminium post with tamper-proof support for S6000 - S9000. Height =1 m.
	001CSSN	Black anodized aluminium post with tamper-proof support for S6000 - S9000. Height =1 m.

## The complete range



### 433,92 MHz transmitters

	001TAM-432SA	2 channel multi-user transmitter. 16,777,216 combinations with self-learning.
	001T432	2 channel multi-user transmitter. 16,777,216 combinations.
	001T434	4 channel multi-user transmitter. 16,777,216 combinations.
	001T438	8 channel multi-user transmitter. 16,777,216 combinations.





### 433,92 MHz rolling code transmitters

	001AT01	One-channel rolling code transmitter. 4,294,967,896 combinations.
	001AT02	2 channel rolling code transmitter. 4,294,967,896 combinations.
	001AT04	4 channel rolling code transmitter. 4,294,967,896 combinations.



### 433,92 MHz transmitters with KEY CODE

	001TWIN2	2 channel multi-user transmitter 4,294,967,896 combinations with KEY CODE. (Twin transmitters can be used only with standard coding, compatible with the Tam series).
	001TWIN4	4 channel multi-user transmitter 4,294,967,896 combinations with KEY CODE. (Twin transmitters can be used only with standard coding, compatible with the Tam series).

### Accessories

	001TOP-A433N	Antenna.
	001TOP-RG58	Antenna cable.
	001P3V	Package of 2 x 3V D.C. CR2016 lithium batteries (for Atomo and Twin series).
	001P3VB	Package of 2 x 3V D.C. CR1620 lithium batteries (for TAM-432SA).

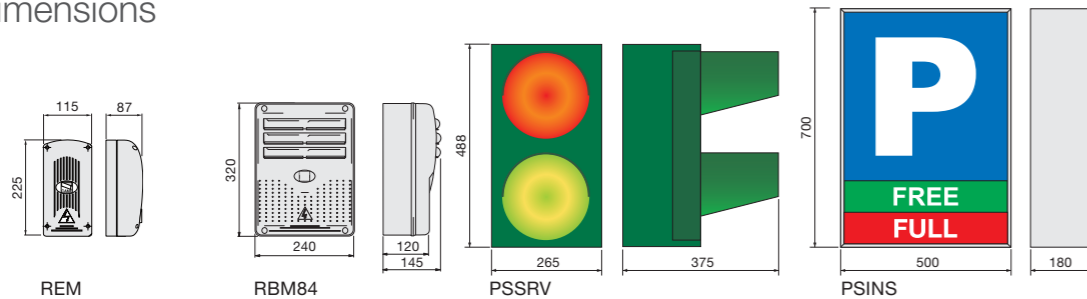
### 433,92 MHz receivers

	001AF43S	Plug-in radio frequency card.
	001AF43TW	Plug-in radio frequency card (for TWIN2 and TWIN4).

## The standard installation

Ideal for many types of applications and is specifically designed for facilities with large numbers of users requiring integration of several control devices (transmitters, coded keypads, cards, etc.) and where it is essential to have real-time data available for all the users in the controlled area. The RBM84 is a product that brings together high levels of practical flexibility and the latest manufacturing technologies available on the market today. The configuration modes and relative applications are varied and diversified depending on the specific operational needs.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### The software

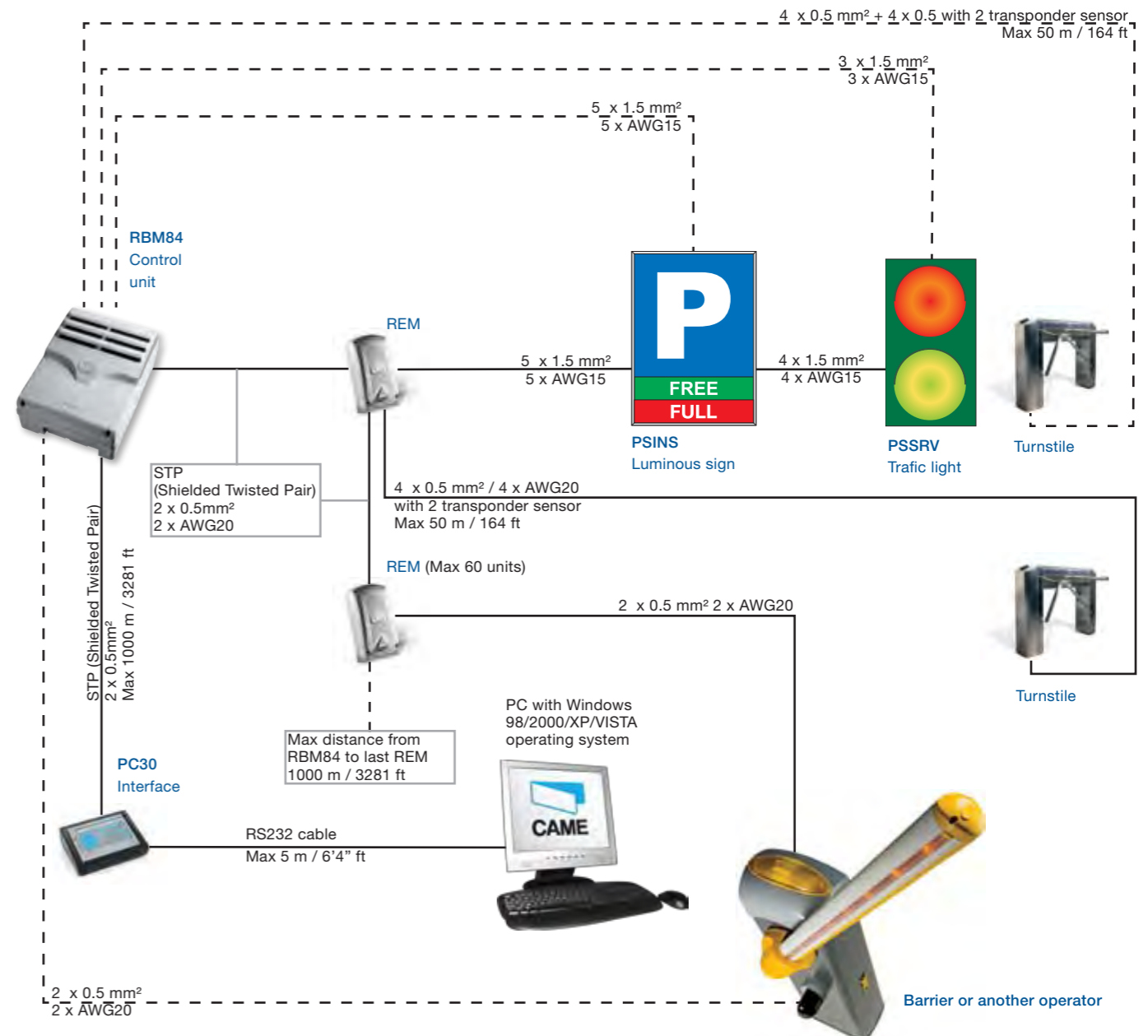
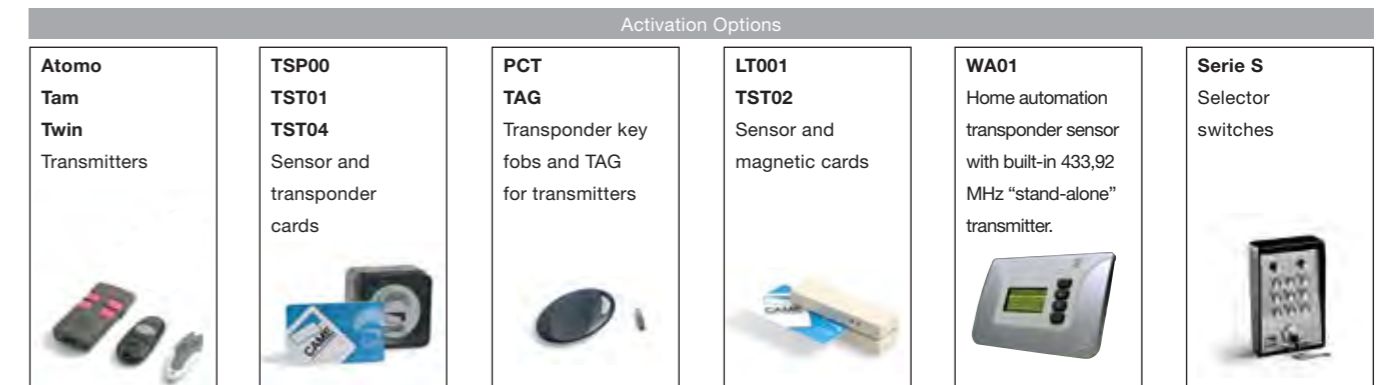
The dedicated software features a light, easy-to-use graphic interface. It runs on the Windows OS and does not require any special hardware.

#### Functions & Features:

- Prepaid access
- Prepaid time
- Selected times
- Card blocker from PC
- Card insertion from PC
- Parking function
- Event printing
- Anti-passback at entrance/exit
- Antipassback timer
- Flow history
- Instant event visualisation
- Direct automation system command
- Differentiated user control (through groups)
- Opening and/or closing of facilities on pre-set dates
- Automatic opening of facilities at pre-set times
- Total block of the system from PC
- Secure password protection
- Synchronization of the state of the facilities



## Connection diagram





The following section contains only a fraction of the Urbaco product range.

For more information please request a copy of the Urbaco General Catalogue.



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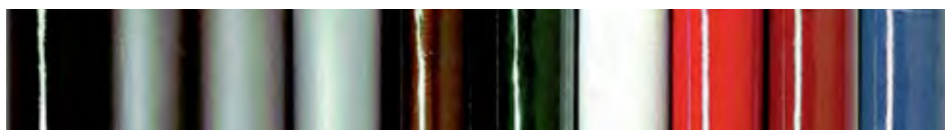


# Automatic Retractable Bollards

## The models

Acquired by CAME in 2004, Urbaco are manufacturers of Automatic Retractable Bollards, Removable Bollards, Fixed Bollards and Posts. Since inventing the 'retractable bollard' Urbaco has developed many models of bollards to meet the technical and aesthetic standards and security needs of its clients. The Generation 6 line of bollards can be fixed, removable or retractable to compliment the existing Tradition range. The Luxor range maintains the same proven high performance standards; providing a strong physical presence and visual deterrent in all situations, even for projects on a restricted budget. Urbaco bollards are completely compatible with CAME products and accessories.

## Colours



**NOTE: Bollards are supplied in RAL 3020 (Traffic Red) unless otherwise specified.**

Urbaco Colour Ref. #	RAL Ref. #	Colour
TPUNO	RAL 9017	Traffic Black
TPUGA	RAL 7016	Anthracite Grey
TPUGR	special	Steel Grey
TPUGM	special	Aluminium Grey
TPUVK	-	Bronze Khaki Green
TRRED	RAL 3020	Traffic Red
OPTIONAL	Other colours are available on request, including the full range of RAL glossy / thermosetting powder paints. Non-standard finishes may incur an additional cost. Please contact us to discuss your requirements.	

Luxor			Pneumatic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code
200	600	68 kg	BPLUXE60LC
200	800	76 kg	BPLUXE80LC
270	600	78 kg	BPLUXF60LC
270	800	89 kg	BPLUXF80LC
320	600	89 kg	BPLUXG60LC
320	800	101 kg	BPLUXG80LC

LUXOR



Cylinder			Pneumatic	Hydraulic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code	Product Code
120	500	54 kg	BPCLPD50LC	-
120	750	72 kg	BPCLPD75LC	-
200	500	87 kg	BPCLPE50LC	BHCLPE50
200	750	108 kg	BPCLPE75LC	BHCLPE75
250	500	113 kg	BPCLPF50LC	BHCLPF50
250	750	149 kg	BPCLPF75LC	BHCLPF75

Acropole			Pneumatic	Hydraulic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code	Product Code
120	500	54 kg	BPACED50LC	-
120	750	72 kg	BPACED75LC	-
200	500	87 kg	BPACEE50LC	BHACEE50
200	750	108 kg	BPACEE75LC	BHACEE75
250	500	113 kg	BPACEF50LC	BHACEF50
250	750	149 kg	BPACEF75LC	BHACEF75

Athéna			Pneumatic	Hydraulic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code	Product Code
120	500	54 kg	BPATND50LC	-
120	750	72 kg	BPATND75LC	-
200	500	87 kg	BPATNE50LC	BHATNE50
200	750	108 kg	BPATNE75LC	BHATNE75
250	500	113 kg	BPATNF50LC	BHATNF50
250	750	149 kg	BPATNF75LC	BHATNF75

Chateaufneuf			Pneumatic	Hydraulic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code	Product Code
120	500	54 kg	BPCHPD50LC	-
120	750	72 kg	BPCHPD75LC	-
200	500	87 kg	BPCHPE50LC	BHCHPE50
200	750	108 kg	BPCHPE75LC	BHCHPE75
250	500	113 kg	BPCHPF50LC	BHCHPF50
250	750	149 kg	BPCHPF75LC	BHCHPF75

Vendôme			Pneumatic	Hydraulic
Diameter (of bollard head)	Height (Above Ground)	Weight	Product Code	Product Code
120	500	54 kg	BPVMD50ILC	-
120	750	72 kg	BPVMD75ILC	-
200	500	87 kg	BPVME50ILC	BHVDME50I
200	750	108 kg	BPVME75ILC	BHVDME75I
250	500	113 kg	BPVDMF50ILC	BHVDMF50I
250	750	149 kg	BPVDMF75ILC	BHVDMF75I

CYLINDER



ACROPOLE



ATHENA



CHATEAUNEUF



VENDOME



# Luxor

## Automatic Retractable Bollards

Technologically advanced, affordable and secure. Luxor, the newest addition to the Urbaco family, is a retractable pneumatic bollard developed to meet any and all requirements. Luxor is the ideal answer to meet the demands of heavy duty private use and public applications: business centres, supermarket chains, pedestrianised town centres, car dealerships, and architecturally sensitive sites where aesthetics are as important as public safety.



**Visual and audible notification.** The illuminated ring is composed of 12 LED lights, designed to function even after impact, as they are protected within the centre of the bollard. An audible warning siren also helps to ensure pedestrian safety during operation.



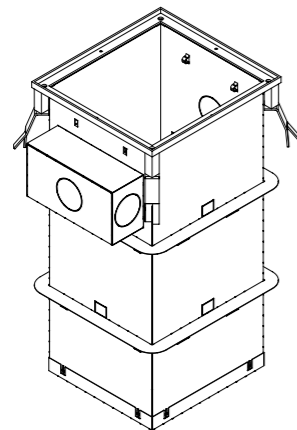
### Advantages of Luxor

Movement of the Luxor pneumatic bollard is signalled by light and sound. The illuminated ring improves the visibility of the bollard in all weather conditions, day or night. The acoustic signal helps ensure the safety of any pedestrians or cyclists in close proximity to the moving bollard.

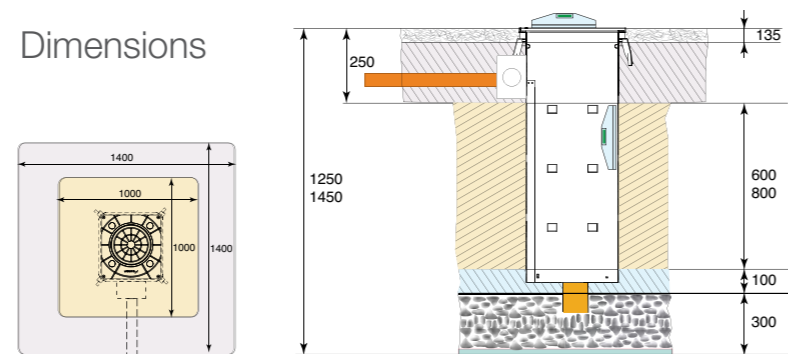
The cast iron design of the head is engineered to be aesthetically more pleasing to the eye when the bollard is retracted as it perfectly integrates with the pavement. The cast-iron cover can be fixed with tamper-proof screws that can only be removed using a special key. The specially-treated coating on the bollard's body may be ordered in any RAL colour and ensures exceptional resistance to corrosion even under the most extreme weather conditions. (comes in RAL 3020 traffic red as standard).

Innovations in design mean that Luxor is lighter, more affordable and easier to install than its predecessors, without compromising security.

**Lower shipping costs, easier storage and transportation.** Made from 1.5mm thick galvanised steel, the folding foundation casing (above, right) can be assembled on-site in just 10 minutes. It is practical to install thanks to its reduced weight, yet remains extremely durable.



### Dimensions



### Technical features

Luxor	
Type	Luxor
Material	Cast Steel
Time to descent	3 - 5 secs
Height above ground	600 mm or 800 mm
Working pressure	6/8 bar
Max opening force (Newtons)	from 1500 to 1918 (depending on height and diameter of bollard)
Operating temperature (°C/°F)	-20 °C to 70 °C    -4 °F to 158 °F    (Note: a heater is available if installing in exceptionally exposed areas)

### The complete range

#### Automatic retractable bollards (supplied with folding foundation casing)

**BPLUXE60LC** Luxor pneumatic bollard.  
**BPLUXE80LC** Comes with foundation casing to suit (see below), 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Fitted with fail OPEN security device as standard, which allows bollard to drop in the event of a power cut. Switching cable not included.  
**BPLUXF60LC**  
**BPLUXF80LC**  
**BPLUXG60LC**  
**BPLUXG80LC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

Folding foundation casings. The correct foundation case is supplied with the 'LC' codes above.

Made from 1.5mm thick galvanised steel, the new foundation cases are essential to guarantee a simple, successful installation. They are delivered 'flat packed', which makes them easier and more economical to transport, and they take just 10 minutes to assemble on site.

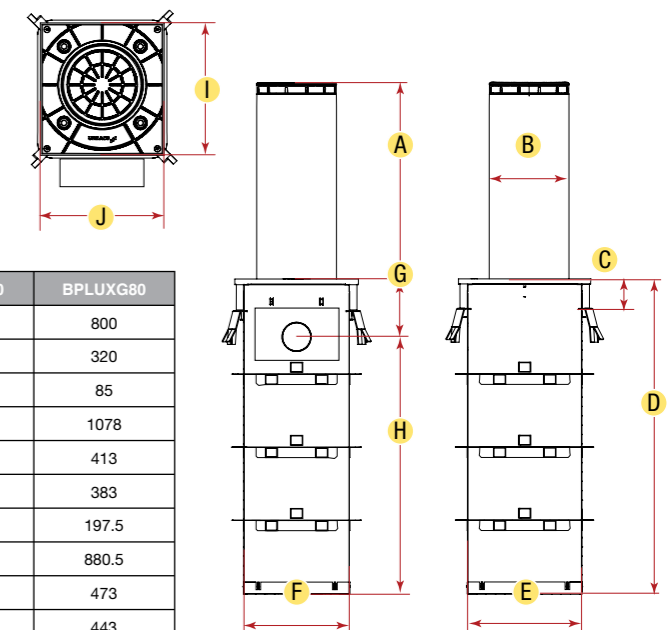
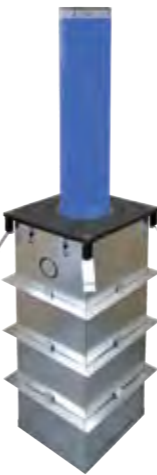
#### Accessories

**BOEVB-LUX** Fail SAFE security device. Bollards remain in the UP position in the event of a power failure.

**U100** Control panel for one access and one or two pneumatic retractable bollards.

**U200** Control panel for two accesses and up to eight bollards (dependant on size).

**CC6U200PRR** 230V A.C. technical control centre. Varnished steel protective cabinet (600 x 800 x 300mm) includes U200 control panel with built in radio receiver, and an intensive use air compressor with pressure gauge and safety valve.



Dimensions of the bollard (mm) - see diagram

	BPLUXE60	BPLUXF60	BPLUXG60	BPLUXE80	BPLUXF80	BPLUXG80
<b>A</b>	600	600	600	800	800	800
<b>B</b>	200	270	320	200	270	320
<b>C</b>	85	85	85	85	85	85
<b>D</b>	878	878	878	1078	1078	1078
<b>E</b>	393	393	413	393	393	413
<b>F</b>	363	363	383	363	363	383
<b>G</b>	197.5	197.5	197.5	197.5	197.5	197.5
<b>H</b>	680.5	680.5	680.5	880.5	880.5	880.5
<b>I</b>	452	452	473	452	452	473
<b>J</b>	422	422	443	422	422	443

# Generation 6

## Automatic Retractable Bollards

Maximum protection for highly sensitive locations.

The result of over 20 years experience, the sixth generation of Urbaco's retractable bollards are manufactured from three separate parts, each cast solidly in one piece. There is no mechanical welding involved, no parts assembly with bolts or screws and no wearing parts with limited lifespan, ensuring an almost indestructible means of vehicular access control.



**High impact resistance.** Impact resistance has been certified from 2,500 to 15,000 joules\* depending on the size and model. Three Generation 6 bollards together have shown an impact resistance of up to 675,000 joules! (or 7 tons at 31 mph).



### Advantages of Generation 6

Urbaco generation 6 bollards require little or no periodic maintenance. With resistance levels of more than 4.5 million operation cycles\* without any breakdown or need for replacement parts CAME are able to offer a 10-year limited parts warranty on these products. In addition to this, structural parts are totally interchangeable. With 5 bollard head designs (available in 3 diameters and 2 heights) and custom powder-coated paint colours (additional charge may be incurred), Generation 6 bollards can compliment any architectural situation.

The patented Monobloc® casing has a very high impact resistance as it is formed from cast steel up to 24 mm thick. Cast in one piece from steel, it fully protects the bollard. Shock energy received by the bollard is divided into the counter components before dissipating through the embedded casing. A guiding ring of thick plastic eases the travel of the bollard up and down reducing friction and noise. The bollard head itself (11mm thick cast steel) provides superior mechanical resistance. A solid, single piece, it integrates smoothly with the guide rails and is designed to withstand the harshest of conditions.

\* official certificate available upon request

### hydraulic/pneumatic

Urbaco Generation 6 retractable bollards can be activated by either hydraulic or pneumatic compressors. Pressurised oil offers greater force and resistance to vertical loads, while compressed air offers simplicity and the option for greater distance between the bollard and technical centre.

Note: Please refer to the URBACO CATALOGUE for fixed and mechanical versions of these models, or visit [www.urbaco.co.uk](http://www.urbaco.co.uk).



### Technical features

Type	Cylinder	Athéna	Acropole	Chateaneuf	Vendôme
Material	Cast Steel	Cast Steel	Cast Steel	Cast Steel	Cast / Stainless Steel
Bollard head thickness	11mm	11mm	11mm	11mm	13mm
Height above ground	500 mm or 750 mm				
Bollard diameter	120 mm, 200 mm or 250mm				
Tested durability	4.5 million operation cycles				
Impact resistance (Joules)	up to 9000 (depending on height and diameter of bollard)				
Operating temperature (°C/°F)	-10 °C to 55 °C		14 °F to 131 °F (Note: an internal heater kit is available if installing in exceptionally exposed areas)		

### The complete range

#### Automatic retractable bollards

**BPCLPD50LC** **Cylinder** model bollard.  
**BPCLPD75LC** With monobloc® casing and cover. Comes with foundation casing to suit (see bottom), 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Switching cable not included.  
**BPCLPE50LC**  
**BPCLPE75LC**  
**BPCLPF50LC**  
**BPCLPF75LC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

**BPATND50LC** **Athéna** model bollard with wide vertical grooves.  
**BPATND75LC** With monobloc® casing and cover. Comes with foundation casing to suit (see bottom), 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Switching cable not included.  
**BPATNE50LC**  
**BPATNE75LC**  
**BPATNF50LC**  
**BPATNF75LC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

**BPACED50LC** **Acropole** model bollard with thin vertical flutes.  
**BPACED75LC** With monobloc® casing and cover. Comes with foundation casing to suit (see bottom), 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Switching cable not included.  
**BPACEE50LC**  
**BPACEE75LC**  
**BPACEF50LC**  
**BPACEF75LC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

**BPCHPD50LC** **Chateaneuf** model bollard with horizontal grooves.  
**BPCHPD75LC** With monobloc® casing and cover. Comes with foundation casing to suit (see bottom), 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Switching cable not included.  
**BPCHPE50LC**  
**BPCHPE75LC**  
**BPCHPF50LC**  
**BPCHPF75LC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

**BPVMD50ILC** **Vendôme** inox stainless steel bollard.  
**BPVMD75ILC** With monobloc® casing and cover. Comes with foundation casing to suit (see below), reflective strip, 25m of air hose, zinc coating and powder coated paint finish (available in 6 RAL colours). Switching cable not included.  
**BPVME50ILC**  
**BPVME75ILC**  
**BPVDMF50ILC**  
**BPVDMF75ILC** Note: All bollards, if not in stock, have a delivery schedule of 4-8 weeks.

Folding foundation casings. The correct foundation case is supplied with all 'LC' codes.

Made from 1.5mm thick galvanised steel, the new foundation cases are essential to guarantee a simple, successful installation. They are delivered 'flat packed', which makes them easier and more economical to transport, and they take just 10 minutes to assemble on site.

#### Accessories

- U100** Control panel for one access and one or two pneumatic retractable bollards.
- U200** Control panel for two accesses and up to nine bollards (dependant on size).



# Technical Centres

## For Automatic Retractable Bollards

### Flexible control options.

For all automatic rising bollards, Urbaco technical control centres are made up of three items; The control panel, the compressor and the cabinet. Altering the configuration of these items will allow you to control different combinations of bollards.



### Standard 230v technical centre.

This rust-proof cabinet contains all the necessary hardware to run up to 4 automatic retractable bollards. The heavy duty air compressor is designed to operate under intensive-use situations and requires little or no periodic maintenance.



### U200 control panel.

The state of the art control panel runs limit switches, lights indicating bollard position, induction loops, and remote control actuators by dry contact as well as compressor surveillance. A maximum of two optional U201 expansion cards can be built into the box, allowing you to run a 2nd and 3rd accessways.



## Pre-assembled control centres

As well as the option to purchase individual elements to suit your needs, Urbaco technical control centres are available in standard configurations to suit the majority of requirements. Compressors are supplied pre-prepared to accept 10mm automatic bollard air line supplied with all bollards unless otherwise stated.

All URBACO control centres (and therefore automatic bollards) can be operated by the usual range of CAME radio transmitters, keypads, card readers, induction loops etc. and can easily accommodate a wide range of safety loops and detectors.

### Limits to use

Features	CU0011PP	CU0011PPR	CC6U200PR	CC6U200PRS
Max no. of small pneumatic bollards	4	6	8	8
Max no. of large pneumatic bollards	2	3	4	4
Operation intermittence	50% (15 mins ON - 15 mins OFF)		40%	40%
Shock index	IK 10 (1kg at 50cm)			
Min operating temperature (°C/°F)	-10 °C / 14 °F (Note: an internal heater kit is available if necessary)			
Max operating temperature (°C/°F)	55 °C / 131 °F			
Built-in isolation switch	NO	NO	NO	NO
Sound insulation	YES	YES	NO	YES
Limit switch management	YES	YES	YES	YES
Reserve Compressor Capacity (L)	0	5	10	10

● 230V A.C.

## Sound-Proofing

Compressors and control centres shown on these pages are NOT SILENT when operating. Urbaco compressors can reach up to 66dB during operation. Noise output can be reduced by fitting sound insulation inside the control centre cabinet.

Please call us on 0115 9210 430 to discuss your requirements.


### Technical features


Technical Control Centre	CU0011PP	CU0011PPR	CC6U200PR	CC6U200PRS
Cabinet Material	1.5mm thick steel	1.5mm thick steel	1.5mm thick steel	1.5mm thick steel
Surface Finish	RAL 7035 (grey). Phosphatation, passivation, neutralisation and polyester coating of 60µm by electro-static powdering.			
Protection rating	IP44 (control panel is IP54)	IP44 (control panel is IP54)	IP44 (control panel is IP54)	IP44 (control panel is IP54)
Power supply (V)	230V A.C. (2 P+E)	230V A.C. (2 P+E)	230V A.C. (2 P+E)	230V A.C. (2 P+E)
Dimensions (mm)	H 600 x L 400 x W 260	H 800 x L 600 x W 260	H 600 x L 800 x W 300	H 600 x L 800 x W 300
Weight (Kg)	-	-	-	-
Ventilation	Natural	Natural	Natural	Natural


● 230V A.C.


## The complete range

### Pre-assembled control centres - recommended for use with Generation 6 bollards

- 


**CC0011PP** 230V A.C. technical control centre. Varnished steel sound-insulated cabinet (600 x 400 x 260mm) contains U200 control panel with built in radio receiver, and an intensive use air compressor with pressure gauge and safety valve. new
- 


**CC0011PPR** 230V A.C. technical control centre. Varnished steel sound-insulated cabinet (800 x 600 x 260mm) contains U200 control panel with built in radio receiver, large intensive-use air compressor with pressure gauge, safety valve and **5L air reserve**. new
- 


**CC6U200PRR** 230V A.C. technical control centre. Varnished steel protective cabinet (600 x 800 x 300mm) includes U200 control panel with built in radio receiver, and an intensive use air compressor with pressure gauge and safety valve. new
- 


**CC6U200PRS** 230V A.C. technical control centre. Varnished steel cabinet **with sound-insulation** (600 x 800 x 300mm) includes U200 control panel with built in radio receiver, and an intensive use air compressor with pressure gauge and safety valve. new

### Accessories

- 

**U200** Control panel for one access and up to eight Luxor or six Generation 6 retractable bollards (dependant on size). With space for **up to 2** optional U201 expansion cards for additional accessways.
- 

**U201** Expansion card. Allows additional accessway to be controlled using the U100 panel.
- 

**COREH02-LUX** Plinth for floor-mounting Luxor control centres. new
- 

**RPURA15** Automatic purge valve for Luxor control centres. new

### Technical Control Centre Operational Limits (Max No. of Bollards)

Diameter of bollard (mm)	Accessways	Generation 6						Luxor Range					
		ø 120		ø 200		ø 250		ø 200		ø 270		ø 320	
		h 500	h 750	h 500	h 750	h 500	h 750	h 600	h 800	h 600	h 800	h 600	h 800
CC0011PP	1 - 3	4	3	3	2	2	2	-	-	-	-	-	-
CC0011PPR	1 - 3	6	4	4	3	3	3	-	-	-	-	-	-
CC6U200PR	1 - 3	-	-	-	-	-	-	8	6	7	5	6	4
CC6U200PRS	1 - 3	-	-	-	-	-	-	8	6	7	5	6	4



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[www.cameuk.com](http://www.cameuk.com)



## Accessories

## The models

To ensure maximum efficiency and peace-of-mind for the user, a modern automation system requires integration of simple controls with safety devices that successfully optimise performance.

For all system types and requirements CAME offers a wide range of devices designed to solve all issues concerning safety, in compliance with current European Standards.

The table opposite sums up the complete range of command and safety accessories and their main features. In the following pages, the features of all the accessories are described, making it easier and quicker to choose the right product.



## Main features

TRANSMITTERS				
Series	Model	Number of keys	Frequency (MHz)	Features
Atomo	AT01	1	433,92 rolling code	● ● ● ●
Atomo	AT02	2	433,92 rolling code	● ● ● ●
Atomo	AT04	4	433,92 rolling code	● ● ● ●
Tam	T432	2	433,92	● ● ● ●
Tam	T434	4	433,92	● ● ● ●
Tam	T438	4+4	433,92	● ● ● ●
Tam	TAM-432SA	2	433,92	● ● ● ●
Tfm	T152	2	30,900	● ● ● ●
Tfm	T154	4	30,900	● ● ● ●
Tfm	T158	4+4	30,900	● ● ● ●
Top 433,92	TOP-432NA	2	433,92	● ● ● ●
Top 433,92	TOP-434NA	4	433,92	● ● ● ●
Top 433,92	TOP-432A	2	433,92	● ● ● ●
Top 433,92	TOP-434A	4	433,92	● ● ● ●
Top 433,92	TOP432S	2	433,92	● ● ● ●
Top 868,35	TOP-862NA	2	868,35	● ● ● ●
Top 868,35	TOP-864NA	4	868,35	● ● ● ●
Top 30,900	TOP-302A	2	30,900	● ● ● ●
Top 30,900	TOP-304A	4	30,900	● ● ● ●
Top 30,900	TOP-3022M	2+2	30,900	● ● ● ●
Touch	TCH-4024	4	40,685	● ● ● ●
Touch	TCH-4048	4+4	40,685	● ● ● ●
Twin	TIW02	2	433,92	● ● ● ●
Twin	TIW04	4	433,92	● ● ● ●

● **Approved devices.**  
All CAME radio control systems are approved for use in both European and non-European countries.

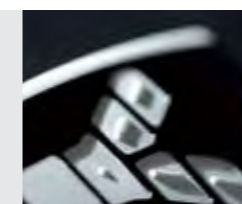
● **Self-learning of the radio code "from the transmitter to the receiver".**  
This function allows the receiver to memorise the code of a device.

● **Self-learning of the radio code "from transmitter to transmitter".**  
This function allows a transmitter to copy onto a new one. It permits the creation of transmitters with the same code.

● **Multi-user system.**  
A different code can be associated to each button on the transmitter. This gives control over independent systems, even within the same effective range.



### Sensitive keys



Thanks to its ergonomic shape, the transmitter is practical to use, and prevents accidental commands from being sent.

### The external receivers



For installations that cannot use normal snap-in cards, such as for controlling garden lighting or sprinklers. CAME offers outside receivers or radio modules, with 2 or 4 channels, powered by 12 - 24V D.C. or 230V A.C. and which are transmitted according to the frequency used.

### Main features

INFRARED-BEAM PHOTOCELLS				
Series	Model	Range (m/ft)	Power supply (V)	Features
Doc	DOC-I	18 / 59'	12-24 A.C.-D.C.	
Doc	DOC-E	18 / 59'	12-24 A.C.-D.C.	
Dir	DIR10	10 / 32' 8"	12-24 A.C.-D.C.	●
Dir	DIR20	20 / 65' 6"	12-24 A.C.-D.C.	●
Dir	DIR30	30 / 98' 4"	12-24 A.C.-D.C.	●
Db	DBC01	10 / 32' 8"	Tx batteries 4 x 1.5 AAA10	●
Db	DBC03	10 / 32' 8"	batteries 4 x 1.5 AAA10	●
Db	DBC04	10 / 32' 8"	batteries 4 x 1.5 AAA10	●
Db	DBC01	10 / 32' 8"	Tx batteries 4 x 1.5 AAA10	● ● ● ●
Db	DBS01	10 / 32' 8"	Tx batteries 4 x 1.5 AAA10	● ● ● ●
Db	DBCT	10 / 32' 8"	batteries 4 x 1.5 AAA10	● ● ● ●

● **Synchronised infrared beam.**  
 Photocell synchronisation (via cable) can be carried out between each pair of transmitters and receivers. This allows for multiple sets of photocells even in close proximity to each other or at double heights without the risk of interference.



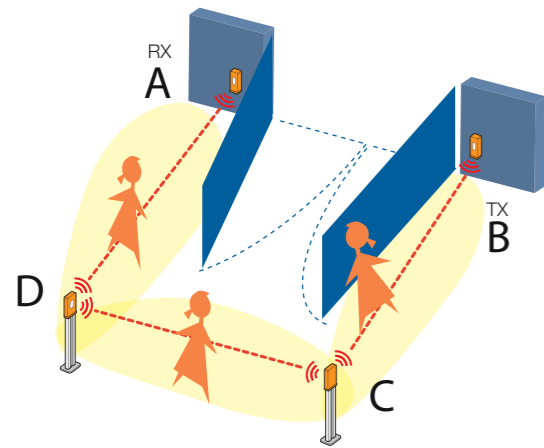
● **Wireless photocells.**  
 No cables or digging required and guaranteed perimeter protection on the moving area of the gate.



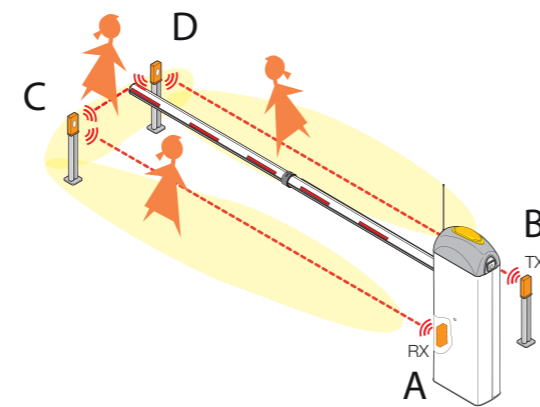
● **The integrated system.**  
 The integrated Db + Df system can control the traffic zone and that behind the sliding gate leaves. Infrared beam technology can work with sensitive edges installed on the gate leaf, thereby solving the risk of accidental contact with the gate and does away with complicated cable laying.



### Application schemes for swing gates and Parking barriers



Example of perimeter coverage on a swing gate with Wireless photocells.  
 A = DBC01 receiver  
 B = DBC01 transmitter  
 C = DBC03 repeater  
 D = DBC04 repeater



Example of perimeter coverage on a Parking barrier with Wireless photocells.  
 A = DBC01 receiver  
 B = DBC01 transmitter  
 C = DBC03 repeater  
 D = DBC04 repeater

### Dir: The synchronised photocell



The DIR photocells' operation principle consists of auto-synchronising the infrared beams between receiver and transmitter. This function allows for multiple installation requirements that are typical in industrial settings, where devices need to be placed at two different heights.

### Accessories



Photocell mounting is simple, thanks to the range of modular aluminium columns. Elegant and accurate in design, they are always perfectly integrable in any applicable context.

### Main features

Sensitive safety edges				
Series	Model	Operation	Length (m/ft)	Connected accessories
Df	DF15	Mechanical contact	1.5 / 4'11"	Db series photocells
Df	DF17	Mechanical contact	1.7 / 5'6"	Db series photocells
Df	DF20	Mechanical contact	2 / 6'5"	Db series photocells
Df	DF25	Mechanical contact	2.5 / 8'2"	Db series photocells

For sliding gates.  
 Thanks to the integrated Db + Df system, safety edges can be installed on the sliding-gate leaves for their opening and closing phases.



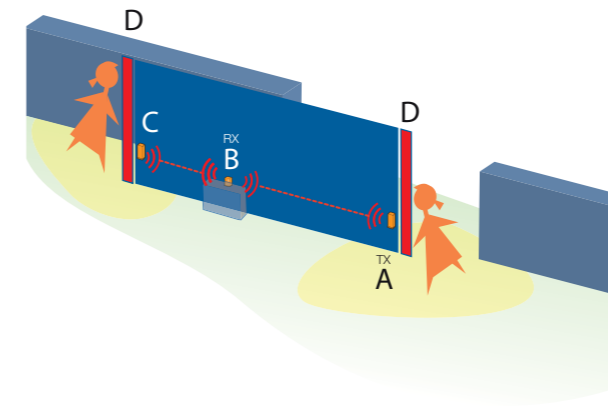
For swing gates.  
 Installed vertically on the end of the gate leaf or across the gate's fixed part to protect the area just behind the gate's movement range.



Entirely deformable.  
 Thanks to their patented internal mechanism, Df safety edges are deformable along their entire length and have no rigid parts. This guarantees top protective efficacy.



### Application schemes for sliding gates



Example application of the Db+Df integrated system on a sliding gate.  
 A = Pair of photocells - DBS01 (TX)  
 B = Pair of DBS01 photocells (RX)  
 C = Additional DBCT transmitting module  
 D = Sensitive safety edges - Df series

### Certified and patented product



The Df models are patented by CAME and are built in compliance with the EN 12978 and EN 954-1 European Standards, providing systems that are always certified and compliant.

### Various models for all needs



The Df sensitive edges come in various sizes and are ready to install, or they can also be assembled up to maximum of 6 m / 19'8" ft in length.



# Wave

up to 200 users

## Home automation

### Affordable Home Automation Solution.

Wave lets you control all the automated appliances in your home; the gate, garage door, garden lights, curtains and shutters, the sprinkler system or the heating. Wherever you are, Wave utilises programmable timers to monitor, open / close and turn on / off the electronics in your home.



**Oled technology.**  
Wave's viewing screen is made of energy-saving, high-visibility OLED diodes, which makes it easy to browse among the integrated software's functions.



**Handy, quick buttons.**  
Wave's face plate is fitted with standard buttons with which you can directly control your devices.



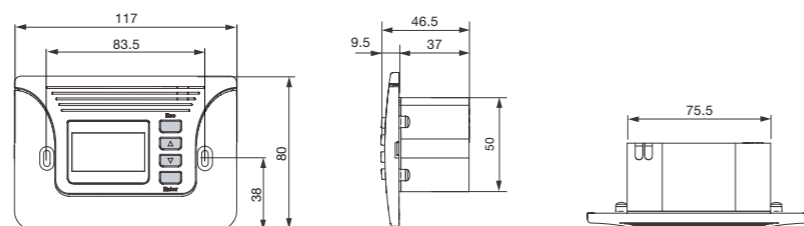
**Universal mounting.**  
Wave fits perfectly into the regular, 3 module hold-all boxes. Simple, modular application - anywhere in the home.



## Advantages of Wave

- Command of up to 5 automatic devices through radio signal or relay.
- Programmable alarm clock over two time zones.
- Thermostat function to adjust the temperature.
- Visual display of room temperature, date and time.
- Timer can program 16 time zones and relay or radio signal activation. For example: turning on the indoor lights, garden lights, burglar alarm, timed gate opening, garden sprinkler.
- "Stand alone" access control function, as a transponder card sensor, for up to 200 users. Its software provides you with a visual display of each user's information and requested service (e.g. checking residual credit for membership or active scalar cards).
- Integrated clock back-up battery.
- Multi-language menu.
- Password protected by alphanumeric code for programming access. or alternatively, by transponder card.
- Possibility to connect to the WI08 to control up to 8 WA02s.
- Possibility to connect the WA01 to the RBM84 access control.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Stand alone and access control

The WAVE can also function as an access control system, the WA01 allows for the programming of 200 users and integrates a proximity reader to facilitate access. To expand the system further the WA01 can be combined with an RBM84 to provide a more complete access control solution.

## Technical features

Type	WA01	WA02	WI08
Protection rating	IP40	IP40	IP54
Power supply (V)	230 A.C. 50/60 Hz	12 A.C.	230 A.C. 50/60 Hz
Frequency (MHz)	433,92	433,92	-
230V relay range (A)	1.5	-	5
Operating temperature (°C/°F)		-20 °C to 55 °C -4 °F to 131 °F	
Material	ABS - PC - PA6 - PMMA	ABS - PC - PA6 - PMMA	ABS - PC - PA6 - PMMA
			● 230V A.C. ● 12V A.C.

## The complete range

### 230V A.C. 433,92 MHz radio control unit



**001WA01** Home automation transponder sensor with built-in "stand-alone" transmitter (Max 200 users).



**001WA02** Home automation transponder sensor with built-in transmitter for WI08 (Max 200 users).

**001WI08** Interface unit to connect up to 8 x WA02.

### Accessories



**001TST01** Proximity card - ISO7810 - 7813 format.



**001TST04** Re-writable proximity card - ISO7810 - 7813 format.



**009PCT** Proximity key fob.



**009TAG** Glass transponder bulb for TSP01 (It can be housed on TOP-432NA - TOP-434NA - TOP-862NA TOP-864NA - Atomo - Twin - Touch).



# Set

## Control accessories

A complete product line for remotely giving the open and close commands. CAME offer product solutions for servicing a variety of differing situations and satisfying real user needs. The SET series of keyswitches are all made of die-cast aluminium and are robust enough to resist tampering and acts of vandalism.



**Open with the Transponder.** The TSP01 transponder sensor allows the user to trigger the automation system using either TST01 or TST04 proximity cards, or alternatively, with the handy PCT keyfobs or TAG transponders. Up to 250 passes can be saved.



**Also with magnetic key.** The SEM-2 model with magnetic key lets you use a practical and lightweight coded key.



**Highly resistant materials.** All of the models are made of die-cast aluminium to be more resistant and long lasting. The SET range is available in both surface mounted and flush mounted versions.

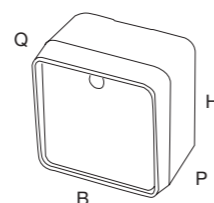


## Advantages of Set

CAME's range of control keyswitches includes 7 models. They differ according to type of command and function. From the traditional metal key switch selector, to the version featuring a practical and lightweight magnetic key (which facilitates customised commands for multiple users). The TSP01 model memorises up to 250 different transponders, an essential feature in complex multiple-user systems.

## Dimensions

Model and dimensions (mm)	B	H	P	Q
SET-I	70	70	73	13
SET-E - SET-EN	70	70	86	13
SET-K	70	70	73	13
SET-J	70	70	45	13
TSP01	70	70	43	13
SEM-2	70	70	86	13
SMA - SMA2	23	94	92	
PCT	33	49	4	
TST01 TST04	ISO 7810 - 7813			



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	SET-I	SET-E / SET-EN	SET-J	SET-K	SEM-2	TSP01	SMA / SMA2
Protection rating	IP54	IP54	IP54	IP54	IP54	IP54	-
Contacts range (A - V)	1 - 24	1 - 24	3 - 24	3 - 24	1 - 24	5 - 24	5 A
Max. no. of cards	-	-	-	-	-	250	-
Operating temperature (°C/°F)	-20 °C to 55 °C		-4 °F to 131 °F				
Material	Alu alloy	Alu alloy	Alu alloy	Alu alloy	Alu alloy	ABS	ABS

## The complete range

### Selectors



- 001SET-I** Flush-mounted key switch with aluminium alloy casing and DIN lock cylinder.
- 001SET-E** Surface-mounted key switch with aluminium alloy casing and DIN cylinder.
- 001SET-EN** Black-varnished, surface-mounted key switch with aluminium alloy casing and DIN cylinder.
- 001SET-K** Flush-mounted key switch with aluminium alloy casing, lock protecting flap-door and cylinder.
- 001SET-J** Surface-mounted key switch with aluminium alloy casing, lock protecting flap-door and cylinder.
- 001SEM-2** Surface-mounted magnetic key switch with aluminium alloy casing.
- 001SEC** Code magnetic key.
- 001TSP01** Stand-alone transponder for card, key-fob and TAG reader for up to 250 users.
- 001TST01** Proximity card - ISO7810 - 7813 format.
- 001TST04** **Re-writable** proximity card - ISO7810 - 7813 format.
- 009PCT** Proximity key fob.
- 009TAG** Glass transponder bulb for TSP01 (It can be housed on TOP-432NA - TOP-434NA - TOP-862NA TOP-864NA - Atomo - Twin - Touch.)
- 009SMA** One-channel magnetic loop-detector sensor.
- 009SMA2** 2 channel magnetic loop-detector sensor.
- 001CLM** Natural anodized aluminium post with tamper-proof support for SEM-2. Height = 1 m.
- 001CSS** Natural anodized aluminium post for SET-I - SET-K - TSP01. Height = 1 m.
- 001CLMN** Black anodized aluminium post with tamper-proof support for SEM-2. Height = 1 m.
- 001CSSN** Black anodized aluminium post for SET-I - SET-K - TSP01. Height = 1 m.



# Digital

## Control accessories

The secure and functional digital keypad. CAME's digital keypads command an automated system through a personal numeric code. Safe and user friendly thanks to a technology which allows control to take place outside of the keyboard, they are built of steel and provide a guarantee of reliability and durability, while at the same time doing away with traditional keys.



**User-friendly and illuminated.**  
For practical use in any unlit outdoor areas, the S5000 version is fitted with courtesy lights that light up the keypad.



**No cables or digging required.**  
The S9000 wireless model is specifically designed to solve any installation issues when the setting lacks existing wiring or where it is difficult to position/lay cables.



**Highly resistant materials.**  
All of the models are built in die-cast aluminium and stainless steel for resistance, durability and reliability over time.

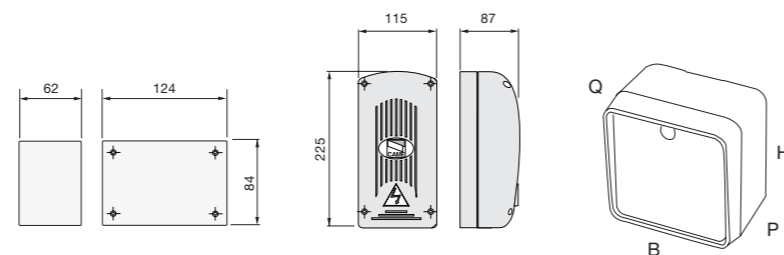


### Advantages of Digital

Code security is safeguarded by more than 16 million numerical combinations and an electronic anti-burglary system which blocks the device's functionality in the event of tampering. Also available is the S9000 wireless version. Employing radio frequency technology, it is especially suited for settings where no wiring exists or would be difficult or costly to install. The Digital series selectors are a valid alternative to do away with any worries about carrying keys around.

### Dimensions

Model and dimensions (mm)	B	H	P	Q
S5000	80	130	40	-
S6000	70	70	73	13
S7000	70	70	51	13
S9000	70	70	32	13



S0001 - S0002

S0004N

Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	S5000	S6000	S7000	S9000
Protection rating	IP54	IP54	IP54	IP54
Power supply (V)	12-24 A.C.-D.C.	12-24 A.C.-D.C.	12-24 A.C.-D.C.	1 battery GP23A 12V D.C.
Combinations	16,777,216	1,679,616	1,679,616	1,562,500
Frequency (MHz)	-	-	-	433,92
Code ciphers	8 Max	6 Max	8 Max	8 Max
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	
Material	Alu alloy - Painted steel			● 24V A.C.-D.C.



### The complete range

#### Keypad selectors



**001S5000** Galvanized and painted steel surface-mount keypad with illuminated panel. 16,777,216 combinations.



**001S6000** Flush-mounted keypad. 1,679,616 combinations.



**001S7000** Surface-mounted keypad. 1,679,616 combinations.



**001S9000** 433,92 MHz surface-mount radio keypad with 4 storable codes and programming access password. Compatible with AF43S - AF43SM - RE432 - RBE4MT radio receivers. 1,562,500 combinations (390,625 possible combinations for each code.).



**001S0001** One-channel card for S5000 - S6000 - S7000 (1 memorisable code).

**001S0002** 2 channel card for S5000 - S6000 - S7000 (2 memorisable codes).



**001S0004N** 4 channel card for S5000 - S6000 - S7000. Possibility of radio controlling the 1st channel. (4 memorisable codes).

#### Accessories

**001CSS** Natural anodized aluminium post with tamper-proof support for S6000 - S9000. Height = 1 m.

**001CSSN** Black anodized aluminium post with tamper-proof support for S6000 - S9000. Height = 1 m.



# Kiario

## Safety accessories

### Smart flashing light.

Modern design, attractive materials, energy efficiency and the ability to program the light to give periodic warnings when the system requires maintenance.

The Kiario series of flashing lights guarantees not only high safety standards but includes other features that makes it much more than just a flashing light.



**Maximum modularity when mounting.**  
The radio antenna can be integrated and mounted on either side of the flashing light.



**The assistant flashing light.**  
The KIAROIN and KIARO24IN flashing lights can be set to warn when the system has performed, 5,000, 10,000, 20,000 or 50,000 operations. It is an automatic solution for programming the system's routine maintenance schedule.



**Dedicated accessories.**  
The KIAROS modular, wall-mounting bracket is designed to work in any possible installation scenario.  
Adjustments: 90°- 180°- 270°.



## Advantages of Kiario

The Kiario series of flashing warning lights are the result of thoughtful, precise and accurate engineering. They are built with high quality, durable materials and are designed to meet the application needs of modern automated installations, and to help them conform with current safety regulations.

As well as the traditional movement-notification function, the KIARO-IN flashing light has a special way of counting the manoeuvres carried out by the system. On reaching the pre-set threshold, a red light alternates with the standard yellow one to warn that the system needs periodic maintenance.

### Limits to use

Model	Lamp (W)	Power supply (V)
KIARON	25	230 A.C. 50/60 Hz
KIAROLXN	6 (XENON)	230 A.C. 50/60 Hz
KIAROIN	25	230 A.C. 50/60 Hz
KIARO24I	25	24 A.C.-D.C.
KIARO24IN	25	24 A.C.-D.C.

● 230V A.C. ● 24V D.C

## Technical features

Type	KIARON	KIAROIN	KIAROLXN	KIARO24N	KIARO24IN
Protection rating	IP54	IP54	IP54	IP54	IP54
Power supply (V)	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	230 A.C. 50/60 Hz	24 A.C.-D.C.	24 A.C.-D.C.
Dimensions (mm)	130 x 170 x 76	130 x 170 x 76	130 x 170 x 76	130 x 170 x 76	130 x 170 x 76
Lamp power (W)	25	25	6	25	25
Duty cycle (%)	50	50	50	50	50
Operating temperature (°C/°F)			-20 °C to 55 °C	-4 °F to 131 °F	
Material	ABS - Polycarbonate	ABS - Polycarbonate	ABS - Polycarbonate	ABS - Polycarbonate	ABS - Polycarbonate

● 230V A.C. ● 24V A.C.-D.C



## The complete range

### 230V A.C. flashing lights



001KIARON Flashing light.

001KIAROLXN Flashing light with xenon lamp.

001KIAROIN Flashing light with manoeuvres counter function.



### 24V A.C.-D.C. flashing lights

001KIARO24N Flashing light.

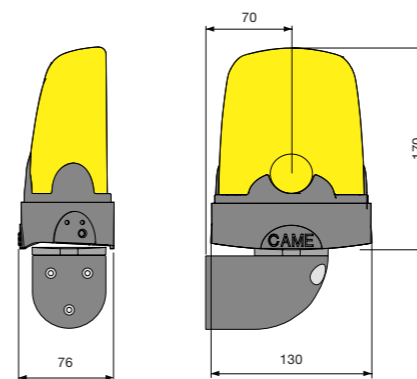
001KIARO24IN Flashing light with manoeuvres counter function.



### Accessories

001KIAROS Wall fixing bracket.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

# Df

up to 6 m  
up to 19'8" ft

## Safety accessories

### Sensitive edges for total safety.

Designed to meet current safety norms, DF sensitive safety edges are the answer to the requirements of multiple active protection. CAME offers a host of ready to install and customisable profiles to suit the requirements of any installation.



**Certified and patented product.**  
The Df models are patented by CAME and are built in compliance with the EN12978 and EN954-1 European Standards, ensuring systems that are always certified and compliant.



**Even on sliding gates.**  
The DB Wireless photocells allow you to use the Df sensitive edges even on the moving gate leaves of sliding gates, on the front and back of the actual leaf.



**Entirely deformable**  
The internal mechanism of the Df ensures the edge is entirely deformable along the entire length and has no rigid parts.



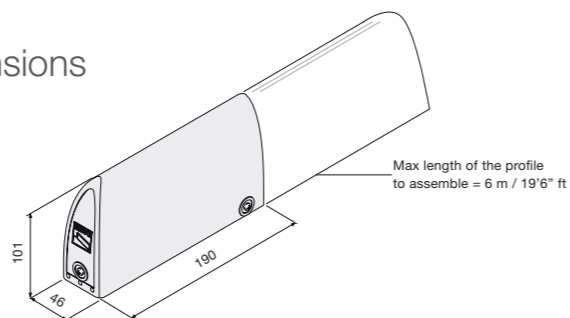
## Advantages of Df

Completing a certified automation system is now vitally important. This is true for both the installer who carries out the job as well as the client who wants to guarantee its safe use. CAME meets these needs with many specifically designed solutions, all of which comply with European Standards and are tested according to strict company standards that ensure safety is the number one priority when creating every new product. The Df sensitive safety-edges are therefore, along with other dedicated accessories, the optimal solution to raise system safety and quality to the highest possible levels.

### Limits to use

Model	Df
Max length (m/ft)	6 / 19'8"
Max speed at leaf edge (m / min ) ( ft / min)	12 / 39'4"

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	DF15 - DF17 - DF20 - DF20N - DF25	CP30
Protection rating	IP54	IP54
Max. length (m/ft)	6 / 19'8"	4 / 13'1"
24V relay Max range (A)	1	-
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Material	TPE 65 Short A	TPE 65 Short A

## The complete range

### Sensitive safety edges

- 001DF15** Grey sensitive mechanical safety edge. Length = 1.5 m / 4'11"  
For use in combination with 001DFI self-diagnosing card.
- 001DF17** Grey sensitive mechanical safety edge. Length = 1.7 m / 5'6"  
For use in combination with 001DFI self-diagnosing card.
- 001DF20** Grey sensitive mechanical safety edge. Length = 2 m / 6'6"  
For use in combination with 001DFI self-diagnosing card.
- 001DF25** Grey sensitive mechanical safety edge. Length = 2.5 m / 8'2"  
For use in combination with 001DFI self-diagnosing card.
- 001CMP** Grey rubber and aluminium profile for maximum 6 m long DF sensitive edges.  
For use in combination with 001DFI self-diagnosing card.
- 001DF20N** **BLACK** sensitive mechanical safety edge (length 2 m / 6'6" ft).  
For use in combination with 001DFI self-diagnosing card.



- 001TMF** Set of caps and mechanisms for maximum 4 m long DF sensitive safety edges.
- 001TMF6** Set of caps and mechanisms for maximum 6 m long DF sensitive safety edges.
- 001DFI** Self-diagnosing card for DF electrical connections.

### Cable collecting kits

- BRC5 KIT** Power cable holder system for sensitive safety edges, installed on sliding gates up to 5m in length. (1 x BRC5 + 1 x BRCP)
- BRC10 KIT** Power cable holder system for sensitive safety edges, installed on sliding gates up to 10m in length. (1 x BRC10 + 2 x BRCP)
- BRC15 KIT** Power cable holder system for sensitive safety edges, installed on sliding gates up to 15m in length. (1 x BRC15 + 3 x BRCP)
- 001BRCP** Aluminium extension profile for use with BRC. Length = 5.1 m

### Sensitive safety edges

- 009CP30** Rubber and aluminium profile for pneumatic sensitive edges. H = 30 mm
- 001PPA** N.O. contact pressure-switch.
- 001PPC** N.C. contact pressure-switch.
- 009TBP** Connector tube for PPC and PPA.
- 009TP30** Rubber cap for pneumatic sensitive edges H = 30 mm



# Doc-Dir

## Safety accessories

### Infrared-beam photocells.

Vitally important for compliance with European Standards, CAME photocells are specifically designed to provide effective control of a door or gate's area of movement.

This is a necessary accessory to guarantee safety standards in any setting.



**DOC**  
The Doc series comes in both the surface mounted and flush mounted versions. Its compact dimensions and easy-to-install features make these devices extremely versatile and suitable for all possible scenarios.



**DIR**  
The Dir series offers maximum modularity when mounting thanks to a complete range of accessory profiles. These are especially designed to be installed in any possible setting.



**Protection against impacts.**  
With a protective cover made from a robust alloy, the DIR-Z is a useful accessory when the photocell needs to be protected from potential impacts against it.



## Advantages of Doc-Dir

DOC is the most widely used series of photocells for all applications. It gives considerable range and the option for external or flush mounting.

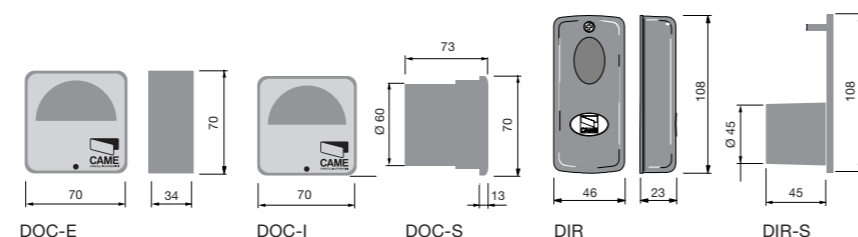
The DIR infrared photocell cuts out possible interference from other apparatus in the system, due to auto-synchronisation of the infrared beams between transmitter and receiver. Yielding remarkable savings in terms of time and cables, the DIR can be easily installed, even in systems fitted with a host of devices, such as those found in industrial settings.

### Limits to use

Model	DIR10	DIR20	DIR30	DOC-I	DOC-E
Max range (m)	10	20	30	18	18

● 12V-24V A.C.-D.C.

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	DOC-I	DOC-E	DIR10 - DIR20 - DIR30
Protection rating	IP54	IP54	IP54
Power supply (V)	12-24 A.C.-D.C.	12-24 A.C.-D.C.	12-24 A.C.-D.C.
Max range (m)	18	18	10 - 20 - 30
24V relay Max range (A)	1	1	1
24V A.C. current draw (mA)	60	60	60
Operating temperature (°C/°F)		-20 °C to 55 °C -4 °F to 131 °F	
Material	ABS - Polycarbonate	ABS - Polycarbonate	ABS - Polycarbonate

● 12V-24V A.C.-D.C.

## The complete range

### Doc Series photocells



001DOC-I Pair of flush mount photocells complete with casing. Range: 18 m / 59 ft.

001DOC-E Pair of flush mount photocells. Range: 18 m / 59 ft.

### Doc series accessories



009DOC-S Flush mount casing.

001DOC-R Steel support for DOC-E (for pillar surface mounting).

001DOC-L Natural anodized aluminium post. H = 50 cm

001DOC-LN Black anodized aluminium post. H = 50 cm.

### Dir series infrared photocells with synchro-beam



001DIR10 Pair of photocells. Range: 10 m / 32'9"

001DIR20 Pair of photocells. Range: 20 m / 65'7"

001DIR30 Pair of photocells. Range: 30 m / 98'5"

### Dir series accessories



001DIR-S Flush mount casing.

001DIRZ Aluminium alloy impact-proof protection.

001DIR-L Natural anodized aluminium post. H = 50 cm.

001DIR-LN Black anodized aluminium post. H = 50 cm.

001DIR-P Natural anodized aluminium extension for DIR-L. H = 50 cm post. To apply on double pair of Dir photocells.

001DIR-PN Black anodized aluminium extension for DIR-LN. H = 50 cm post. To apply on double pair of Dir photocells.





## Safety accessories

### Safe, fast, anywhere.

The new, improved series of Db wireless photocells provide a revolutionary way to install protection. They are also a great solution for retrofitting to existing projects, as they save on costly digging and masonry work. Because it is bidirectional, the Db also lets you have perimeter coverage on all types of automation devices.



**Easy installation.**  
Today, Wireless technology makes using safety devices much more flexible. It especially favours the installation of systems that will provide total peace-of-mind to the end user.



**Bidirectional beam.**  
The DBC03 and DBC04 modules are able to both receive and transmit in two directions. This feature enables them to provide perimeter protection.



**Battery powered.**  
The DBC01 transmitter and DBC03 and DBC04 repeaters run on standard sized AAA batteries. We recommend using long-life lithium batteries to avoid unnecessary inconvenience to the end user.



## Advantages of Wireless Db

The Db is the new bidirectional wireless photocell which removes any issues related to additional groundwork, cabling and conduit.

It is a battery-operated device, efficient and provides continual service with little consumption. Using long-life lithium batteries ensures many months of maintenance-free operation.

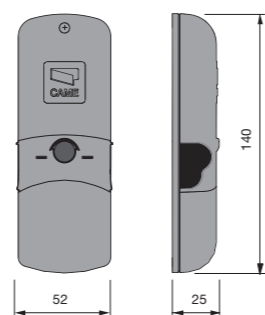
Also, thanks to its bidirectional capability, with few additional items you can offer perimeter protection, increasing safety.

### Limits to use

Model	DBC01	DBC03	DBC04
Max Range (m)	10	10	10

NOTE: Uses 4 x 1.5v AAA batteries. min.1000mAh. (Supplied separately)

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	DB
Protection rating	IP54
Power supply (V)	12-24 A.C.-D.C. (RX - DBC01)
Batteries (V)	4 x 1.5 AAA LR03
Max range (m/ft)	10 / 32' 8"
24V relay Max range (mA)	500
Current draw	DBCT 70µA - DBC01 50mA (24V A.C.) - DBC03 150µA - DBC04 150µA
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F
Material	ABS - Polycarbonate

● 12V-24V A.C.-D.C.



## The complete range

### Db series photocells



**001DBC01** Pair of surface mount wireless monodirectional infrared photocells  
1 receiver + 1 battery operated transmitter (batteries not included).



**001DBC03** Surface mount bidirectional infrared repeater module (batteries not included)  
(side receiver + front transmitter). Range: 10 m / 32' 8" ft.



**001DBC04** Surface mount bidirectional infrared repeater module (batteries not included)  
(front receiver + side transmitter). Range: 10 m / 32' 8" ft.

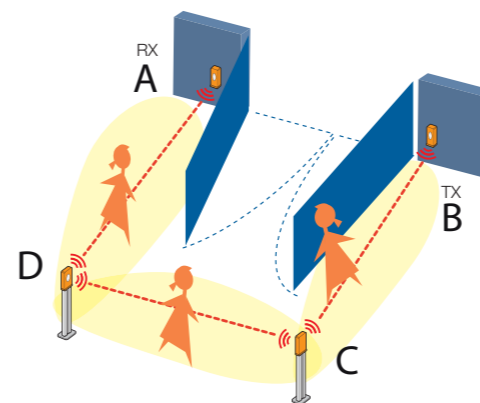


### Accessories

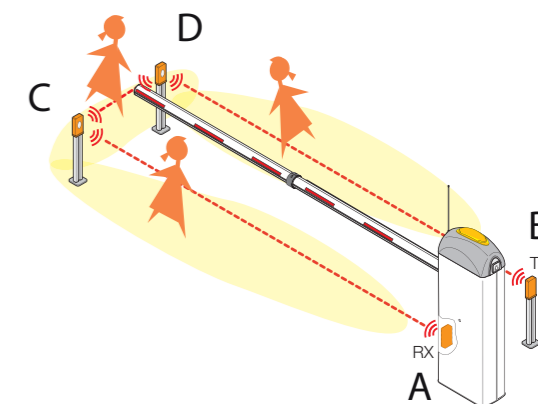
**001DB-L** Natural anodized aluminium post. H = 50 cm.

**001DB-LN** Black anodized aluminium post. H = 50 cm.

## Application schemes



Example of perimeter coverage on a swing gate with Wireless photocells.  
A = DBC01 receiver  
B = DBC01 transmitter  
C = DBC03 repeater  
D = DBC04 repeater



Example of perimeter coverage on a Parking barrier with Wireless photocells.  
A = DBC01 receiver  
B = DBC01 transmitter  
C = DBC03 repeater  
D = DBC04 repeater

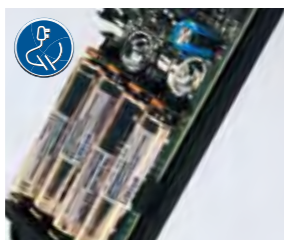
# Db+Df

## Integrated safety system

For sensitive safety edges on sliding gates.  
Using the Db series photocells and Df sensitive edges, installers can now fit active protection on sliding gates as required by the European Standards.  
The infrared bidirectional protection extends the field of detection, while the soft deformable edge protects against accidental contact with people, objects or pets.



**Battery powered.**  
Using long life lithium batteries to power the photocells ensures many months of maintenance-free operation. This feature does away with the need for complex cabling operations, which would otherwise be required.



**Patented product.**  
The Db+Df integrated system is an exclusive CAME patent.



**Add on to the BX-243, Bx and Bk series**  
The receiver is connected directly to the operator's control board and can receive the modulated, infrared beam on opposite axis. This feature makes it possible to install sensitive edges on both ends of the sliding gate without the need for complicated wiring.



## Advantages of Db+Df

Ready for integral mounting on sliding gate operators of the Bx-243, Bx and Bk series, the Db photocells are the answer to increased safety requirements in sliding gate systems.  
Battery-powered wireless operation means that installation is simple. No digging, cabling or masonry work is necessary. This system is easier to set up while at the same time providing greater safety. Even the paperwork is easier, because the products are already certified.

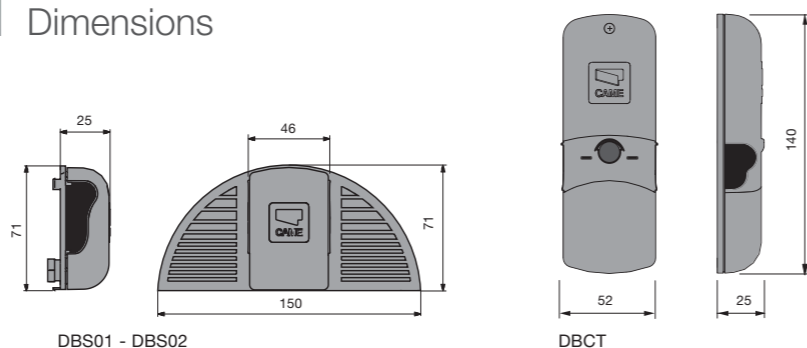
### Limits to use

Model	DBS01	DBS01	DBCT
Max range (m / ft)	10 / 32'8"	10 / 32'8"	10 / 32'8"
Max speed at leaf edge (m / min) (ft / min)	12 / 39'4"	12 / 39'4"	12 / 39'4"

● 24V A.C.-D.C.

**NOTE:** Uses 4 x 1.5v AAA batteries. min.1000mAh. (Supplied separately)

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)



## Technical features

DBS01 - DBS01 - DBCT	
Type	IP54
Protection rating	24 A.C.-D.C. (RX)
Power supply (V)	4 x 1.5 AAA10 (TX)
Batteries (V)	10 / 32'8"
Max range (m/ft)	48 (RX) - 70 (TX)
Current draw (mA a 24V A.C.)	-20 °C to 55 °C -4 °F to 131 °F
Operating temperature (°C/°F)	ABS - Polycarbonate
Material	● 24V A.C.-D.C.



## The complete range

### Connection systems for Df sensitive safety edges

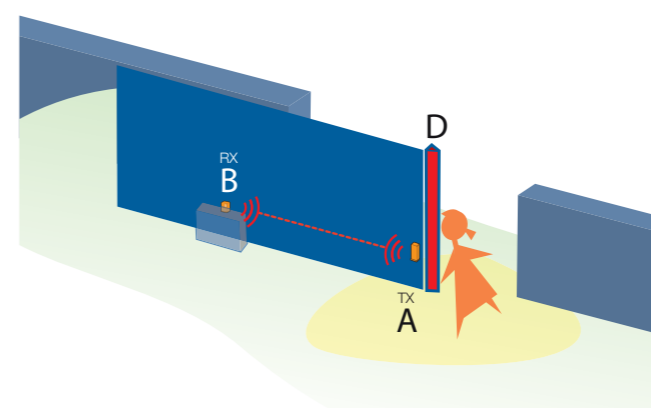


**001DBS01** Pair of wireless bidirectional infrared photocells with single contact output. Built-in receiver and external transmitter (batteries not included). For Bx-243, Bx and Bk series operators (Max range: 10 m / 32'8" ft).

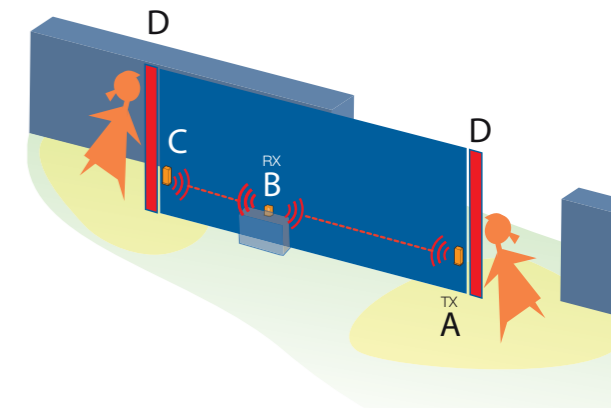
**001DBS02** Pair of wireless bidirectional infrared photocells with double contact output. Built-in receiver and external transmitter (batteries not included). For Bx-243, Bx and Bk series operators (Max range: 10 m / 32'8" ft).

**001DBCT** Surface mount transmitter module to combine with DBS02 (batteries not included) (Max range: 10 m / 32'8" ft).

## Application schemes



Find in the diagram an example of standard installation on a sliding gate with Wireless photocells.  
A = Pair of photocells - DBS01 (TX)  
B = Pair of photocells - DBS01 (RX)  
D = Safety sensitive edge - Df series



Find in the diagram a possible application of the Db+Df integrated system on a sliding gate.  
A = Pair of photocells - DBS01 (TX)  
B = Pair of photocells - DBS01 (RX)  
C = Additional DBCT transmitting module  
D = Sensitive safety edges - Df series



# Atomo

433,92 MHz rolling code

## Radio remote control system

### Total safety.

A blend of design and technology, this elegant and ergonomic product employs state-of-the-art materials while prioritising security. Atomo utilises “rolling code” technology, which varies with each impulse and guarantees maximum security and secrecy of the emitted signal.



**Easy “self-learning”.**  
Atomo can memorise the code from the transmitter to the receiver through its radio self-learning function.



**Long-lasting performance.**  
Atomo transmitters are powered with lithium micro batteries, supplied as standard on all models. High autonomy is achieved through low energy consumption.



**Double function.**  
Atomo can house a TAG transponder sensor which also lets you use it as a proximity card.



## Advantages of 433,92 MHz Atomo

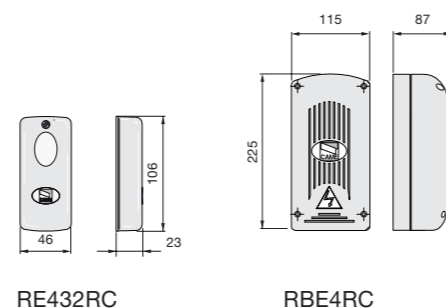
With every command impulse, a new ‘rolling’ code is transmitted. This code is generated from over 4 billion possible combinations using a sophisticated algorithm that only its respective receiver can decode. For even greater security, Atomo’s ‘double-checking’ feature make each unique transmitter truly impossible to clone.

It comes in the 1, 2 and 4 channel versions, and is the perfect solution when you need to integrate various controls into one apparatus: automatic gate, garage door operator, outdoor lighting etc. thanks to small, outdoor receivers which can be located anywhere.

### Limits to use

Model	Range (m / ft)
AT01	50 - 150 / 160' - 500'
AT02	50 - 150 / 160' - 500'
AT04	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	AT01	AT02	AT04
Frequency (MHz)	433,92	433,92	433,92
Batteries	2 x CR2016 Lithium	2 x CR2016 Lithium	2 x CR2016 Lithium
Dimensions (mm)	32 x 68 x 13	32 x 68 x 13	40 x 85 x 12
Combinations	4,294,967,896	4,294,967,896	4,294,967,896
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F
Material	ABS	ABS	ABS
Weight (g)	16	16	22

## The complete range

### 433,92 MHz rolling code transmitters.

	<b>001AT01</b>	One-channel rolling code transmitter. 4,294,967,896 combinations.
	<b>001AT02</b>	2 channel rolling code transmitter. 4,294,967,896 combinations.
	<b>001AT04</b>	4 channel rolling code transmitter. 4,294,967,896 combinations.

### 433,92 MHz rolling code receivers.

	<b>001AF43SR</b>	Plug-in radio frequency card for Max. 25 transmitters.
	<b>001RE432RC</b>	12 - 24V D.C. IP54 surface mount 2 channel receiver for Max. 25 transmitters.
	<b>001RBE4RC</b>	12 - 24V D.C. IP54 surface mount 4 channel receiver for Max. 500 transmitters, complete with 1 AT04 transmitter (master).

### Accessories

	<b>001TOP-A433N</b>	Antenna.
	<b>001P3V</b>	Package of 2 x 3V D.C. CR2016 lithium batteries.
	<b>009TAG</b>	Glass transponder bulb for TSP01.
	<b>001TOP-RG58</b>	Antenna cable.



# Tam

433,92 MHz

## Radio remote control system

Elegance, design and technology for multi-user applications.

CAME has concentrated all of its technology and know-how into just 12 grams by making a transmitter that offers 16 million code combinations, standard multi-user function, and practicality, all in one handy transmitter.



Standard multi-user mode. TAM remotes emit their own separate code-differentiated commands; perfect for those applications where multi-user functionality is a must. (i.e. apartment buildings)



Easy encoding. TAM-432SA lets you memorise codes from "transmitter to transmitter" through its radio-encoding function. So you can easily generate copies if you have the original.



The multi-user radio system In both industrial installations and residential apartment complexes, it is often necessary to have a radio receiver that can manage differentiated codes. The RBE4MT is the answer to this need. It comes complete with a display on which to monitor up to 999 codes and features a back-up function.



## Advantages of 433,92 MHz Tam

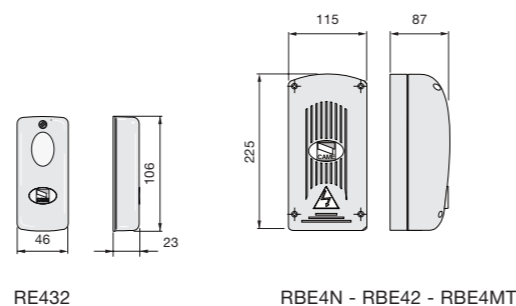
TAM is a complete series of 4 models, ranging from 2 to 8 channels, all with multi-user functionality and secure encoding utilising 16 million possible combinations.

The receivers that they are paired with come in 6 models; there are plug-in radio frequency cards that fit straight into the standard CAME control panels, or external 2 or 4 channel cards (featuring multi-code storing) that are housed in their own separate IP54-rated ABS plastic housing. The RBE4MT receiver allows you to manage and store up to 999 different transmitter codes, thus simplifying multi-user management.

### Limits to use

Model	Range (m / ft)
TAM-432SA	50 - 150 / 160' - 500'
T432	50 - 150 / 160' - 500'
T434	50 - 150 / 160' - 500'
T438	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	TAM-432SA	T432	T434	T438
Frequency (MHz)	433,92	433,92	433,92	433,92
Batteries	2 x CR2016 Lithium	1 x 12V AAA battery	1 x 12V AAA battery	1 x 12V AAA battery
Dimensions (mm)	24 x 68 x 12.5	45 x 92 x 15	45 x 92 x 15	45 x 92 x 15
Combinations	16,777,216	16,777,216	16,777,216	16,777,216
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	
Material	ABS	ABS	ABS	ABS
Weight (g)	12	44	46	46

## The complete range

### 433,92 MHz transmitters



001TAM-432SA 2 channel multi-user transmitter. 16,777,216 combinations with self-learning.

001T432 2 channel multi-user transmitter. 16,777,216 combinations.

001T434 4 channel multi-user transmitter. 16,777,216 combinations.

001T438 8 channel multi-user transmitter. 16,777,216 combinations.

### 433,92 MHz receivers



001AF43S Plug-in radio frequency card.

001AF43SM Plug-in radio frequency card with memory to store up to 128 codes (users).

001RE432 12 - 24V A.C.-D.C. IP54 surface mount 2 channel receiver.

001RBE4N 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module.

001RBE42 230V A.C. IP54 surface mount 4 channel radio module.

001RBE4MT 12 - 24V A.C.-D.C. IP54 surface mount 4 channel multi-user receiver to store up to 999 codes (users).

### Accessories

001TOP-A433N Antenna.

001P3VB Package of 2 x 3V D.C. CR1620 lithium batteries (for TAM-432SA).

001TOP-RG58 Antenna cable.



## Radio remote control system

### Up to 8 handy channels.

CAME has concentrated all of its technology and know-how into just 34 grams by making a transmitter that offers 16 million code combinations, standard multi-user function, and practicality in one handy device to control up to 8 different automation devices.



**Standard multi-user mode.** TFM remotes emit their own separate code-differentiated commands; Perfect for those applications where multi-user functionality is a must. (i.e. apartment buildings)



**"Via cable" encoding.** The T432 - T434 and T438 models can be connected up by cable to the RBE4N receiver to simplify encoding procedures when there are many identical transmitters, such as in a residential apartment complex.



**Up to 8 channels** The T158 model of the Tfm 30,900 MHz series lets you control up to eight different channels using only four buttons, thanks to the lateral selector switch.



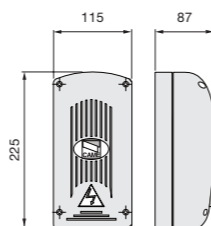
## Advantages of 30,900 MHz Tfm

The modulated frequency radio signal is generically less sensitive to external interference and provides for greater range compared to other transmission systems. The Tfm series offers this feature together with the standard multi-user function. It also allows you to encode the transmitters via cable, by connecting them to the receiver. This can dramatically speed up operations, especially in systems where many transmitters are using one code.

### Limits to use

Model	Range (m / ft)
T152	50 - 200 / 160' - 650'
T154	50 - 200 / 160' - 650'
T158	50 - 200 / 160' - 650'

### Dimensions



RBE4N - RBE42

Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	T152	T154	T158
Frequency (MHz)	30,900	30,900	30,900
Batteries	1 x 12V AAA battery	1 x 12V AAA battery	1 x 12V AAA battery
Dimensions (mm)	45 x 92 x 15	45 x 92 x 15	45 x 92 x 15
Combinations	16,777,216	16,777,216	16,777,216
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F
Material	ABS	ABS	ABS
Weight (g)	34	56	56

## The complete range

### 30,900 MHz transmitters



- 001T152 2 channel multi-user transmitter. 16,777,216 combinations.
- 001T154 4 channel multi-user transmitter. 16,777,216 combinations.
- 001T158 8 channel multi-user transmitter. 16,777,216 combinations.

### 30,900 MHz receivers



- 001AF150 Plug-in radio frequency card.



- 001RBE4N 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module..
- 001RBE42 230V A.C. IP54 surface mount 4 channel radio module.

### Accessories



- 001TOP-A309N Antenna.
- 001TOP-RG58 Antenna cable.

# Top

## Radio remote control system

### Simple and handy transmitters.

The superheterodyne radio systems are specifically designed to meet all the needs of modern automation systems. Elegant, lightweight design, small dimensions and multi-user capability are the key features of these transmitters.



**Standard multi-user mode.**  
The latest TOP series remotes\* emit their own separate code-differentiated commands; Perfect for those applications where multi-user functionality is a must. (i.e. apartment buildings)



**Easy coding.**  
The Top series lets you memorise codes from "transmitter to transmitter" through its radio-encoding function. So, you can easily generate copies if you have the original.\*



**Double function.**  
The latest TOP series\* models can house a TAG transponder sensor which also lets you use them just like a proximity card in conjunction with TSP00 and TSP01 devices.



**Lightweight and compact.**  
Top 868,35 MHz transmitters offer further flexibility to the TOP range of remotes. Containing all the user friendly features of our regular TOP remotes with a new radio frequency.



\* Applicable to the following models only:  
TOP-432NA, TOP-434NA, TOP-862NA, TOP-864NA

433,92 MHz

868,35 MHz



## Advantages of Top

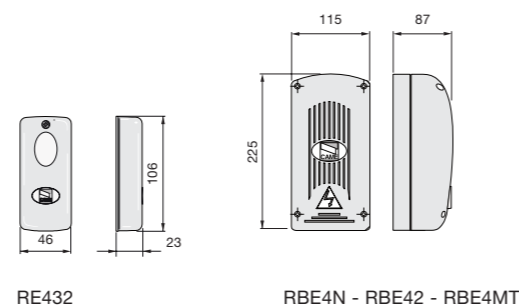
Complete with a range of 5 radio transmitters and 6 different receivers, the 433,92 MHz TOP series offers a high quality solution characterised by its special ergonomic style and refined design. TOP is the popular solution for radio controlling any type of installation, be that residential or commercial.

The new 868,35 MHz TOP transmitter is a high quality product characterised by its special ergonomic style and refined design. It is designed for residential environments such as apartment buildings.

### Limits to use

Model	Range (m / ft)
TOP-432NA	50 - 150 / 160' - 500'
TOP-434NA	50 - 150 / 160' - 500'
TOP-432A	50 - 150 / 160' - 500'
TOP-434A	50 - 150 / 160' - 500'
TOP432S	50 - 150 / 160' - 500'
TOP-862NA	50 - 150 / 160' - 500'
TOP-864NA	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	TOP-432NA	TOP-434NA	TOP-432A	TOP-434A	TOP-432S	TOP-862NA	TOP-864NA
Frequency (MHz)	433,92	433,92	433,92	433,92	433,92	868,35	868,35
Batteries	2 x CR2016 Lithium		1 x 12V AAA battery			2 x CR2016 Lithium	
Dimensions (mm)	32 x 68 x 13	40 x 85 x 12	45 x 92 x 15	45 x 92 x 15	31 x 65 x 15	32 x 68 x 13	40 x 85 x 12
Combinations	4,096	4,096	1,024	1,024	1,024	4,096	4,096
Operating temperature (°C/°F)			-20 °C to 55 °C		-4 °F to 131 °F		
Material	ABS	ABS	ABS	ABS	ABS	ABS	ABS
Weight (g)	16	22	44	45	25	16	22

## The complete range

### 433,92 MHz and 868,35 MHz transmitters

- 001TOP-432NA** 2 channel 433,92 MHz multi-user transmitter. 4,096 combinations with self-learning feature.
- 001TOP-434NA** 4 channel 433,92 MHz multi-user transmitter. 4,096 combinations with self-learning feature.
- 001TOP-862NA** 2 channel 868,35 MHz multi-user transmitter. 4,096 combinations with self-learning feature.
- 001TOP-864NA** 4 channel 868,35 MHz multi-user transmitter. 4,096 combinations with self-learning feature.
- 001TOP-432A** 2 channel 433,92 MHz transmitter 1,024 combinations.
- 001TOP-434A** 4 channel 433,92 MHz transmitter 1,024 combinations.
- 001TOP-432S** 2 channel miniaturized 433,92 MHz transmitter. 1,024 combinations.

### 433,92 MHz and 868,35 MHz receivers

- 001AF868** 868,35 MHz Plug-in radio frequency card.
- 001AF43S** 433,92 MHz Plug-in radio frequency card.
- 001AF43SM** 433,92 MHz Plug-in radio frequency card with memory to store up to 128 codes (users).
- 001RE432** 12 - 24V A.C.-D.C. IP54 surface mount 2 channel 433,92 MHz receiver.
- 001RE862** 12 - 24V A.C.-D.C. IP54 surface mount 2 channel 868,35 MHz receiver.
- 001RBE4N** 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module.
- 001RBE42** 230V A.C. IP54 surface mount 4 channel radio module.
- 001RBE4MT** 12 - 24V A.C. - D.C. IP54 surface mount 4 channel multi-user receiver to store up to 999 codes (users).

### Accessories

- 001TOP-A433N** 433,92 MHz Antenna.
- 001TOP-A862N** 868,35 MHz Antenna
- 001P3V** Package of 2 x 3V D.C. CR2016 lithium batteries (for TOP-432NA - TOP-434NA - TOP-862NA - TOP-864NA).
- 009TAG** Glass transponder bulb for TSP01 (It can be housed on TOP-432NA - TOP-434NA - TOP-862NA - TOP-864NA)
- 001TOP-RG58** Antenna cable.



# Top

## Radio remote control system

30,900 MHz

### The digitally encoded transmitter.

Top 30,900 MHz series transmitters are all fitted with digital encoding. This technology permits the emitted radio code to be managed using the same keys found on the remote. This guarantees security and ease-of-use.



### Digital coding.

The digital encoding function makes it possible to use the transmitter's buttons to insert codes. The system thereby makes the code unreadable in the event the transmitter is opened.



### The internal battery.

The transmitters of the Top 30,900 MHz series are powered by a regular 12V AAA battery.



### Double encoding.

Top-3022M model has been designed to meet the needs of light multi-user residential applications. Each pair of buttons can be encoded with a different code.



## Advantages of 30,900 MHz Top

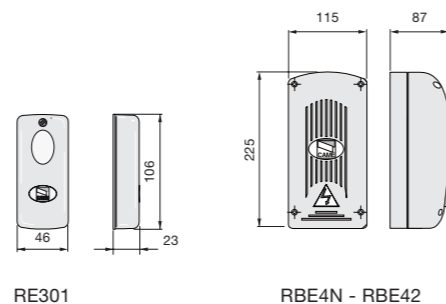
The signal emitted by the transmitters of the Top 30,900 MHz series is quartz modulated. This provides for maximum selectivity and precision. All remotes in this series are free of the traditional encoding "dip switches" so the code is well-protected even if the device is opened.

The 3022M model with digital "double-code" is perfect for lighter multi-use situations (homes and apartments).

### Limits to use

Model	Range (m / ft)
TOP-302A	50 - 150 / 160' - 500'
TOP-304A	50 - 150 / 160' - 500'
TOP-3022M	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	TOP-302A	TOP-304A	TOP-3022M
Frequency (MHz)	30,900	30,900	30,900
Batteries	1 x 12V AAA battery	1 x 12V AAA battery	1 x 12V AAA battery
Dimensions (mm)	58 x 113 x 23	58 x 113 x 23	40 x 88 x 20
Combinations	1,024	1,024	1,024
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F
Material	ABS	ABS	ABS
Weight (g)	16	22	30

## The complete range

### 30,900 MHz transmitters



001TOP-302A 2 channel transmitter 1,024 combinations.

001TOP-304A 4 channel transmitter 1,024 combinations.

001TOP-3022M 2 channel multi-user transmitter 1,024 combinations.

### 30,900 MHz receivers



001AF30 Plug-in radio frequency card.



001RE301 12 - 24V A.C.-D.C. IP54 surface mount one-channel receiver



001RBE4N 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module.

001RBE42 230V A.C. IP54 surface mount 4 channel radio module.

### Accessories



001TOP-A309N Antenna.



001TOP-RG58 Antenna cable.



# Touch

40,685 MHz

## Radio remote control system

The elegant, multi-functional 8 channel transmitter. Touch offers over 16 million possible personal code combinations, to be used over 8 different channels. Stylish, elegant and very ergonomic, with a front panel made of polished polycarbonate and a "Soft Touch" rubber grip; Touch doesn't just transmit radio signals – it also transmits style.



**Diversified light signals.** Depending on the operating channel, the transmitter sends a red signal for the first channel sequence, and a light-blue one for the second.



**Sensitive buttons.** Touch's ergonomics makes this transmitter easy to use. Its sensitive buttons protect the system from involuntary activation.



**Harmonized global frequency.** Touch works on a frequency that is not limited by prevailing EU and UK regulations, making it more suitable for commercial and industrial applications.



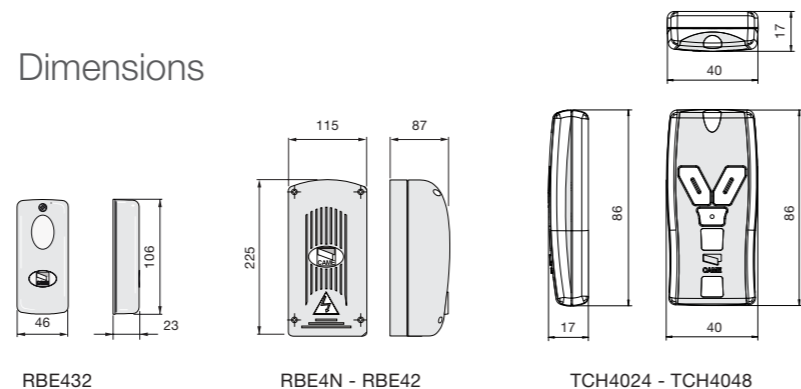
## Advantages of 40,685 MHz Touch

Touch is the latest generation radio transmitter that combines quartz technology with the practicality of multi-use functioning. A single remote control for all automation systems, at home and in the workplace; Pedestrian passageways, gates, overhead garage doors, car-park security, indoor and outdoor lighting, or roller shutters. Touch allows you to create a complete integrated automation system for home or business.

### Limits to use

Model	Range (m / ft)
TCH-4024	50 - 150 / 160' - 500'
TCH-4048	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	TCH-4024	TCH-4048
Frequency (MHz)	40.685	40.685
Batteries	1 x 12V AAA battery	1 x 12V AAA battery
Dimensions (mm)	40 x 86 x 17	40 x 86 x 17
Combinations	16,777,216	16,777,216
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Material	Polycarbonate - Rubber	Polycarbonate - Rubber
Weight (g)	45	45

## The complete range

### 40,685 MHz transmitters



- 001TCH-4024 2 + 2 channel multi-user transmitter 16,777,216 combinations with self-learning function.
- 001TCH-4048 4 + 4 channel multi-user transmitter 16,777,216 combinations with self-learning function.

### 40,685 MHz receivers



001AF40 Plug-in radio frequency card.



001RE402 12 - 24V A.C.-D.C. IP54 surface mount 2 channel receiver



001RBE4N 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module.



001RBE42 230V A.C. IP54 surface mount 4 channel radio module.

### Accessories



001TOP-A40 Antenna.

001TOP-RG58 Antenna cable.

009TAG Glass transponder bulb for TSP01.



# Twin



433,92 MHz rolling code

## Radio remote control system

More protection, more convenience.

Twin is the new CAME transmitter with a 12 bit "Duplication Code Lock". This system ensures unauthorised duplication of remote controls is restricted, allowing additional remotes to be cloned only by administrators who have the original code.



**CODE LOCK.**  
The administrator's code combination is inserted using the dip-switches. The code is then activated with the transmitter buttons.



**CODE LOCK protected self-learning mode.**  
TWIN allows those who know the dip-switch code to memorise commands from "transmitter to transmitter" through its radio-encoding function. Additional remotes cannot be cloned without knowing the secret code.



**Compatible with Top and Tam.**  
If they are used without Code Lock, Twin remotes are compatible with 433.92MHz Top and Tam series receivers.



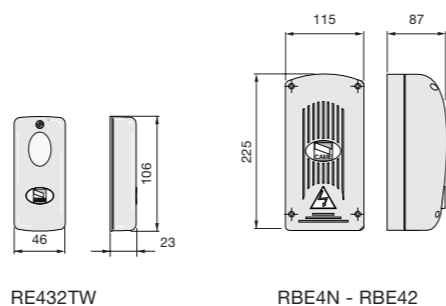
## Advantages of 433,92 MHz Twin

The new TWIN multi-user radio remote controls are available in 2 or 4 button variations. They feature rolling code technology utilising 4 billion possible combinations, and are programmable in standard mode (which is compatible with the TOP and TAM series receivers) or "Code-locked" mode to protect the device from unauthorised duplication. A TAG transponder bulb may also be inserted to allow TWIN to activate TSP00 and TSP01 proximity sensors.

### Limits to use

Model	Range (m / ft)
TWIN2	50 - 150 / 160' - 500'
TWIN4	50 - 150 / 160' - 500'

### Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	TW02	TW04
Frequency (MHz)	433,92	433,92
Batteries	2 x CR2016 Lithium	2 x CR2016 Lithium
Dimensions (mm)	32 x 68 x 13	32 x 68 x 13
Combinations	4,294,967,896	4,294,967,896
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Material	ABS	ABS
Weight (g)	16	16

## The complete range



### 433,92 MHz transmitters with KEY CODE

- 001TWIN2 2 channel rolling code multi-user transmitter 4,294,967,896 combinations with KEY CODE.
- 001TWIN4 4 channel rolling code multi-user transmitter 4,294,967,896 combinations with KEY CODE.



### 433,92 MHz receivers

- 001AF43TW Plug-in radio frequency card.
- 001RE432TW 12 - 24V A.C.-D.C. IP54 surface mount 2 channel receiver.
- 001RBE4N 12 - 24V A.C.-D.C. IP54 surface mount 4 channel radio module.
- 001RBE42 230V A.C. IP54 surface mount 4 channel radio module.



### Accessories

- 001TOP-A433N Antenna.
- 001P3V Package of 2 x 3V D.C. CR2016 lithium batteries.
- 001TOP-RG58 Antenna cable.
- 009TAG Glass transponder bulb for TSP01.





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[www.cameuk.com](http://www.cameuk.com)



## Industrial door operators



## The models

CAME provides a full range of motors for large sliding, sectional or folding doors, which are suited for any type of system; including extra-large doors, or where space limitations are an issue and for roller shutters where the versatile H motor is capable of solving most usage requirements.

The table below lists the full range of products for industrial doors and roller shutters in relation to the type of application and the dimensions of the door, to help you quickly choose the right product for the job.

Use	RESIDENTIAL	APARTMENTS	INDUSTRIAL	INTENSIVE USE	
Series	Model	AUTOMATIC SWING DOORS - Max leaf width (m / ft) - Max leaf weight (Kg / lb)			
F4000	F4000	2 - 6'5" / 300 - 660	2 - 6'5" / 300 - 660		
F4000	F4024	2 - 6'5" / 300 - 660	2 - 6'5" / 300 - 660	YES	
Series	Model	FOLDING DOORS (ONE LEAF) - Max leaf width (m / ft) - Max leaf weight (Kg / lb)			
F4000	F4000	1.5 - 5' / 200 - 440	1.5 - 5' / 200 - 440		
F4000	F4024	1.5 - 5' / 200 - 440	1.5 - 5' / 200 - 440	YES	
Series	Model	SLIDING AND SLIDING FOLDING DOORS - Max leaf width (m / ft)			
Cbx	C-BX	11 / 36'	11 / 36'	11 / 36'	
Cbx	C-BXE	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXK	11 / 36'	11 / 36'	11 / 36'	
Cbx	C-BXEK	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXET	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXE24	5.5 / 18'	5.5 / 18'	5.5 / 18'	YES
Cbx	C-BXT	11 / 36'	11 / 36'	11 / 36'	
Series	Model	SECTIONAL DOORS WITH "DIRECT GRIP" TRANSMISSION - Max height door (m / ft)			
Cbx	C-BX	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXE	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXK	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXEK	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXET	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Cbx	C-BXE24	5.5 / 18'	5.5 / 18'	5.5 / 18'	YES
Cbx	C-BXT	5.5 / 18'	5.5 / 18'	5.5 / 18'	
Series	Model	SECTIONAL DOORS WITH CHAIN TRANSMISSION - Max height door (m / ft)			
Cbx	C-BX	8.5 / 28'	8.5 / 28'	8.5 / 28'	
Cbx	C-BXE	8.5 / 28'	8.5 / 28'	8.5 / 28'	
Cbx	C-BXK	8.5 / 28'	8.5 / 28'	8.5 / 28'	
Cbx	C-BXEK	8.5 / 28'	8.5 / 28'	8.5 / 28'	
Cbx	C-BXET	8.5 / 28'	8.5 / 28'	8.5 / 28'	
Cbx	C-BXE24	8.5 / 28'	8.5 / 28'	8.5 / 28'	YES
Cbx	C-BXT	8.5 / 28'	8.5 / 28'	8.5 / 28'	
● 230V A.C. ● 24V D.C. ● 230-400V A.C. 3-phase					
Series	Model	ROLLER SHUTTERS - Lift capacity (Kg / lb)			
H	H1003	120 / 265			
H	H1103	120 / 265			
H	H2003	200 / 440	200 / 440	200 / 440	
H	H2103	200 / 440	200 / 440	200 / 440	
● 230V A.C.					

Compliant with EN12453 and EN12445 safety norms.



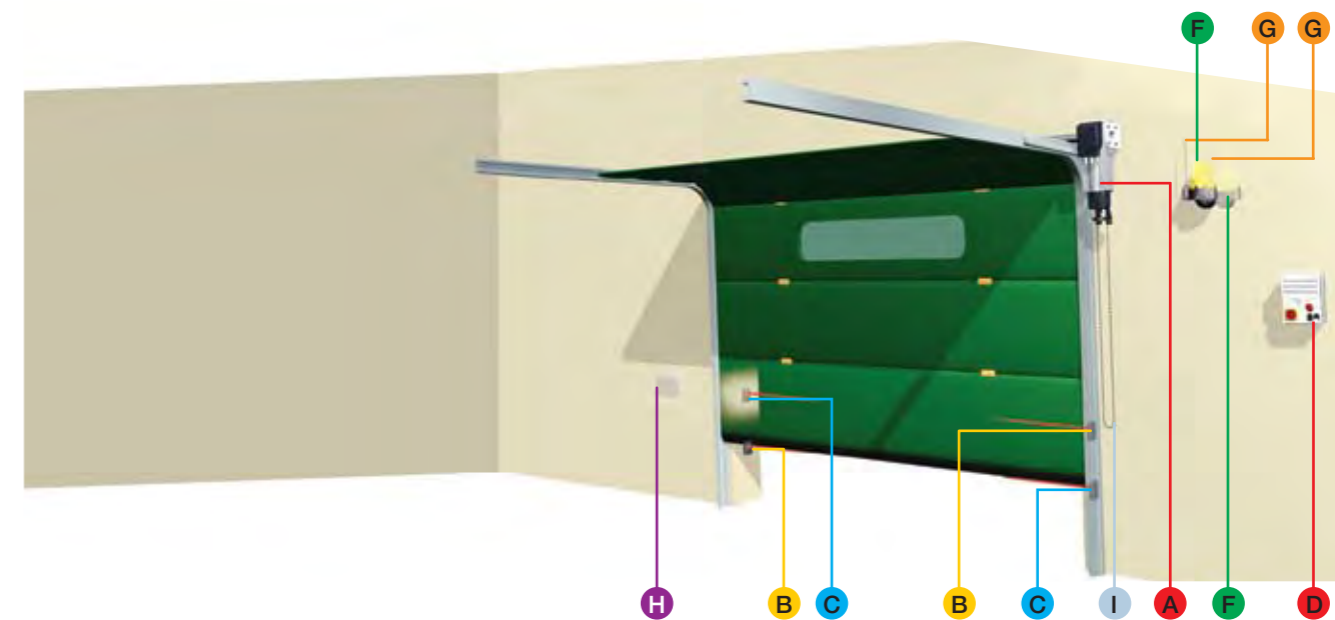
## Standard INDUSTRIAL installation

TRAINED users and positioned on PUBLIC STREET

A typical system design will include activation via "remote control radio command", and automation monitoring using the required safety devices; such as photocells, sensitive safety edges and flashing light.

### Important

In industrial passageways used by heavy-duty vehicles, such as forklifts, it is always advisable to install infrared beam photocells at two different heights, to prevent the doors from closing should vehicles stop in the middle of the passageway. A flashing light on the inside **and** outside of the doorway is also extremely useful.



The scheme shown applies to all Cbx series motors fitted on sectional doors with direct transmission

### Standard issue

- A** Motor
- B** TX wireless photocells
- C** TX/RX wireless photocells
- D** RX wireless photocells
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Hanging release device

Cable length (m)	<10	10 - 20	20 - 30	> 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"	> 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2GxAWG13
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20
● Flashing light 24V A.C. -D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20
● Antenna		RG58 Max 10m	32'8" ft	

\*n° = see documentation ● European standards ● US standards

### ENCODER-based solutions for maximum safety



On certain models, the Cbx series includes an ENCODER-based system to manage the endstops and to detect any obstacles on the door's line of movement, which dramatically increases safety levels.

### Eight channels in one single transmitter



The T438 model allows users the possibility to control you up to eight devices from one remote control. It is extremely useful in industrial contexts where commands often need to be centralised. It is practical while providing great range, along with 16 million code combinations.

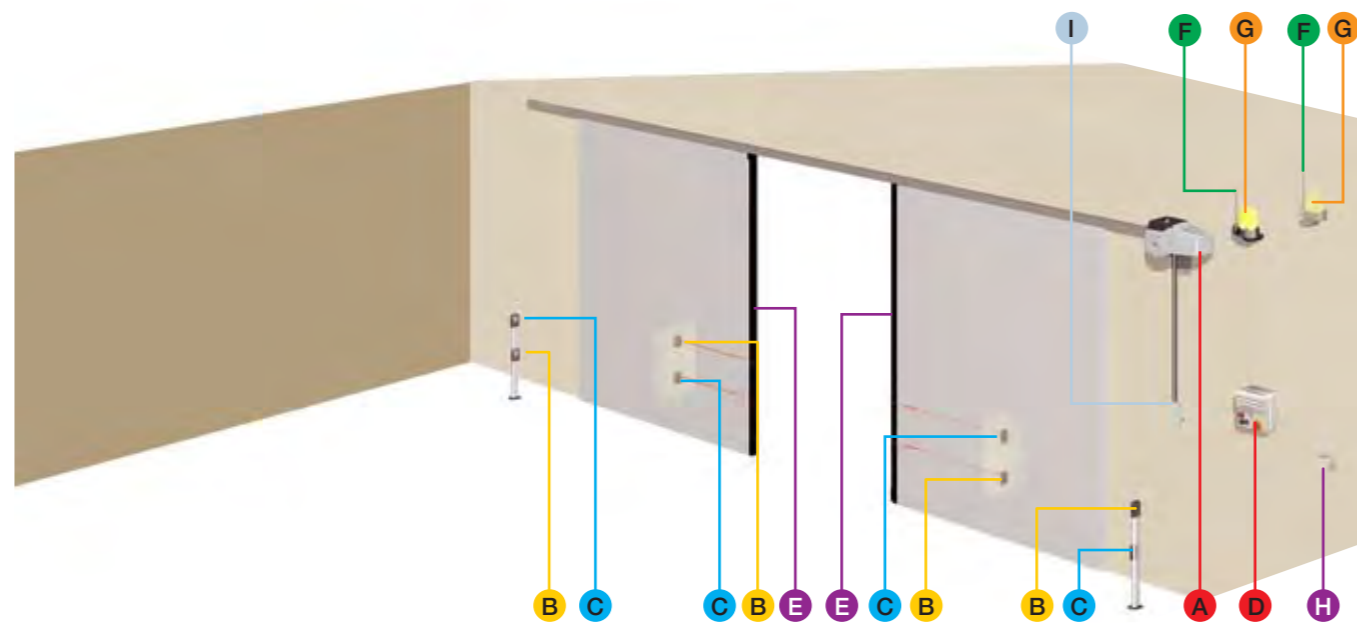
## Standard INDUSTRIAL installation

TRAINED users and positioned on PUBLIC STREET

A typical system design will include activation via "remote control radio command", and automation monitoring using the required safety devices; such as photocells, sensitive safety edges and flashing light.  
**The B + C type minimal solution is therefore required. (ref. page 8)**

### Important

In industrial passageways used by heavy-duty vehicles, such as forklifts, it is always advisable to install infrared beam photocells, at two different heights, to prevent the doors from closing should vehicles stop in the middle of the passageway. A flashing light on the inside **and** outside of the doorway is also extremely useful.



The scheme shown applies to all Cbx series motors fitted on either sliding doors or folding-sliding doors.

### Standard issue

- A** Motor
- B** TX wireless photocells
- C** TX/RX wireless photocells
- D** Control Panel
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Hanging release device

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Antenna		RG58 Max 10m	32'8" ft

\*n° = see documentation ● European standards ● US standards

### Dir: the synchronised photocell



The DIR photocells' operation principle consists of auto-synchronising the infrared beams between receiver and transmitter. This function allows for multiple installation requirements that are typical in industrial settings, where devices need to be placed at two different heights.

### Touch: the 4+4 channel quartz remote control



8 channels provide 16 million possible code combinations, making Touch a powerful and reliable transmitter. Many applications can be controlled using just one device. Touch has been designed and manufactured to the highest standards, making it a robust, ergonomic and user-friendly remote.

## Standard INDUSTRIAL installation

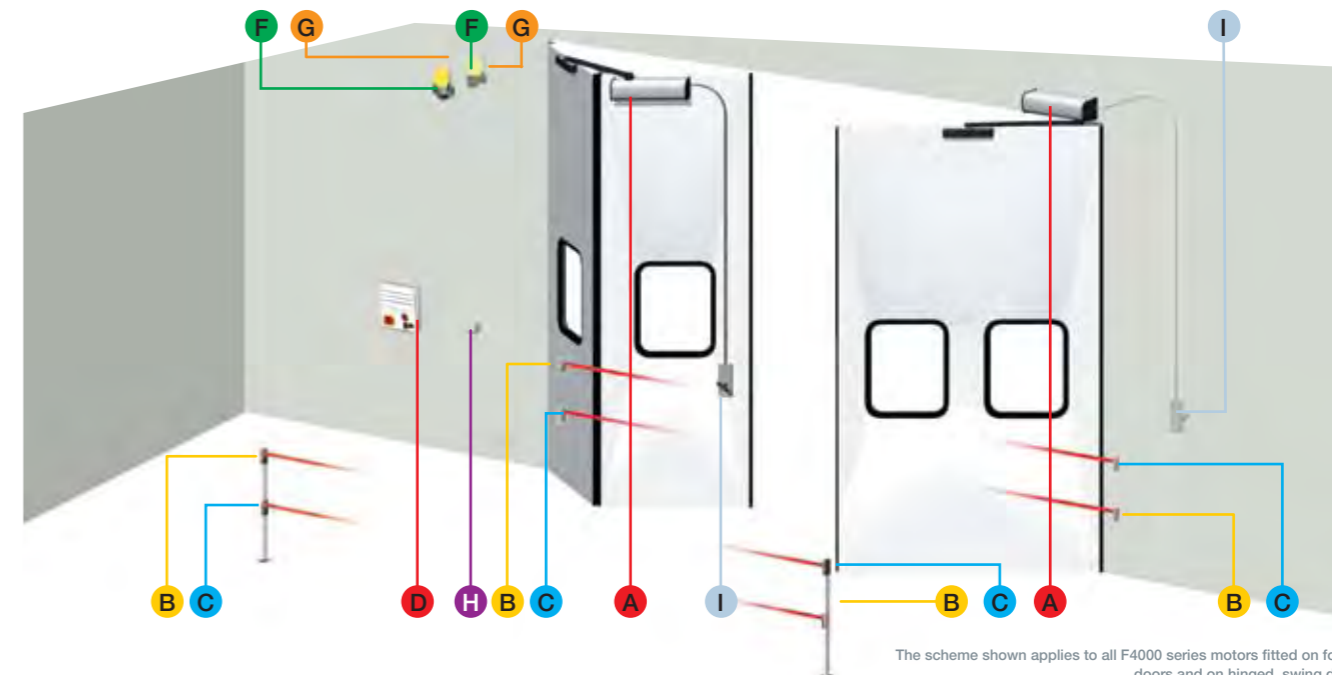
TRAINED users and positioned on PUBLIC STREET

A typical system design will include activation via "remote control radio command", and automation monitoring using the required safety devices; such as photocells, sensitive safety edges and flashing light.  
**The B + C type minimal solution is therefore required. (ref. page 8)**



### Important

If using EN12445 – EN12453 tested motors and control panels (highlighted with the green EN Tested mark), then sensitive safety edges need not be installed, provided that the required impact-force measurements (taken for each individual installation by the engineer responsible) are compliant with the parameters dictated by the Standards.



The scheme shown applies to all F4000 series motors fitted on folding doors and on hinged, swing doors.

### Standard issue

- A** Motor
- B** TX wireless photocells
- C** TX/RX wireless photocells
- D** Control Panel
- F** Flashing light
- G** Antenna
- H** Selector switch (key - code - card)
- I** Hanging release device

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup> 3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup> 4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup> 2GxAWG13
○ Endstop microswitches	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup> 2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup> 2xAWG20
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup> 4xAWG20
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG15
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup> 2xAWG17
● Commands	*n°x0.5mm <sup>2</sup>	n°xAWG20	*n°x0.5mm <sup>2</sup> n°xAWG20
● Antenna		RG58 Max 10m	32'8" ft

\*n° = see documentation ● European standards ● US standards

### Magnetic key entry



The practical SEM-2's magnetic key is a valid alternative for locally commanding any automation. Especially suited to industrial settings, SEM-2 is made of aluminium and is IP54-rated for outdoor use.

### Key-protected safe release



The CMS pull-cord manual release system is the ideal solution to connect hard to reach motors. Indispensable in industrial applications, CMS is made of steel and is protected by a customised key.

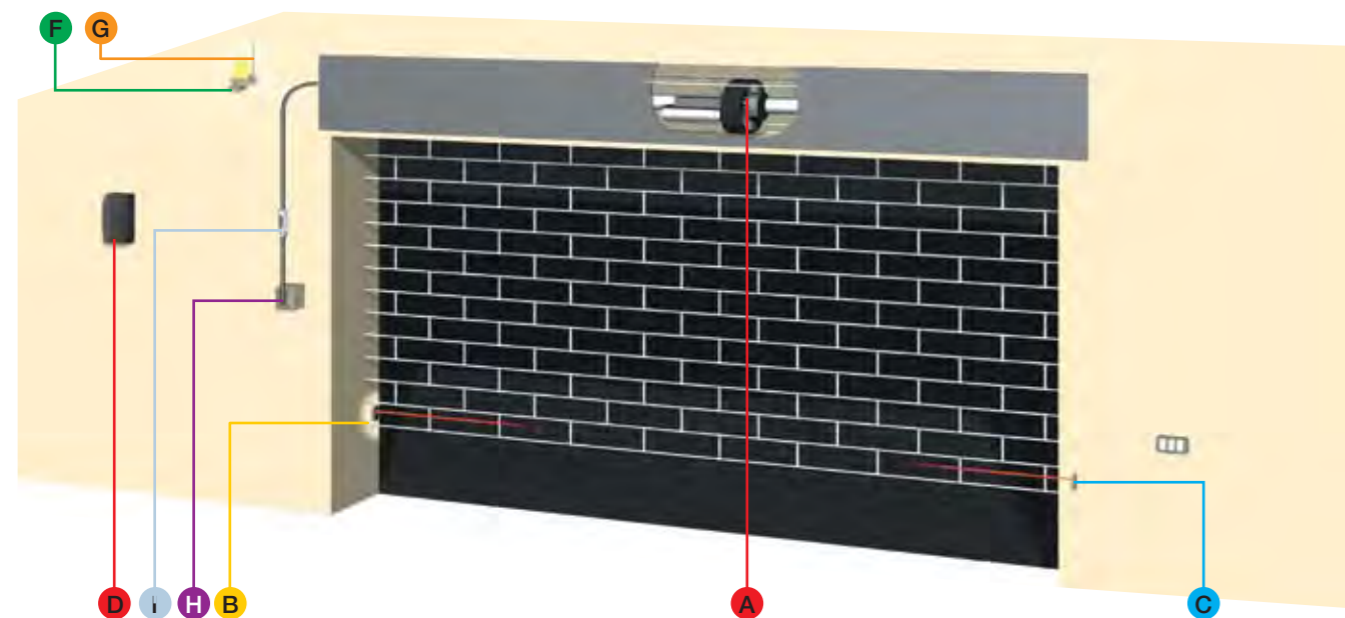
## Standard ROLLER SHUTTER installation

TRAINED users and positioned on PUBLIC STREET

The automation, which would usually triggered by a nearby button, still requires safety devices to prevent user risks.

### Important

For safety reasons it is vital to set up a system with the right control panel that integrates every application with low-voltage commands capable of controlling all safety accessories such as infrared beam photocells and flashing light.



### Standard issue

- A** Motor
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Control panel
- F** Flashing light
- G** Antenna
- H** External cord-operated release device with command button
- I** Internal cord-operated release device

Cable length (m)	<10	10 - 20	20 - 30	30 - 40
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"	
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG14
● Power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15
● Motor power supply 230-400V A.C. 3-phase 750W Max	4Gx1.5mm <sup>2</sup>	4GxAWG15	4Gx1.5mm <sup>2</sup>	4GxAWG15
● Motor power supply 24V D.C. 400W Max	2Gx1.5mm <sup>2</sup>	2GxAWG15	2Gx2.5mm <sup>2</sup>	2GxAWG13
○ Endstop microswitches	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20
● Flashing light 24V A.C.-D.C. 25W	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2x1mm <sup>2</sup>
● Flashing light 230V A.C. (120V A.C.) 25W	2x1.5mm <sup>2</sup>	2xAWG15	2x1.5mm <sup>2</sup>	2xAWG15
● TX Photocell	2x0.5mm <sup>2</sup>	2xAWG20	2x0.5mm <sup>2</sup>	2x0.5mm <sup>2</sup>
● RX Photocell	4x0.5mm <sup>2</sup>	4xAWG20	4x0.5mm <sup>2</sup>	4x0.5mm <sup>2</sup>
● Electric lock 12V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2x1.5mm <sup>2</sup>
● Electric lock 24V D.C.	2x1mm <sup>2</sup>	2xAWG17	2x1mm <sup>2</sup>	2xAWG17
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*x0.5mm <sup>2</sup>
● Antenna		RG58 Max 10m	32'8" ft	

\*n° = see documentation ● European standards ● US standards

### External release protected by lock & key



The H3001 container is installed on the outside of the building. It comes complete with the pull-cord manual release system, which is indispensable during a power cut. In the locked container, there is also a convenient command button to activate the automation.

### The control panel for a compliant installation



The ZR24 is the CAME control panel specifically designed to be installed on rolling shutters. The container's compact size makes it easy to install and commission for remote control and to connect up to the safety devices, thus making it compliant with current technical standards.

## Industrial door operators

OPERATORS – SERIES	F4000	F4000 C-BX C-BXK	F4024	C-BX C-BXK F4000	F4024	C-BXE C-BXEK	C-BXE24	C-BXET	C-BXT	H Roller Shutter Operator
CARD – PANEL	ZA3C	ZM3EC	ZL170N	ZC3 ZC3C	ZL19N	ZCX10 ZCX10C	ZL80 ZL80C	ZT5 ZT5C	ZT6 ZT6C	ZR24
FUNCTIONAL FEATURES										
SELF-DIAGNOSIS of active safety devices function		●		●	●	●	●	●	●	
Opening and closing PREFLASHING function	●	●	●	●	●	●	●	●	●	
REOPENING during closing function	●	●	●	●	●	●	●	●	●	●
RECLOSING during opening function	●	●	●	●	●	●	●	●	●	●
Obstacle STALL function		●		●	●	●	●	●	●	
TOTAL STOP function	●	●	●	●	●	●	●	●	●	●
PARTIAL STOP of the gate-leaf function	●	●	●	●	●	●	●	●	●	●
OBSTACLE DETECTION function on photocells	●	●	●	●	●	●	●	●	●	●
ENCODER operation		●				●	●	●	●	
MOVEMENT CONTROL and obstacle detection device		●			●	●	●	●	●	
AMPEROMETRIC DETECTION function		●	●		●	●	●	●	●	
SAFETY										
1 leaf PEDESTRIAN OPENING function		●			●					
1 leaf PARTIAL OPENING function	●	●		●	●	●	●	●	●	
TRANSMITTER OPEN ONLY function	●	●	●	●	●	●	●	●	●	
OPEN ONLY button connection function	●	●	●	●	●	●	●	●	●	
CLOSE ONLY button connection function	●	●	●	●	●	●	●	●	●	
OPEN-STOP-CLOSE-STOP button connection function	●	●	●	●	●	●	●	●	●	●
OPEN-CLOSE-REVERSE button connection function	●	●	●	●	●	●	●	●	●	●
MAINTAINED ACTION command function	●	●	●	●	●	●	●	●	●	●
1st leaf DELAYED CLOSING function	●	●			●					
2nd leaf DELAYED CLOSING function	●	●			●					
IMMEDIATE CLOSING function										
EMERGENCY RELEASE function from the remote control										
COMMAND										
FLASHING LIGHT connection	●	●	●	●	●	●	●	●	●	●
CYCLE LAMP connection	●	●	●	●	●	●	●	●	●	●
COURTESY LAMP connection				●						●
Antenna connection	●	●	●	●	●	●	●	●	●	●
24V ACCESSORIES connections	●	●	●	●	●	●	●	●	●	●
OPEN WARNING LIGHT connection	●	●	●	●	●	●	●	●	●	●
CLOSED WARNING LIGHT connection										●
Contact output for 2nd RADIO CHANNEL	●	●	●	●	●	●	●	●	●	●
Adjusting RUNNING TIME	●	●	●	●	●	●	●	●	●	●
EXTRACTABLE, NUMBERED connection terminals	●	●	●	●	●	●	●	●	●	●
SELF-LEARNING function of the transmitter's RADIO code	●	●	●	●	●	●	●	●	●	●
RAM BLOW function to aid the release of the electrolock	●	●	●	●	●	●	●	●	●	●
Adjustable AUTOMATIC RE-CLOSING TIME function	●	●	●	●	●	●	●	●	●	●
ELECTROLOCK/ELECTRORELEASE connection output	●	●	●	●	●	●	●	●	●	●
OPENING AND/OR CLOSING deceleration	●	●	●	●	●	●	●	●	●	●
EMERGENCY-BATTERY operation (optional)					●					●
MASTER-SLAVE operation mode						●	●	●	●	●
Adjustable RUNNING SPEED AND DECELERATION function		●	●		●		●	●	●	●
Warning DISPLAY		●	●				●	●	●	●
Electronic BRAKE				●				●	●	●
CONTROL and warning led	●	●	●	●	●	●	●	●	●	●
SELF-LEARNING function of the opening and closing endstops										●

● 230V A.C. ● 24V D.C. ● 230-400V A.C. 3-phase

# F4000



## Folding door operators

The operator for any type of folding door.  
The F4000 operator is specifically engineered for bi-folding industrial doors. Due to its versatility however, it can also be used in apartment-block settings. The F4000 is also suitable for powering two-leafed, hinged swing doors, which are typically found in small industrial environments.



**Easy-to-use mounting plate.**  
The F4000 comes with an aluminium alloy mounting plate to enable fast installation onto the door leaf or lintel.



**One versatile model.**  
F4000 and F4024 are designed for universal left or right installation and so have two entries for the gear shaft.



**Even outdoors.**  
The F4000 and F4024 operator are designed for external application and come with weather-resistant gaskets.



## The advantages of the F4000

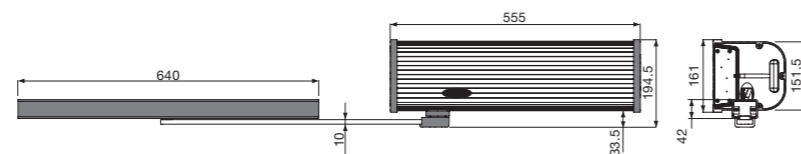
The F4000 series motors are the ideal solution for medium and large bi-folding industrial doors. Attached to the lintel or door leaf (depending on the space available), they provide a safe, linear motion. They are also well suited for swing doors used in residential premises, and can be used to operate swing-type garage doors.

### Limits to use

Model	F4000	F4024
Application	Swing doors with two leaves	Folding doors
Width of door leaf (m / ft)	2 / 6.5	2 / 6.5
Weight of door leaf (Kg / lb)	300 / 660	200 / 440

● 230V A.C. ● 24V D.C.

### Dimensions



F4004 SLIDE ARM

F4000 - F4024

Dimensions in millimetres (25.4 mm = 1 in)

## 24V F4024 is 24 Volt

24V technology increases the safety level of the system, since it allows you to adjust the run-speed, enables re-opening during closing, and above all, it enables electronic obstacle detection.

## Technical features

Type	F4000	F4024
Protection rating	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60 Hz	24 D.C.
Rotation speed (RPM)	9	9
Current draw (A)	1,9	15 Max
Power (W)	235	180
Reduction ratio (i)	1/150	1/150
Duty cycle (%)	30	Intensive use
Torque (Nm)	340	470
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F
Motor's thermo-protection (°C/°F)	150/302	-

● 230V A.C. ● 24V D.C.

## The complete range

### 230V A.C. operator



001F4000 Self-locking operator.

### 230V A.C. control panels



002ZA3C Control panel with radio decoder, emergency stop button, up/down activation buttons and power isolation switch.



002ZC3 Control panel with movement control function, built-in radio decoder and safety device diagnostics.



002ZC3C Control panel with movement control function, built-in radio decoder, emergency stop and activation buttons, power isolation switch and safety device diagnostics.



002ZM3EC Multifunction control panel, complete with emergency stop and activation buttons, power isolation switch, digital display, built-in radio decoder and safety device diagnostics.

### 24V D.C. operator and control panels



001F4024 Self-locking operator.



002ZL170N Control panel for one operator with built-in radio decoder.



002ZL19N Control panel for two operators with built-in radio decoder.



002LB18 Casing with emergency card, fitted to house three 12V - 7 Ah batteries - for ZL170N and ZL19N control panels.

### Accessories



001F4004 Transmission slide arm and slide guide.



001CMS Manual release handle with customized key and cord reset. L = 7 m / 23 ft.



001C002 Pendulum release system.

### Accessories

Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189



# Cbx

## Industrial door operators

### Multi-functional automation.

Designed for sectional doors that have “direct transmissions”, CBX and is also ideal to power all industrial, sliding and sliding-folding doors. A new concept in automation with a whole range of motors to meet all needs: simply and without modifications to the door.



**Free installation.**  
Cbx can be installed vertically to the ground, solving those frequent lack-of-space issues involving industrial doors.



**Manual opening.**  
The manual override mechanism is equally at home with horizontal or vertical automation.



**Electronic control.**  
Some models in the Cbx series feature an encoder for electronic control of the door's movement. This guarantees maximum movement precision and safety.



## The advantages of the Cbx

Innovative design plus a compact structure make Cbx the preferred solution for automating large-sized industrial doors.

A sleek compact design, the CBX series is an innovative solution for automating industrial doors. It comes in 5 models which can be powered by 230V A.C., 24V D.C. and 3-phase 230-400V A.C.

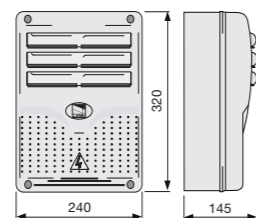
The beauty of the CBX motor is its versatility. It can be installed vertically or horizontally and the winch for the manual release can be worked from the ground with the appropriate accessories.

### Limits to use

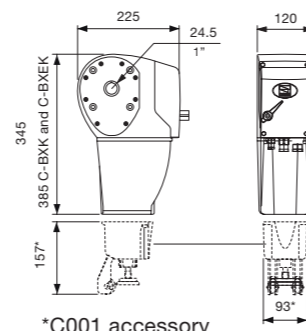
Model	C-BX	C-BXT	C-BXE	C-BXET	C-BXE24	C-BXK	C-BXEK
Max height of sectional door with direct grip transmission (m / ft)	5.5 / 18	5.5 / 18	5.5 / 18	5.5 / 18	5.5 / 18	5.5 / 18	5.5 / 18
Max height of sectional door with chain transmission (m / ft)	8.5 / 28	8.5 / 28	8.5 / 28	8.5 / 28	8.5 / 28	8.5 / 28	8.5 / 28
Max door width sliding doors and sliding folding doors (m / ft)	11 / 36	11 / 36	5.5 / 18	5.5 / 18	5.5 / 18	11 / 36	5.5 / 18

● 230V A.C. ● 24V D.C. ● 230-400V A.C. 3-phase

### Dimensions



All the control panel models and CBX



\*C001 accessory

Dimensions in millimetres (25.4 mm = 1 in)

### Technical features

Type	C-BX	C-BXE	C-BXE24	C-BXT	C-BXET	C-BXK	C-BXEK
Protection rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230-400 A.C. 3-phase 50/60Hz	230-400 A.C. 3-phase 50/60Hz	230 A.C.	230 A.C.
Motor power supply (V)	230 A.C. 50/60Hz	230 A.C. 50/60Hz	24 D.C.	230-400 A.C. 3-phase 50/60Hz	230-400 A.C. 3-phase 50/60Hz	230 A.C. 50/60Hz	230 A.C. 50/60Hz
Current draw (A)	2.2	2.2	9 Max	2.5	2.5	3.6	3.6
Power (W)	450	450	240	780	780	750	750
Rotation speed (RPM)	21.5	21.5	26.5	21.5	21.5	21.5	21.5
Duty cycle (%)	30	30	50	50	50	30	30
Torque (Nm)	60	60	25	80	80	120	120
Operating temperature (°C/°F)				-20 °C to 55 °C -4 °F to 131 °F			
Motor's thermo-protection (°C/°F)	150	150	-	150	150	150	150

● 230V A.C. ● 24V D.C. ● 230-400V A.C. three phase

## The complete range

### 230V A.C. operators

- 001C-BX Operator with mechanical endstop (450W).
- 001C-BXE Operator with encoder (450W).
- 001C-BXK Operator with mechanical endstop (750W).
- 001C-BXEK Operator with encoder (750W).

### 230-400V A.C. 3-phase operators

- 001C-BXT Operator with mechanical endstop.
- 001C-BXET Operator with encoder.

### 230V A.C. control panels

- 002ZC3 Control panel with movement control functionality, built-in radio decoder and safety device diagnostics. For C-BX and C-BXK operators.
- 002ZC3C Control panel with movement control functionality, built-in radio decoder, emergency stop and activation buttons, power isolation switch and safety device diagnostics. For C-BX and C-BXK operators.
- 002ZM3EC Multifunction control panel complete with emergency stop and activation buttons, power isolation switch, built-in radio decoder and safety device diagnostics. For C-BX and C-BXK operators.
- 002ZCX10 Control panel with digital display, built-in radio decoder and safety device diagnostics. For C-BXE and C-BXEK operators.
- 002ZCX10C Control panel complete with emergency stop and activation buttons, power isolation switch, digital display, built-in radio decoder and safety device diagnostics. For C-BXE and C-BXEK operators.

## Also 3-phase

When you need maximum power and performance, Cbx's three-phase technology gives the system's potential a major boost and greater thrust as well as better control of movement resistance.



### Accessories

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

## The complete range

### Doors Turnstiles & Access Control Catalogue

#### 230-400V A.C. three-phase control panels



**002ZT5** Control panel with digital display, built-in radio decoder and safety device diagnostics. For C-BXET operator.



**002ZT5C** Control panel complete with emergency stop and activation buttons, power isolation switch, digital display, built-in radio decoder and safety device diagnostics. For C-BXET operator.



**002ZT6** Control panel with built-in radio decoder and safety device diagnostics. For C-BXT operator.



**002ZT6C** Control panel complete with emergency stop and activation buttons, power isolation switch, built-in radio decoder and safety device diagnostics. For C-BXT operator.



#### 24V D.C. operator

**001C-BXE24** Operator with encoder.



#### 24V D.C. control panels

**002ZL80** Control panel, complete with digital display, built-in radio decoder and safety device diagnostics.



**002ZL80C** Control panel complete with emergency stop and activation buttons, power isolation switch, digital display, built-in radio decoder and safety device diagnostics.

#### Accessories



**001CMS** Release handle with customized key and cord reset. L = 7 m / 23 ft.



**009CCT** Simple 1/2 inch chain for folding and sliding doors.



**009CGIU** Joint for 1/2 inch chain.



**001C001** Manual operations winch for sectional doors. (chain L = 10 m / 32'9" ft).



**001C002** Pendulum release system.



**001C003** Transmission system for sliding doors, including a rack with Z = 26 pinion for hollow gear shaft, chain tightening transmission system, operator securing brackets and door-leaf fixing brackets.

**Accessories**  
**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

## The complete range



**001C004** Chain transmission system for sectional doors (for door leaves higher than 5.5 m / 18 ft) complete with shaft with a Z = 26 pinion for hollow gear shaft, Z = 40 pinion with chain and 1/2" chain joint, and operator securing brackets.



**001C005** Transmission system for folding doors, complete with shaft with a Z = 26 pinion for hollow gear shaft, chain tightening transmission system, operator securing brackets and chain hooking pin for the door-leaf.



**001C006** Package of 2 x pre-drilled brackets for sectional doors with  $\varnothing$  25.4 mm spring shaft (accessory required in case of installation on a door with a direct-grip operator).



**001C007** Accessory for sectional doors with  $\varnothing$  25 mm spring shaft.



**001C008** Accessory for sectional doors with  $\varnothing$  40 mm spring shaft.



**001C009** Operator support bracket for sectional doors with  $\varnothing$  25.4 mm diameter spring shaft. (accessory required in case of installation on a door with a direct-grip operator).

### Permanent micrometric adjustment



Versions with mechanical endstops are fitted with the practical micrometric level which enables optimal and constant adjustment of the doors closing position.

### New electronics

- The new C-BXE series control panels offer the following innovative functions.
- **Electronic encoder controlled movement.** This enables reliable obstacle sensing, as well as exact adjustment of the "slow-down" and endstops.
  - **Digital display,** for easier and more intuitive programming of the features.
  - **Linked control.** Enables centralized management and control of the closure through a PC. A standard feature of the CBX is the software that manages up to 16 automation systems.
  - **Reduced thrust.** Adjustable slow-down speed in opening and closing operations.
  - **Programming of the differentiated control functions.** Opening with automatic command closing with maintained action command.
  - **Electronic movement control.** With obstacle detection safety function.
  - **Comprehensive safety device diagnostics.** Electronic auto test which checks the working status of the safety devices connected to the system before approving the impulse to the motor.
  - **Utmost safety even with the door closed.**

# H



lift capacity 120 - 200 Kg  
lift capacity 265 - 440 lb

## Rolling shutter operators

**New H, the best solution for rolling shutters.**  
The new, improved H series operator is now even more reliable and durable.  
Special attention was given to designing the new movement adjustment system, which is now more precise and easier to adjust while at the same time taking up less space.



**One versatile model.**  
H offers a universal solution for all the applicative needs thanks to the standard issue adaptors on all its models. The adaptors make installation possible on shutter poles with 48 or 60 mm diameters, and springs with 200 or 220 mm diameters.



**The highest possible level of integration.**  
The H1003 and H1103 motors can be coupled with a second motor to increase the lift capacity. Up to 120 Kg and 200 Kg for the two versions with one or two motors.



**Installations that are always compliant.**  
The ZR24 control panel is compliant with the current technical safety standards to guarantee installations are always compliant. It is also equipped with built-in radio decoding for remote radio control.



## Advantages of H

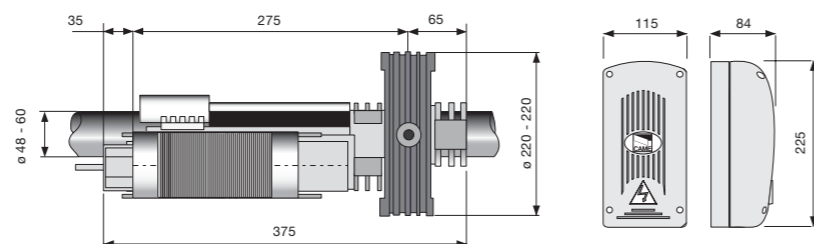
A safe and easy-to-use system, one model is suitable for all different types of shutters. The H series operators allow for modular installation without the need to make costly alterations. For large-scale applications, the two-motor version increases the lift power.  
Also available are all the additional accessories such as the electro-lock with pull-cord release (for reversible versions), and the H3001 container with command button and built-in pull-cord release.

## Limits to use

Model	H1000	H1103	H2000	H2103
Lift capacity (Kg / lb)	120 / 265	120 / 265	200 / 440	200 / 440

● 230V A.C.

## Dimensions



Dimensions in millimetres (25.4 mm = 1 in)

## Technical features

Type	H1000	H1103	H2003	H2103
Protection rating	IP40	IP40	IP40	IP40
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Current draw (A)	2,4	2,4	4,5	4,5
Power (W)	270	270	500	500
Reduction ratio (i)	1/150	1/150	1/150	1/150
Duty cycle (%)	30	30	30	30
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	
Motor's thermo-protection (°C/°F)	150/302	150/302	150/302	150/302
Crown revolutions (RPM)	9	9	9	9

For ● 230V A.C.

## The complete range

### 230V A.C. operators for shutter post with a diameter from 48 mm to 60 mm and springs from 200 mm to 220 mm



**001H1003** Self-locking operator complete with cord-release (Lift capacity: 120 Kg / 265 lb).



**001H1103** Reversible operator (Lift capacity: 120 Kg / 265 lb).



**001H2003** Self-locking operator with two motors complete with cord-release (Lift capacity: 200 Kg / 440 lb).



**001H2103** Reversible operator with two motors (Lift capacity: 200 Kg / 440 lb).

### 230V A.C. control panel



**002ZR24** Control panel with built-in radio decoder.

### Accessories



**001H3100** 230V A.C. reversible motor to combine with H1003 and H1103 operators.



**001H3012** Manual release system for H1103 - H2103 reversible operators. Length = 5 m.



**001H3001** Security container for pull-cord manual release system, complete with automation activation button.

## New endstop assembly

The gate-run adjustment system has been re-engineered to yield greater precision and ease of adjustment, while reducing overall dimensions.

### Accessories

**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189





A world of safe automation

[www.cameuk.com](http://www.cameuk.com)



## Turnstiles



# Bridge



## Tripod turnstile

### Totally safe, minimal space

Bridge is the silent and precise turnstile to control entry and exit to and from leisure centres, museums, supermarkets and other commercial facilities. Its small size helps manage access even when the space available is limited. It offers several possible options for controlling pedestrian flow to suit the required application.



**Finishing**  
Legs and cover in brushed galvanised steel, arms in stainless steel. The tripod casing also comes in white.



**Electronics and lock.**  
The top cover features a key lock. The inner part is designed to house the electronic control equipment.



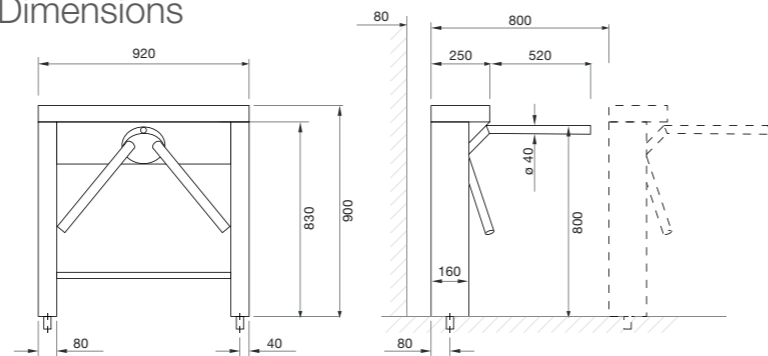
**Easy integration.**  
Bridge is easy to use combined with CAME access control systems.



## The advantages of Bridge

In three different models, all equipped with a hydraulic decelerator, the Bridge is ideal for a wide range of applications. Carefully crafted aesthetic details and safe rounded corners compliment it's elegant design. Thanks to its galvanised steel structure Bridge is highly resistant to tampering and vandalism.

### Dimensions



Dimensions in millimetres 1 in = 25.4 mm

### Technical features

Type	PSAP01	PSAP02	PSAP07
Power supply (V) (50/60Hz)	-	230 A.C.	24 D.C.
Motor power supply (V)	-	24 D.C.	-
Current draw (A)	-	2.5	2.5
Weight (Kg/lb)	40 / 88	40 / 88	40 / 88
Operating temperature (°C/°F)	-20 °C to 65 °C -4 °F to 149 °F	-20 °C to 65 °C -4 °F to 131 °F	-20 °C to 65 °C -4 °F to 131 °F

## The complete range

### Mechanical tripod turnstile

001PSAP01 Mechanical mono directional turnstile with painted steel structure.

### Electromechanical tripod turnstile

001PSAP02 24V D.C. mono directional electromechanical turnstile with painted steel structure. Tripod automatic release in case of power cut.

001PSAP07 24V D.C. bidirectional electromechanical turnstile with painted steel structure. Tripod automatic release in case of power cut.

### Accessories for mechanical and electromechanical tripod turnstiles

001PSOPSC01 Panic-release arms with pressure joint.

001PSOPCN01 Mechanical counter meter.

001PSOPGOO Stainless steel lateral guide barrier.

001PSOPGO1 Stainless steel lateral guide barrier - 100 cm high post, metal flange and plastic flange cover.

001PSOPGO1X Stainless steel lateral guide barrier - 100 cm high post, flange and stainless steel flange cover.

### Accessories for electromechanical tripod turnstiles

001PSOPSC02 Climb-over detection system with sensors and alarm.

001PSOPSC03 Cover pressure detection sensor (complementary to 001PSOPSC02)

001PSOPSF01 Bidirectional traffic light with high-intensity Leds.

001PSCSCR04 Console to remotely control up to a maximum of 4 passageways.

001PSOPCN03 Electronic counter meter.

001PSOPAL01 24V D.C. 2.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL01N 24V D.C. 2.5 A power supply unit (switching type).

001PSOPAL05 24V D.C. 4.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL05N 24V D.C. 4.5 A power supply unit (switching type).

001PSOPAL06 24V D.C. 6.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL06N 24V D.C. 6.5 A power supply unit (switching type).

### NOTES:

See p. 138 for its use combined with RBM84 access control system.



24 Volt only

The 24V power supply makes for an easy installation procedure and is at the same time a guarantee of safety for the user.

**Accessories** **Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

# Twister



## Electromechanical turnstile

Easy, functional passage selection.

The new Twister turnstile from CAME is designed for access control in high-traffic areas. Its stainless steel construction makes it ideal for railway stations, theme parks, sport and leisure facilities and any other public areas and wherever pedestrian flows need to be regulated in a speedy and efficient manner. Twister is the natural compliment to CAME access control systems.



**The structure.**  
Made of scotch-brite finished stainless steel with a removable cover and key lock.



**The inner mechanism.**  
Equipped with an adjustable hydraulic cushion, control logic, and an automatic release function for the tripod during power cuts.



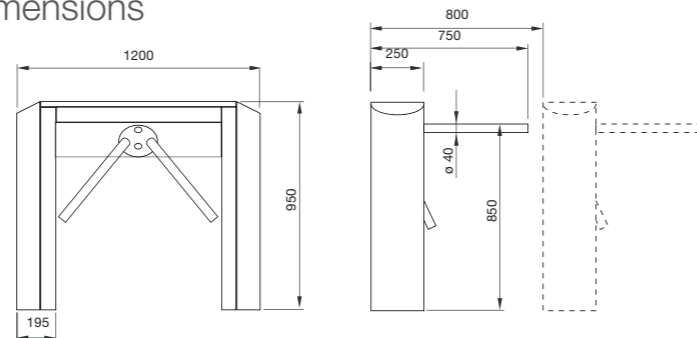
**Integrated access control sensor.**  
Twister is equipped with a transponder sensor. Therefore it can be used with cards or keyfobs, the best solution when controlling access in sport centres and other leisure facilities.



## The advantages of Twister

Twister is CAME's durable and functional solution suitable for any access control requirements. It can be installed anywhere, even in high-traffic settings such as stadiums, train stations, public buildings and sports centres. Managed by a built-in control board, Twister is perfectly compatible with the CAME RBM84 evolved access control system.

### Dimensions



Dimensions in millimetres 1 in = 25.4 mm

## Ideal for access control

The CAME RBM84 access control system can be fully integrated with our Twister turnstile, delivering a complete access control system.

### Technical features

Type	PSBPS01	PSBPS02	PSBPS07
Power supply (V) (50/60Hz)	-	230 A.C.	230 A.C.
Motor power supply (V)	-	24 D.C.	24 D.C.
Current draw (A)	-	2.5	2.5
Weight (Kg/lb)	60 / 132	60 / 132	60 / 132
Operating temperature (°C/°F)	-20 °C to 65 °C -4 °F to 149 °F	-20 °C to 55 °C -4 °F to 131 °F	-20 °C to 55 °C -4 °F to 131 °F

24V D.C.



## The complete range

### Tripod mechanical turnstile

001PSBPS01 Mechanical mono directional turnstile in stainless steel with scotch brite finishing.

### Tripod electromechanical turnstile

001PSBPS02 24V D.C. mono directional electromechanical turnstile in stainless steel with scotch brite finish. Tripod mechanical and manual release.

001PSBPS07 24V D.C. bidirectional electromechanical turnstile in stainless steel with scotch brite finish. Tripod automatic release in case of blackout.



### Accessories for mechanical and electromechanical turnstiles

001PSOPSC01 Panic-release arms with pressure joint.

001PSOPCN01 Mechanical counter meter.

001PSOPGOO Stainless steel lateral guide barrier.

001PSOPGO1 Stainless steel lateral guide barrier - 100 cm high post, metal flange and plastic flange cover.

001PSOPGO1X Stainless steel lateral guide barrier - 100 cm high post, flange and stainless steel flange cover.

### Accessories for electromechanical turnstiles

001PSOPSC02 Climb-over detection system with sensors and alarm.

001PSOPSC03 Cover pressure detection sensor (complementary to 001PSOPSC02)

001PSOPSF01 Bidirectional traffic light with high-intensity Leds.

001PSCSCR04 Console to remotely control up to a maximum of 4 passageways.

001PSOPCN03 Electronic counter meter.

001PSOPAL01 24V D.C. 2.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL01N 24V D.C. 2.5 A power supply unit (switching type).

001PSOPAL05 24V D.C. 4.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL05N 24V D.C. 4.5 A power supply unit (switching type).

001PSOPAL06 24V D.C. 6.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL06N 24V D.C. 6.5 A power supply unit (switching type).

### NOTES:

See p. 138 for its use combined with RBM84 access control system.

### Accessories

Access control pages 160-165

Safety pages 166-175

Radio control pages 176-189

# Guardian new

## High security turnstile

### For large passageways

Guardian is the best solution when you need wide intensively-used entrances to be totally secure. They do not need to be directly controlled by an attendant, although this is a possibility. Guardian is ideal for outdoor settings with applications in airports, banks, subway stations, railway stations and large sports stadiums.



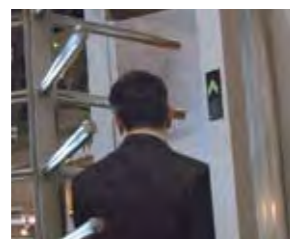
**Movement control.**  
Guardian is equipped with a hydraulic decelerator.



**Perfect integration.**  
Guardian is easily integrable to all CAME access control systems.



**Passage Indicator.**  
Guardian has a built-in passage indicator.



## The advantages of Guardian

Guardian is our top of the range full-height turnstile. It is the perfect solution where safety and security come first. The sturdy structure and elegant design offer the very highest level of protection against criminal activity and unauthorised access. Reliability and durability are guaranteed even when it is installed outdoors. Thanks to the galvanised steel structure and special epoxy varnishing, it is resistant even in those areas subject to corrosive agents.

## Technical features

Type	PSHPS07	PSHPS01
Power supply (V)	24 D.C.	-
Current draw (A)	2.5	-
Weight (Kg/lb)	400 / 880	400 / 880
Operating temperature (°C/°F)	-20 °C to 55 °C -4 °F to 131 °F	-20 °C to 65 °C -4 °F to 149 °F

● 24V D.C



## The complete range

### "Full-Height" turnstile



**001PSHPS07** Full height bidirectional electromechanical turnstile, with galvanised and painted steel structure, hydraulic decelerator, control and managing logic and high intensity LED-indicators on both sides. 24V D.C. power supply unit.



**001PSHPS01** Full height mono directional mechanical turnstile, galvanised and painted steel structure, with hydraulic decelerator.



**NOTES:**  
See p. 138 for its use combined with RBM84 access control system.

## 24 Volt only

The 24V power supply makes for an easy installation procedure and is at the same time a guarantee of safety for the user.

**Accessories**  
Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189

# Wing



## Motorised swing turnstile

**Quality contemporary design.**  
Harmony, elegance, smoothness and speed. Wing is perfect for prestigious environments such as hotels, company premises, casinos, showrooms and leisure centres. It's design makes disabled access easy and simple.



**Double version.**  
Wing is available also in double version, for larger openings.



**Flow management.**  
For a better flow management, Wing can be accessorised with a modular lateral fence system.



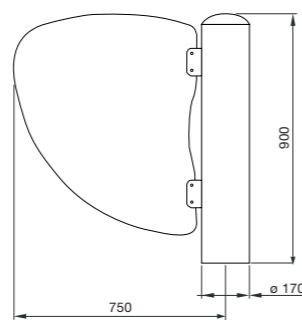
**Perfect integration.**  
A command to open can be administered from any one of a vast range of accessories, and can be integrated with CAME access control systems. Authorised access to reserved areas can then be granted only to identified users.



## The advantages of Wing

Wing is a bidirectional motorised swing turnstile. It is composed of a stainless steel structure with an IROKO wood cover. The swing door made from 10mm-thick transparent polycarbonate. The design of the swing door can be customised, allowing it to enhance the architecture of its surrounding environment. Wing features temporised closure and an emergency panic release system. It is also suitable for wider passageways as it is available in a double configuration with synchronised automation. Wing allows easy access for wheelchairs where other turnstiles might cause problems.

## Dimensions



Dimensions in millimetres 1 in = 25.4 mm

**24V** 24 Volt only

The 24V power supply makes for an easy installation procedure and is at the same time a guarantee of safety for the user.

## Technical features

Type	PSEPCSS00	PSEPCSD00	PSEPCSS00CT	PSEPCSD00CT
Power supply (V) (50/60Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.	24 D.C.	24 D.C.
Current draw (A)	2.5	2.5	2.5	2.5
Weight (Kg/lb)	40 / 88	40 / 88	40 / 88	40 / 88
Operating temperature (°C/°F)	-20 °C to 55 °C		-4 °F to 131 °F	

24V D.C.



## The complete range

### Motorised swing turnstile



- 001PSEPCSS00** Bidirectional motorised swing turnstile. Automatic opening with command device; timed closing and emergency panic-release system. Polycarbonate leaf.
- 001PSEPCSD00** Double bidirectional motorised swing turnstile. Automatic opening with command device; timed closing and emergency panic-release system. Polycarbonate leaf.
- 001PSEPCSS00CT** Bidirectional motorised swing turnstile. Automatic opening with command device; timed closing and emergency panic-release system. Tempered glass leaf.
- 001PSEPCSD00CT** Double bidirectional motorised swing turnstile. Automatic opening with command device; timed closing and emergency panic-release system. Tempered glass leaf.



### Accessories



- 001PSOPSC02** Climb-over detection system with sensors and alarm.
- 001PSOPSF01** Bidirectional traffic light with high-intensity LEDs.
- 001PSOPCN03** Electronic counter meter.
- 001PSCSCR04** Console to remotely control up to a maximum of 4 passageways.
- 001PSOPEPCDIS** Polycarbonate leaf for disabled access.
- 001PSOPEPCDISCT** Tempered glass leaf for disabled access.
- 001PSOPAL01** 24V D.C. 2.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.
- 001PSOPAL01N** 24V D.C. 2.5 A power supply unit (switching type).
- 001PSOPAL05** 24V D.C. 4.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.
- 001PSOPAL05N** 24V D.C. 4.5 A power supply unit (switching type).
- 001PSOPAL06** 24V D.C. 6.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.
- 001PSOPAL06N** 24V D.C. 6.5 A power supply unit (switching type).

**NOTES:**  
See p. 138 for its use combined with RBM84 access control system.

**Accessories** Access control pages 160-165  
Safety pages 166-175  
Radio control pages 176-189

# Saloon new

## Motorised swing turnstile

### Easy access control

Saloon is the motorised swing turnstile with a compact design. It can work in a bidirectional mode; the swing door only opens in the direction selected. Perfect for use inside factories, cafeterias, shopping centres, service stations, supermarkets, leisure centres and swimming pools. It's design does not cause a hindrance to disabled users.



**Total safety.**  
In the event of a power cut the panic-release system allows the turnstile to be easily pushed opened in either direction.



**Command impulses.**  
The turnstile can be activated by card, transponder keyfob, push-button or photocell.



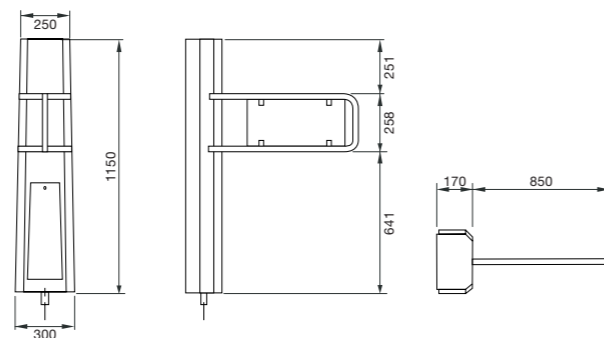
**Access control.**  
Integration with Rbm84 allows complete management of access for up to 5500 users. See page 138 for details.




## The advantages of Saloon

Saloon is available in two different versions; One version in painted steel and another in stainless steel, ideal for outdoor applications. It is designed to perfectly integrate into a modular lateral fence system. Also available in the double swing version for managing wider passageways.

### Dimensions



Dimensions in millimetres 1 in = 25.4 mm

 24 Volt only

The 24V power supply makes the installation procedure easy and is at the same time a guarantee of safety for the user.

### Technical features

Type	SALOON	
Power supply (V) (50/60Hz)	230 A.C.	
Motor power supply (V)	24 D.C.	
Current draw (A)	2.5 / 5	
Weight (Kg/lb)	55 / 110	
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

 24V D.C.



## The complete range

### Motorised swing turnstile

- 001PSEP0S00** Bidirectional motorised swing turnstile in painted steel. Automatic opening with command device; timed closing and emergency panic-release system.
- 001PSEP0S01** Mono directional motorised swing turnstile in painted steel with right-hand post. Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEP0S02** Mono directional motorised swing turnstile in painted steel with left-hand post. Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEP0S03** Mono directional motorised swing turnstile in painted steel with right-hand post. Automatic opening with command device; closing controlled by sensor and emergency panic-release system.
- 001PSEP0S04** Mono directional motorised swing turnstile in painted steel with left-hand post. Automatic opening with command device; closing controlled by sensor and emergency panic-release system.
- 001PSEP0D00** Double bidirectional motorised swing turnstile in painted steel. Automatic opening with command device; timed closing and emergency panic-release system.
- 001PSEP0D01** Double mono directional motorised swing turnstile in painted steel Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEP0D02** Double mono directional motorised swing turnstile in painted steel Automatic opening with command device; closing controlled by sensor and emergency panic-release system.
- 001PSEP0SM01** "Always open" mechanical mono directional motorised swing turnstile in painted steel and with right-hand post. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.
- 001PSEP0SM02** "Always open" mechanical mono directional motorised swing turnstile in painted steel and with left-hand post. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.
- 001PSEP0DM00** Double "Always open" mono directional motorised swing turnstile in painted steel. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.
- 001PSEPSS00** Bidirectional motorised swing turnstile in stainless steel. Automatic opening with command device; timed closing and emergency panic-release system.
- 001PSEPSS01** Mono directional motorised swing turnstile in stainless steel and right-hand post. Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEPSS02** Mono directional motorised swing turnstile in stainless steel and left-hand post. Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEPSS03** Mono directional motorised swing turnstile in stainless steel and right-hand post. Automatic opening with command device; closing controlled by sensor and emergency panic-release system.
- 001PSEPSS04** Mono directional motorised swing turnstile in stainless steel and left-hand post. Automatic opening with command device; closing controlled by sensor and emergency panic-release system.
- 001PSEPSD00** Double bidirectional motorised swing turnstile in stainless steel Automatic opening with command device; timed closing and emergency panic-release system.
- 001PSEPSD01** Double mono directional motorised swing turnstile in painted steel Automatic opening with sensor, timed closing and emergency panic-release system.
- 001PSEPSD02** Double mono directional motorised swing turnstile in stainless steel. Automatic opening with command device; closing controlled by sensor and emergency panic-release system.

**NOTES:**  
See p. 138 for its use combined with RBM84 access control system.

**Accessories**  
**Access control** pages 160-165  
**Safety** pages 166-175  
**Radio control** pages 176-189

# Saloon



## The complete range

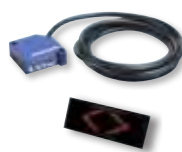
### Motorised swing turnstile



- 001PSEPSSM01 "Always open" mechanical mono directional motorised swing turnstile in stainless steel and with right-hand post. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.
- 001PSEPSSM02 "Always open" mechanical mono directional motorised swing turnstile in stainless steel and with left-hand post. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.
- 001PSEPSDM00 Double "Always open" mono directional motorised swing turnstile in stainless steel. Flow direction control sensor with automatic activation of alarm and turnstile closing/locking.



### Accessories



001PSOPSC02 Climb-over detection system with sensors and alarm.

001PSOPSF01 Bidirectional traffic light with high-intensity LEDs.

001PSOPAL01 24V D.C. 2.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL01N 24V D.C. 2.5 A power supply unit (switching type).



001PSOPAL05 24V D.C. 4.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL05N 24V D.C. 4.5 A power supply unit (switching type).

001PSOPAL06 24V D.C. 6.5 A power supply unit (switching type) cabled with IP65 casing with 2 m long cable. 16A plug.

001PSOPAL06N 24V D.C. 6.5 A power supply unit (switching type).



### Functioning

Saloon is a bidirectional turnstile that can be placed on either side of the entrance because the electronics allow opening direction to be selected. The open command can be triggered by proximity card readers or other devices and activates the motor-rotation in the direction selected. The leaf opens at 90° and at a pre-set speed except when an obstacle is detected (for example a person standing on the passage area). In this event, the electronics deactivate the motor-rotation and activates an acoustic alarm signal.

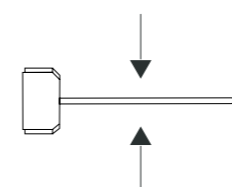
Once the obstacle is removed, the leaf automatically completes the movement. When the leaf is in the open position, the electronics wait for the user to pass through the access for a certain pre-set time. Once this time has elapsed, the leaf closes. The electronics can also recognise pedestrian passage through photocells and commands the closing of the leaf without waiting for the pre-set time to elapse.

Saloon is equipped with a panic-release device: if the user pushes the door open with a thrust higher than 8 N, the acoustic alarm activates, and if the turnstile system is motorised (non-emergency situation), the electronics automatically replaces the leaf in the normal position.

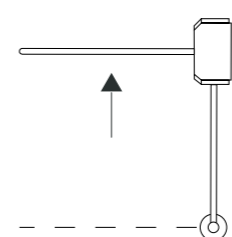
## Configurations

----- Photocell max range

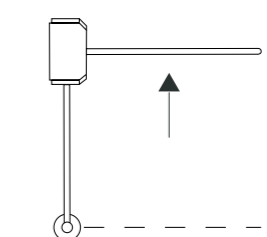
PSEP0S00 - PSEPSS00



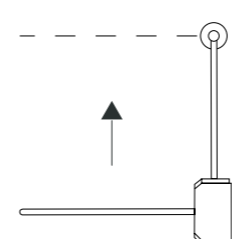
PSEP0S01 - PSEPSS01



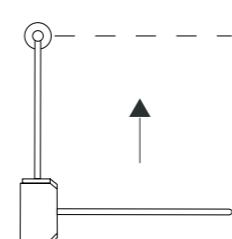
PSEP0S02 - PSEPSS02



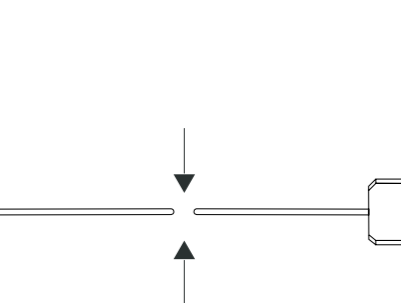
PSEP0S03 - PSEPSS03



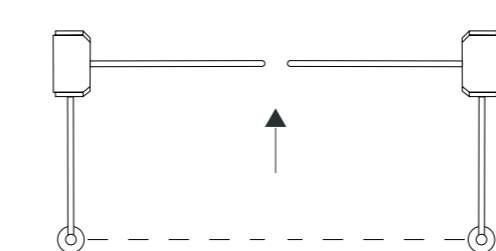
PSEP0S04 - PSEPSS04



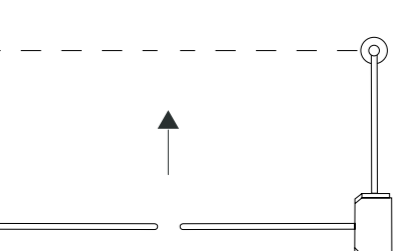
PSEP0D00 - PSEPSD00



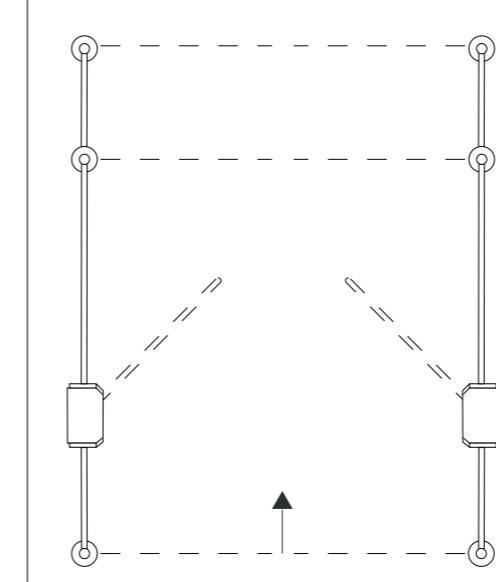
PSEP0D01 - PSEPSD01



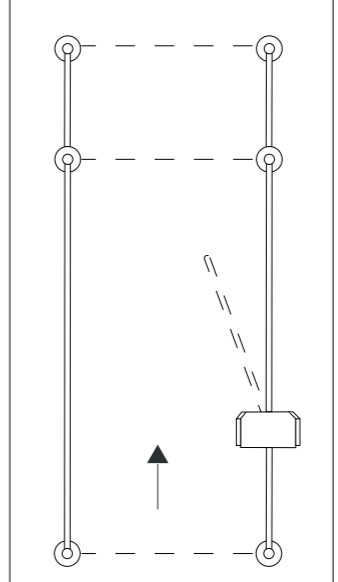
PSEP0D02 - PSEPSD02



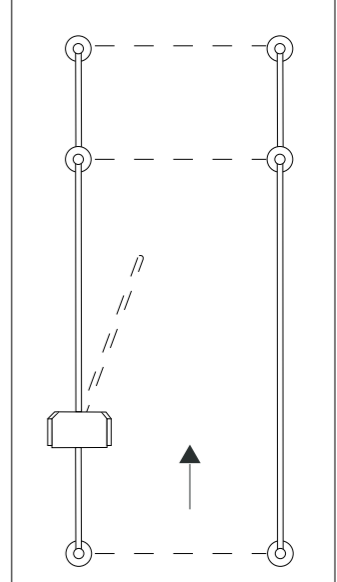
PSEP0DM00 - PSEPSDM00



PSEP0SM01 - PSEPSSM01



PSEP0SM02 - PSEPSSM02



# Compass new

## Revolving turnstile

### Easy movement

Compass is the easiest and cheapest solution to efficiently manage high passage flows in retail outlets, supermarkets, service stations and cafeterias. It can also be used in other settings such as leisure centres, holiday resorts, libraries, museums etc. Compass is suitable for almost any situation where the direction of entry or exit needs to be controlled.



**Three different openings.** It is available with three different type of openings: clockwise, counter-clockwise and bidirectional.



**Stainless steel finishing.** The securing flange and the flange cover are both in stainless steel.



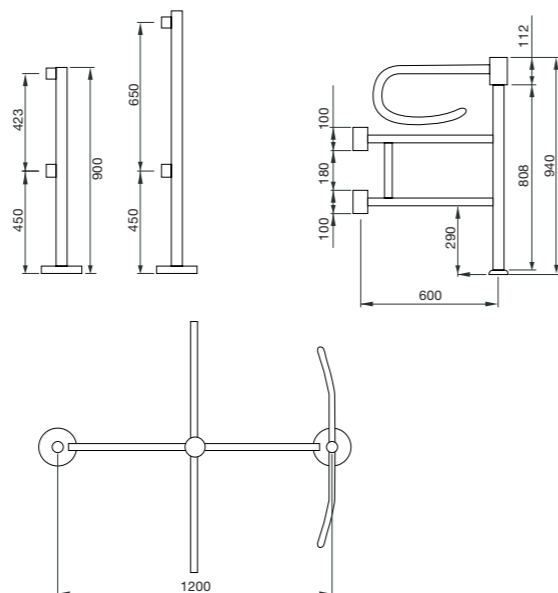
**Flow management.** For a better flow management Compass can be applied with the addition of the modular lateral fence system. Compass is also equipped with a panic-release system.



## The advantages of Compass

This mechanical revolving turnstile with four arms strictly controls passage of people in both directions. The stainless steel structure makes Compass the right product even for outdoor applications. The entire frame can be unlocked and pivoted on its axis, allowing the entrance to be opened for free access when necessary.

## Dimensions



Dimensions in millimetres 1 in = 25.4 mm

## Technical features

Type	PSSPCWO	PSSPCCW	PSSP00	PSSPFMCWO	PSSPFMCCW
Power supply (V)	-	-	-	-	-
Current draw (A)	-	-	-	-	-
Weight (Kg/lb)	18 / 40	18 / 40	18 / 40	18 / 40	18 / 40
Operating temperature (°C/°F)	-20 °C to 55 °C		-4 °F to 131 °F		

## The complete range

### Revolving turnstile

- 001PSSPCWO Mechanical revolving turnstile with right-hand post and emergency panic-release system. H 100 cm.
- 001PSSPCCW Mechanical revolving turnstile with left-hand turnstile and emergency panic-release system. H 100 cm.
- 001PSSP00 Mechanical bidirectional revolving turnstile. H 100 cm.
- 001PSSPFMCWO Wall-securing mechanical revolving turnstile with right-hand post. H 100 cm.
- 001PSSPFMCCW Wall-securing mechanical revolving turnstile with left-hand post. H 100 cm.

### Accessories

- 001PSOPGOO Stainless steel lateral guide barrier.
- 001PSOPGO1 Stainless steel lateral guide barrier 100 cm high post, metal flange and plastic flange cover.
- 001PSOPGO1X Stainless steel lateral guide barrier 100 cm high post, flange and stainless steel flange cover.



# Flag



## Mechanical barrier

### The simple solution

Flag is the mechanical gate with a simple push-to-open system and an automatic gravity closing system. It can be installed in different contexts: leisure centres, cafeterias, retail outlets, emergency exits, shopping centres and supermarkets. It's simplicity allows easy access for wheelchairs.



**Opening.**  
It is available with three different type of openings: clockwise, counter-clockwise and bidirectional.



**Double Flag.**  
If necessary, two opposing barriers can be installed to control a wide mono directional access-way of up to 180 cm.



## The advantages of Flag

Flag becomes really ideal when flow passages need to be regulated because of security, safety, control and hygiene. It is perfectly suited to applications within points of sale and as emergency exits. Its simplicity make it a cost effective solution.

## Technical features

Type	PSBPCWO	PSBPCCW	PSBP00
Power supply (V)	-	-	-
Current draw (A)	-	-	-
Weight (Kg/lb)	10 / 22	10 / 22	10 / 22
Operating temperature (°C/°F)	-20 °C to 55 °C		-4 °F to 131 °F

## The complete range

### Mechanical hatch



001PSBPCWO Mechanical hatch with right-hand post. H 100 cm.

001PSBPCCW Mechanical hatch with left-hand post. H 100 cm.

001PSBP00 Bidirectional mechanical hatch. H 100 cm.

### Accessories



001PSOPGOO Stainless steel lateral guide barrier.



001PSOPGO1 Stainless steel lateral guide barrier  
100 cm high post, metal flange and plastic flange cover.

001PSOPGO1X Stainless steel lateral guide barrier  
100 cm high post, flange and stainless steel flange cover.

001PSOBPSC Key lock.





# Accessories

## Lateral fences

### Exit Control

For use in conjunction with turnstiles, revolving turnstiles and pedestrian barriers, the CAME range of stainless steel modular lateral fencing ensures a highly safety installation. The range includes 'Exitpass', a section with an emergency panic-release bar.



Lateral fence for trolley passage. The solution for supermarkets.



'Top' lateral fence. The Top in filled lateral fence is intended for use in conjunction with a turnstile system.



Smart lateral fences. To elegantly compliment turnstiles, revolving turnstiles and pedestrian barriers.



## Modular lateral fences

A modular system of lateral fences in stainless steel. Easy to assemble, they are absolutely useful if combined with turnstiles, revolving turnstiles and hatches both for directing people flows or for delimiting areas reserved to different types of users.

## The complete range

### Exitpass Lateral fence

001PSUS120D	Stainless steel lateral fence with panic-release bar. Right-hand post. Length = 120 cm. Height = 100 cm.
001PSUS120S	Stainless steel lateral fence with panic-release bar 304. Left-hand post. Length = 120 cm. Height = 100 cm.
001PSUS090D	Stainless steel lateral fence with panic-release bar 304. Right-hand post. Length = 90 cm. Height = 100 cm.
001PSUS090S	Stainless steel lateral fence with panic-release bar 304. Left-hand post. Length = 90 cm. Height = 100 cm.
001PSUS060D	Stainless steel lateral fence with panic-release bar 304. Right-hand post. Length = 60 cm. Height = 100 cm.
001PSUS060S	Stainless steel lateral fence with panic-release bar 304. Left-hand post. Length = 60 cm. Height = 100 cm.



### Lateral fence for shopping trolleys

001PSTPC100	Mono directional lateral fence with 2 trolley guides. Height = 100 cm.
001PSTPC150	Mono directional lateral fence with 3 trolley guides. Height = 150 cm.
001PSTPC200	Mono directional lateral fence with 4 trolley guides. Height = 200 cm.



### Lateral fences

001PSTRV	Galvanised steel post with securing flange and flange cover in chromium plated plastic. Without holes.
001PSTRV2F	Galvanised steel post with securing flange and flange cover in chromium plated plastic. With 2 holes - Height = 100 cm.
001PSTRV4F90	Galvanised steel post with securing flange and flange cover in chromium plated plastic. With 2+2 90° holes - Height = 100 cm.
001PSTRV4F180	Galvanised steel post with securing flange and flange cover in chromium plated plastic. With 2+2 180° holes - Height = 100 cm.
001PSTRV6F	Galvanised steel post with securing flange and flange cover in chromium plated plastic. With 6 holes - Height = 100 cm.
001PSTRV8F	Galvanised steel post with securing flange and flange cover in chromium plated plastic. With 8 holes - Height = 100 cm.
001PSTRVX	Post with securing flange and stainless steel flange cover. Without holes. Height = 100 cm.
001PSTRVX2F	Post with securing flange and flange cover in stainless steel. With 2 holes. Height = 100 cm.
001PSTRVX4F90	Post with securing flange and stainless steel flange cover. With 2+2 90° holes. Height = 100 cm.
001PSTRVX4F180	Post with securing flange and stainless steel flange cover. With 2+2 180° holes. Height = 100 cm.
001PSTRVX6F	Post with securing flange and stainless steel flange cover. With 6 holes. Height = 100 cm.
001PSTRVX8F	Post with securing flange and stainless steel flange cover. With 8 holes. Height = 100 cm.




# Accessories

The complete range


## Lateral fences

	<b>001PSTRT050</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 50 cm.
	<b>001PSTRT100</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 100 cm.
	<b>001PSTRT150</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 150 cm.
	<b>001PSTRT200</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 200 cm.
	<b>001PSTRT250</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 250 cm.
	<b>001PSTRT300</b> Horizontal tube for stainless steel lateral fences. Ø 40 mm diameter - 1 mm thick - Length 300 cm.
	<b>001PSTRM001</b> Junction sleeve in chromium plated plastic complete with fixing screws.
	<b>001PSTRM003</b> Junction sleeve in stainless steel complete with fixing screws.
	<b>001PSTRM004</b> Stainless steel wall-securing sleeve complete with screws.

## Top lateral fences

	<b>001PSTRPE</b> Ridged aluminium plate with anticorrosion frame-structure.
	<b>001PSTRFPE</b> Stainless steel plate securing lateral fence and polycarbonate panel. 6 mm thick - Height = 90 cm.
	<b>001PSTRFPA</b> Stainless steel floor securing lateral fence and polycarbonate panel. 6 mm thick - Height = 90 cm.
	<b>001PSTRFPEN</b> Stainless steel plate securing lateral fence. Height = 90 cm.
	<b>001PSTRFPAN</b> Stainless steel floor securing lateral fence. Height = 90 cm.

## Smart lateral fences

	<b>001PSTRV80</b> Stainless steel post Height = 90 cm - Ø 80 mm diameter.
	<b>001PSTRSFPL60875</b> 6 mm thick transparent polycarbonate panel dimensions: 800 x 750 mm.



A world of [safe automation](https://www.cameuk.com)

[www.cameuk.com](https://www.cameuk.com)



Automatic swing  
and sliding doors


## The models


Automatic doors offer great advantages and added value to a range of facilities; residential, office, or commercial. Convenience, prestige, safety, usability, space-enhancement, and image are just some of the remarkable advantages offered.

Simultaneously sleek and functional, CAME automatic doors make life easier right from the planning phase, where one can choose the best possible door automation solution to fit the given situation.

CAME's automation devices and state-of-the art engineering transform the door from a barrier into a modern convenience.

The table below lists the complete range of swing and sliding door motors, providing a quick reference guide for easy product selection.

Use		INTENSIVE USE 		
Series	Model	Max weight of door leaf/leaves (Kg / lb)	Max width of door leaf/leaves (m / ft)	
Fly	PB1100	250 / 550	0.8 / 2'6"	YES
		200 / 440	1 / 3'2"	YES
		150 / 330	1.2 / 4'	YES
Fly	PB2100	250+250 / 550+550	0.8+0.8 / 2'6"+2'6"	YES
		200+200 / 440+440	1+1 / 3'8"+3'2"	YES
		150+150 / 330+330	1'2"+1'2" / 4+4	YES
Corsa	Corsa 1	75 / 165		YES
Corsa	Corsa 2	75+75 / 165+165		YES
Rodeo	Rodeo 1	125 / 280		YES
Rodeo	Rodeo 2	125+125 / 280+280		YES

 24V D.C.

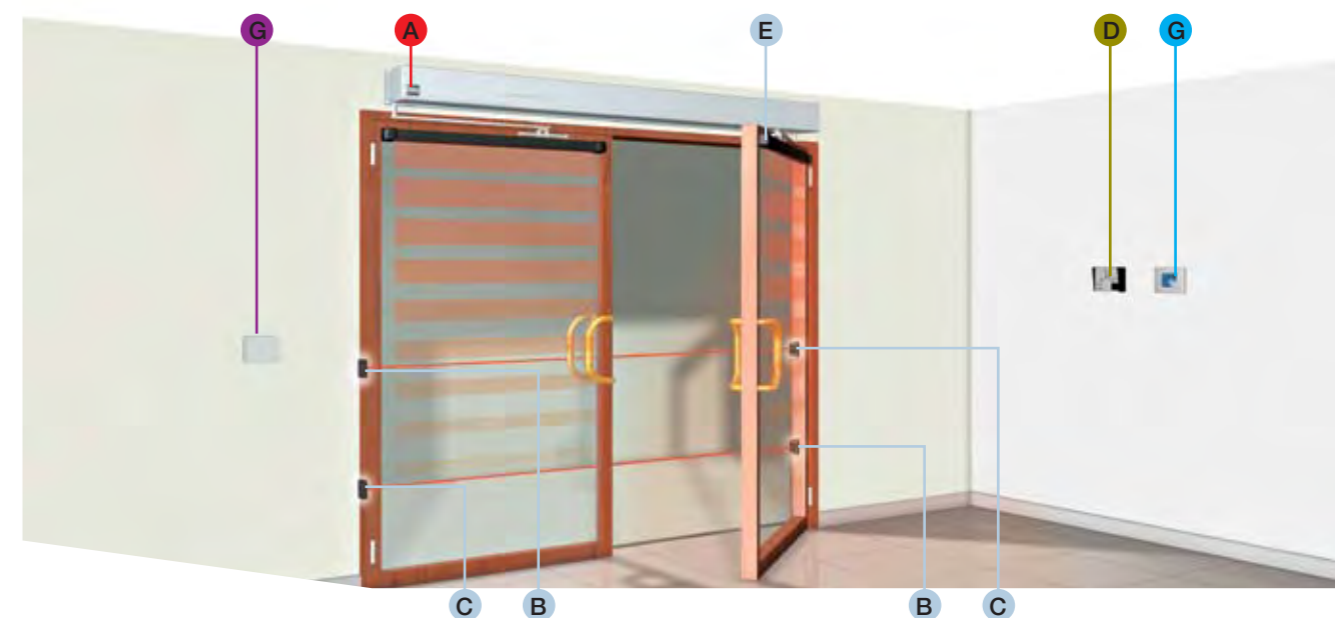
## Standard installation for 2-LEAF swing doors

TRAINED users and positioned on PUBLIC STREET

Automatic doors are the automated products that serve the greatest number of users in terms of transit-volumes. These being predominantly of pedestrian nature. It is vital to carefully consider the minimum safety issue-devices to raise the safety level and guarantee usage-intensity.

### Important

The equipment shown in the diagram is for information purposes only and the control accessories, such as the radar and sensors, must be evaluated according to the actual needs of the installation.



### Standard Issue

- A** Operators with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Function selector
- E** Safety and command radar
- G** Touch sensor
- H** Selector switch (key - code - card)

Cable length (m)	<10	10 - 20	20 - 30	
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"	
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3GxAWG15	3Gx1.5mm <sup>2</sup>	3GxAWG15
● Function selector	7x0.5mm <sup>2</sup>	7xAWG20	7x0.5mm <sup>2</sup>	7xAWG20
● Touch sensor	4x1mm <sup>2</sup>	4xAWG17	4x1mm <sup>2</sup>	4xAWG17
● Commands	*n*x0.5mm <sup>2</sup>	n*xAWG20	*n*x0.5mm <sup>2</sup>	n*xAWG20

\*n° = see documentation ● European standards ● US standards

### Safety radar



The MR8334 - MR8370 - MR8390 safety radars with anti-masking technology detect the presence of people on the space behind the moving door. Unparalleled protection for those applications when a high level of safety is required.

### Total entry control



Command devices for automatic doors can be connected to different access control systems that memorise, clear for entry and exit only authorised personnel and manage access throughout the various departments of a company or in any other public building.

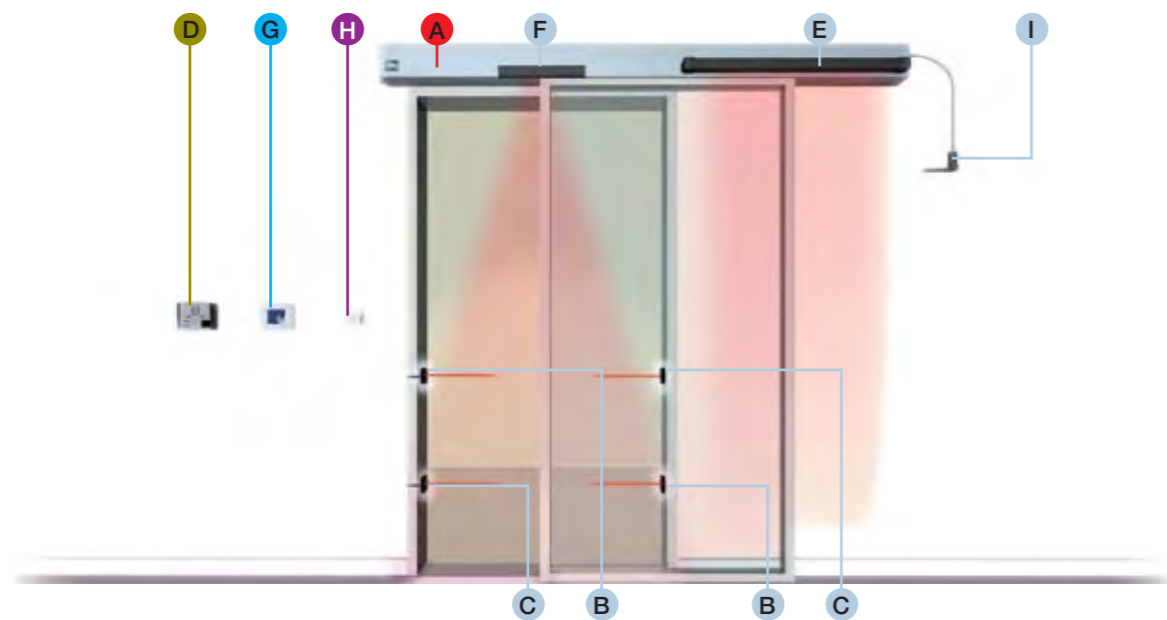
## Standard installation FOR 1-LEAF sliding doors

TRAINED users and positioned on PUBLIC STREET

Automatic doors are the automated products that serve the greatest number of users in terms of transit-volumes. These being predominantly of pedestrian nature. It is vital to carefully consider the minimum safety issue-devices to raise the safety level and guarantee usage-intensity.

### Important

The equipment shown in the diagram is for information purposes only and the control accessories, such as the radar and sensors, must be evaluated according to the actual needs of the installation.



### Standard issue

- A** Operators with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Function selector
- E** Safety radar
- F** Command radar
- G** Touch sensor
- H** Selector switch (key - code - card)
- I** Inner pull-chord release for electro-release

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Feature selector	7x0.5mm <sup>2</sup>	7x0.5mm <sup>2</sup>	7x0.5mm <sup>2</sup>
● Touch sensor	4x1mm <sup>2</sup>	4x1mm <sup>2</sup>	4x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>

\*n° = see documentation ● European standards ● US standards

### The touch sensor



The MS9502 sensor allows a hand-swipe gesture to operate swing or sliding automatic doors. A device specifically designed for applications requiring a local command that can be activated even without using one's hands. A typical example, for hygiene reasons, would be in a hospital.

### The wireless digital keypad



The S9000 wireless model is designed to solve issues when the installation requires minimal disruption or where it is difficult to lay cables. The code is protected by millions of combinations and by an "electronic anti-burglary" system which prevents tampering.

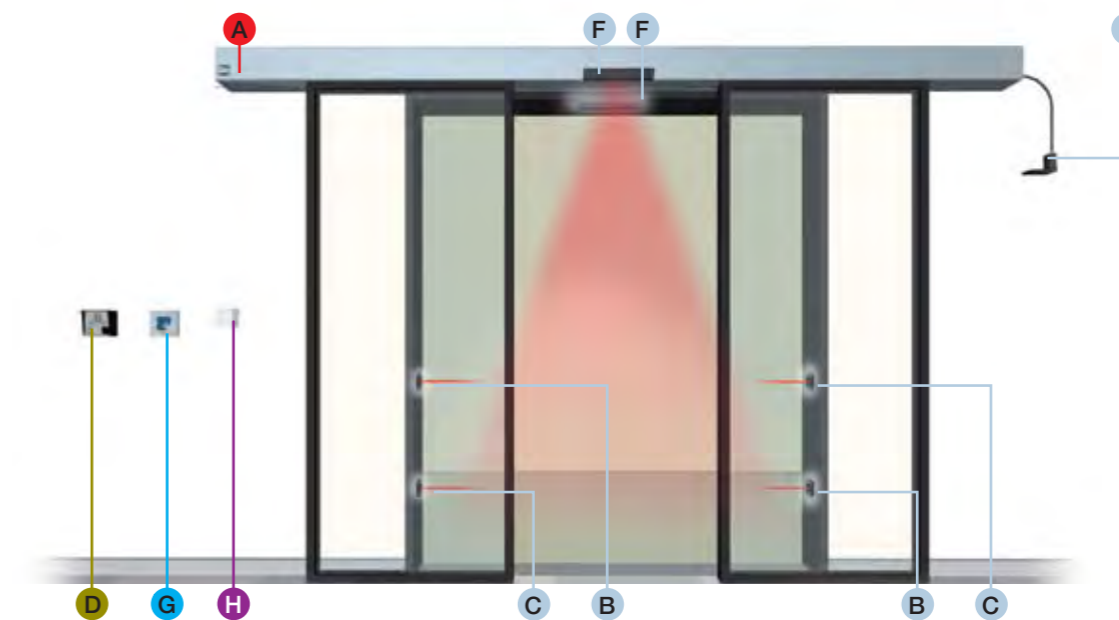
## Standard installation for 2-LEAF sliding doors

TRAINED users and positioned on PUBLIC STREET

Automatic doors are the automated products that serve the greatest number of users in terms of transit-volumes. These being predominantly of pedestrian nature. It is vital to carefully consider the minimum safety issue-devices to raise the safety level and guarantee usage-intensity.

### Important

The equipment shown in the diagram is for information purposes only and the control accessories, such as the radar and sensors, must be evaluated according to the actual needs of the installation.



### Standard issue

- A** Operators with control panel
- B** TX Infrared photocells
- C** RX Infrared photocells
- D** Function selector
- E** Safety and command radar
- G** Touch sensor
- H** Selector switch (key - code - card)
- I** Inner pull-chord release for electro-release

Cable length (m)	<10	10 - 20	20 - 30
Cable length (ft)	< 32'8"	32'8" - 65'6"	65'6" - 98'4"
● Power supply 230V A.C. (120V A.C.) 750W Max	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>	3Gx1.5mm <sup>2</sup>
● Feature selector	7x0.5mm <sup>2</sup>	7x0.5mm <sup>2</sup>	7x0.5mm <sup>2</sup>
● Touch sensor	4x1mm <sup>2</sup>	4x1mm <sup>2</sup>	4x1mm <sup>2</sup>
● Commands	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>	*n*x0.5mm <sup>2</sup>

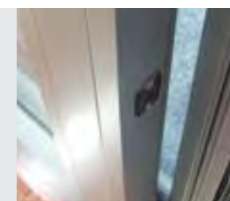
\*n° = see documentation ● European standards ● US standards

### Emergency escape



Doors automated with Corsa and Rodeo can be fitted with the Mi push bar system to give the doors a built-in panic-release function. The door leaves swing open whether they are moving or fixed, providing a much quicker emergency exit route out of the building.

### Infrared-beam micro-photocells



Made specifically for automatic doors, they can be installed in very little space by a simple alteration of the door profile. They come in pairs or double pairs and feature a standard issue screened cable that needs to be connected.

# Fly

## Automatic swing doors

### Automatic swing doors.

A revolutionary product that is a safe and reliable way to operate any type of door.

Fly is a reversible automation device with a built-in control panel that is easy to use and install.

It is well-suited for use in hospitals and other high-traffic settings.



Public buildings such as railway stations, airports, hospitals and public offices.



Commercial buildings such as shops or large distribution warehouses.



Private and service-sector buildings such as in restaurants, sports centres, businesses, hotels and residential properties.



door leaves of up to 1.2 m  
door leaves of up to 4' ft



## Advantages of Fly

Modern swing doors can be automated quickly and easily thanks to Fly, available in single or double door versions. It is extremely versatile, and thus ideal for settings in which busy people have their hands full, such as medical centres and hospitals, factories or public buildings in general where architectural barriers need to be dealt with.

## Limits to use

1 Leaf models	PB1100	PB1100	PB1100
Max weight of door leaf/leaves (Kg)	250	200	150
Max weight of door leaf/leaves (lb)	550	440	330
Max width of door leaf/leaves (mm)	800	1000	1200
Max width of door leaf/leaves (in)	32	40	47
2 Leaved models	PB2100	PB2100	PB2100
Max weight of door leaf/leaves (Kg)	250+250	200+200	150+150
Max weight of door leaf/leaves (lb)	550+550	440+440	330+330
Max width of door leaf/leaves (mm)	800+800	1000+1000	1200+1200
Max width of door leaf/leaves (in)	32+32	40+40	47+47

● 24V D.C.

## 24V Fly

24V technology increases the safety level of the system, since it allows you to adjust the run-speed, enables slow-down in the final phase of opening and closing and enables electronic obstacle detection., which is built-into the control panel.

## Technical features

Type	PB1100	PB2100
Power supply (V) (50/60 Hz)	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.
Current draw (A)	0.6	1.2
Power (W)	138	276
Manoeuvre speed 90°(s)	2 ~ 5	2 ~ 5
Duty cycle (%)	Intensive use	Intensive use
Torque (Nm)	40	40
Operating temperature (°C/°F)	-20 °C to 55 °C	-4 °F to 131 °F

● 24V D.C.



## The complete range

### Complete automation systems with 24V D.C. operator

001PB1100 Automation system for single-leaf swing doors.



001PB2100 Automation system for double-leaf swing doors. Profile and profile covers are not included.



001PF2100\* Profile and profile cover for PB2100.

### Accessories

001PB1001 Straight transmission arm. "PULL" opening.

001PB1002 Articulated transmission arm. "PUSH" opening.

001MA7034 Emergency panic release system complete with 2 x 12V - 0.8Ah batteries.

001MA7041 Function selector.

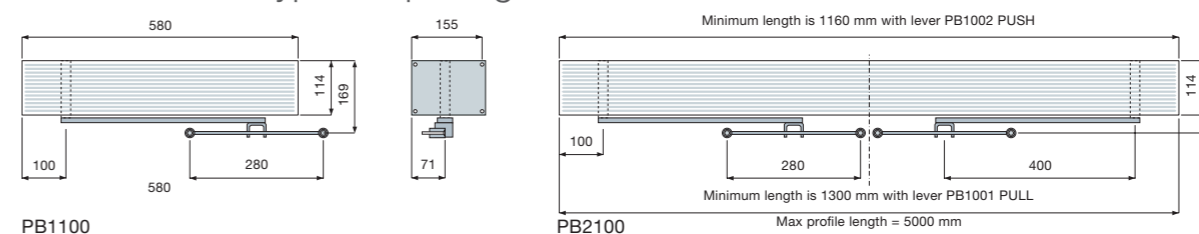
### NOTES:

\* Max Length of profile and cover L = 5000 mm.

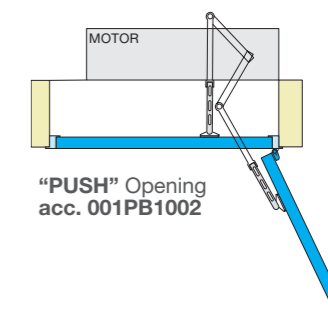
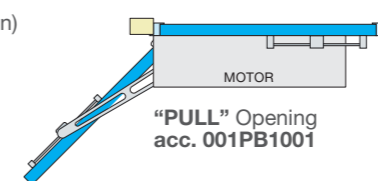
Min. length of profile and cover with con art. 001PB1001 L = 1300 mm.

Min. length of profile and cover with con art. 001PB1002 L = 1160 mm.

## Dimensions and type of opening



Dimensions in millimetres (25.4 mm = 1 in)



# Corsa-Rodeo

up to 75 and 125 Kg  
up to 165 and 280 lb

## Automatic sliding doors

### Intelligent operators.

The rational management of space and the need for simple, quick passage from one room to another make the automatic door an important element in any modern building.

Corsa and Rodeo are the ideal solutions for applications in commercial, residential and high-traffic areas.



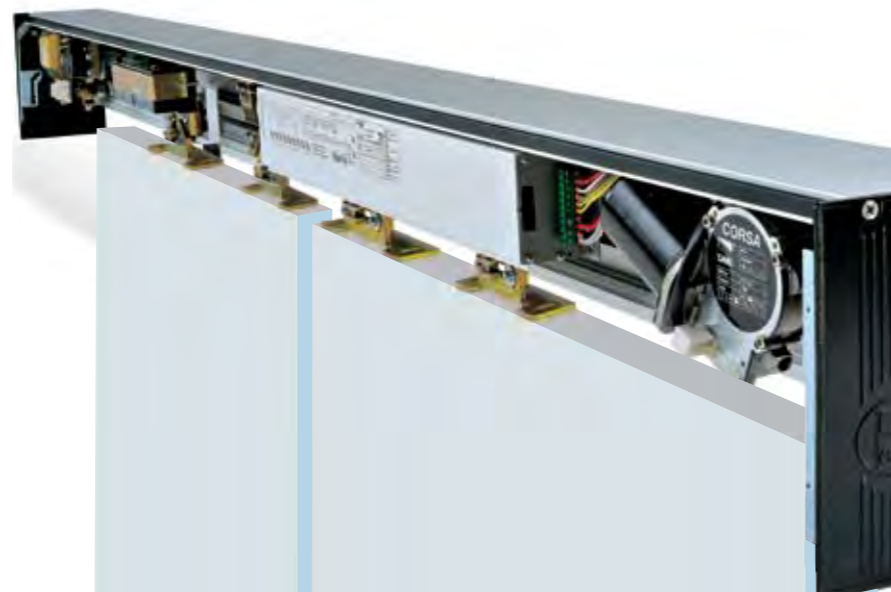
Public and commercial facilities such as railway stations, airports, ports, shops, shopping centres and motorway services.



Other public buildings such as banks, office buildings, hospitals and sports centres.



Private buildings such as hotels, restaurants, homes and businesses.



## Advantages of Corsa and Rodeo

Automatic sliding doors solve any issues related to managing passage between rooms in public and private facilities. CAME meets the needs of modern building design by offering two 24V automated products that can power any type of sliding door weighing up to 125 Kg per door leaf. Corsa and Rodeo are two intelligent operators that feature micro-processing logic and self-managing opening/closing operation and thrust parameters as well as constant movement control and obstacle-detection.

### Limits to use

1 Leaf models	CORSA 1	RODEO 1
Max weight of door leaf/leaves (Kg / lb)	75 / 165	125 / 276
Max width of door leaf/leaves (mm / in)	3340 / 132	3340 / 132
2 Leaves models	CORSA 2	RODEO 2
Max weight of door leaf/leaves (Kg / lb)	75+75 / 165+165	125+125 / 280+280
Max width of door leaf/leaves (mm / in)	1670 / 66	1670 / 66

● 24V D.C

### Technical features

Type	CORSA 1	CORSA 2	RODEO 1	RODEO 2
Power supply (V) (50/60 Hz)	230 A.C.	230 A.C.	230 A.C.	230 A.C.
Motor power supply (V)	24 D.C.	24 D.C.	24 D.C.	24 D.C.
Current draw (A)	0.6	0.6	0.6	0.6
Power (W)	70	70	90	90
Manoeuvre speed (cm/s)	Max 57	Max 102	Max 45	Max 80
Duty cycle (%)	Intensive use	Intensive use	Intensive use	Intensive use
Thrust (Kg/lb)	5 / 11	5 / 11	8 / 17	8 / 17
Operating temperature (°C/°F)		-20 °C to 55 °C	-4 °F to 131 °F	

● 24V D.C.



## The complete range

### Complete automation system with 24V D.C. operator

- 001CORSA1 Automation system for single-leaf sliding doors of up to 75 Kg / 165 lb.
- 001CORSA2 Automation system for double-leaf sliding doors of up to 75 Kg / 165 lb per door leaf.
- 001RODEO1 Automation system for single-leaf sliding doors of up to 125 Kg / 280 lb.
- 001RODEO2 Automation system for double-leaf sliding doors of up to 125 Kg / 280 lb per door leaf.

### Accessories

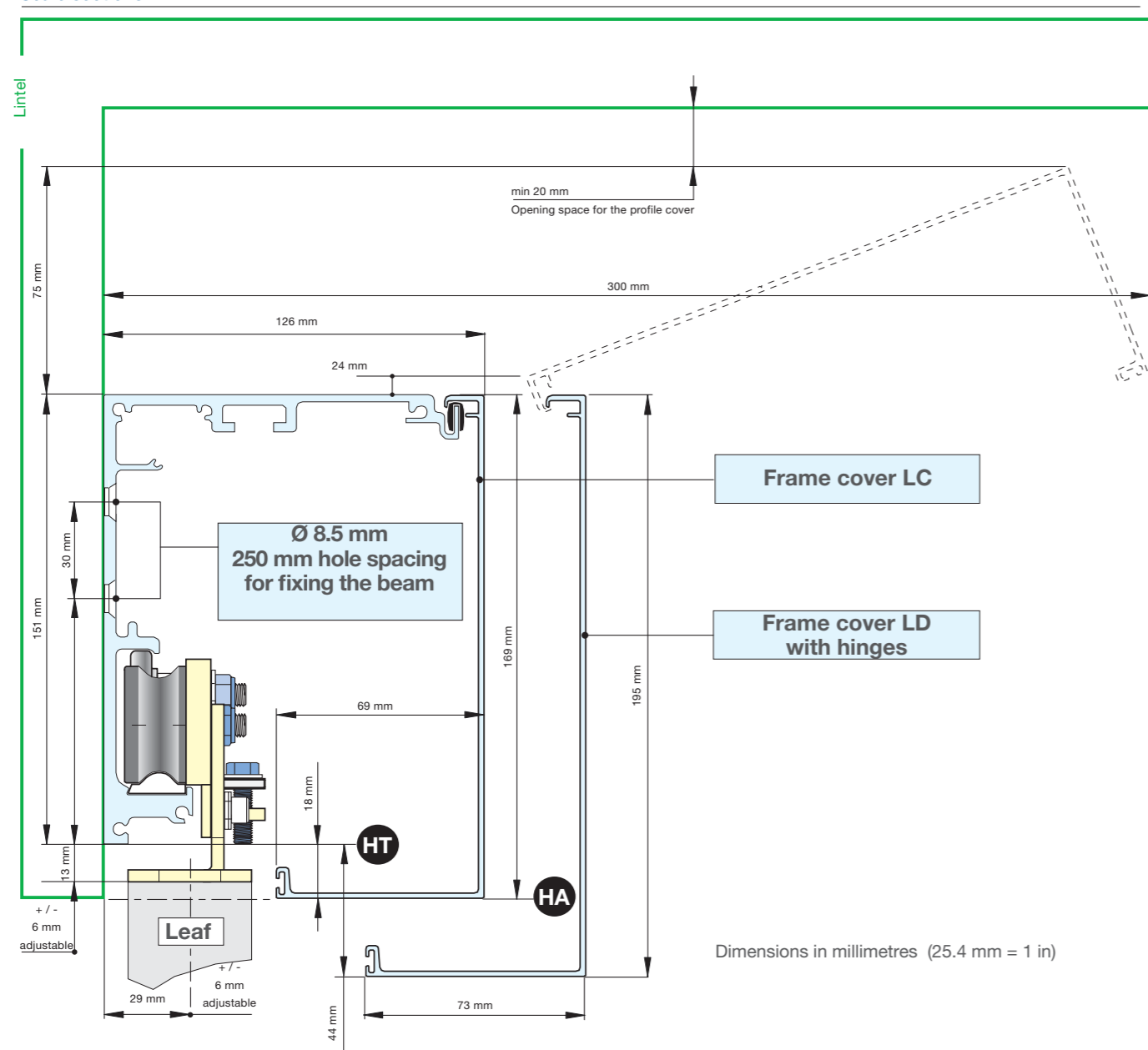
- 001MA7012 Electric lock complete with cord and release lever.
- 001MA7032 Card for connecting two 12V – 1.2Ah emergency batteries with rack.
- 001MA7041 Function selector.

## 24 Volt only

The 24V technology increases the system's safety level, because it allows adjustment of the operating speed, the final phase of closing and opening, but especially due to its standard-issue, electronic, obstacle-detection function, which is built-into the control panel.

## Dimensions

### Scale sections



### Pre-perforated beam profile

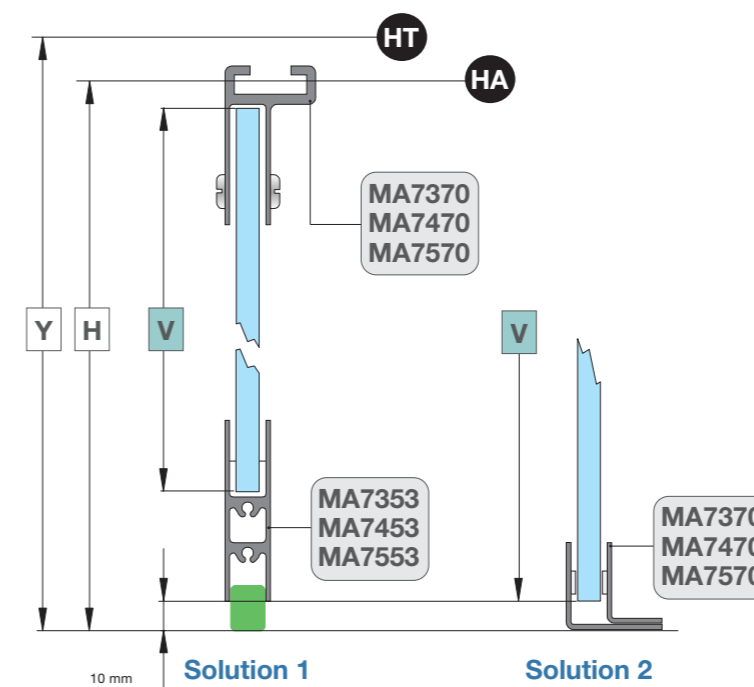
The Corsa and Rodeo operators are supplied to clients' specifications with a pre-perforated beam profile for fixing to the lintel or wall. Depending on the nature of the support on which the operator will be fixed, the operator comes with suitable fixing systems that use at least 2/3 of the holes available and, mandatory those on the ends and centre of the profile.

The holes are situated along two parallel lines with 250 mm spacing. Generally speaking, fixing on every other holes is sufficient.



## Leaf/leaves height

### Glass doors



#### Solution 1

$$V = \begin{matrix} H - 70 \text{ mm} \\ Y - 88 \text{ mm} \end{matrix}$$

#### Solution 2

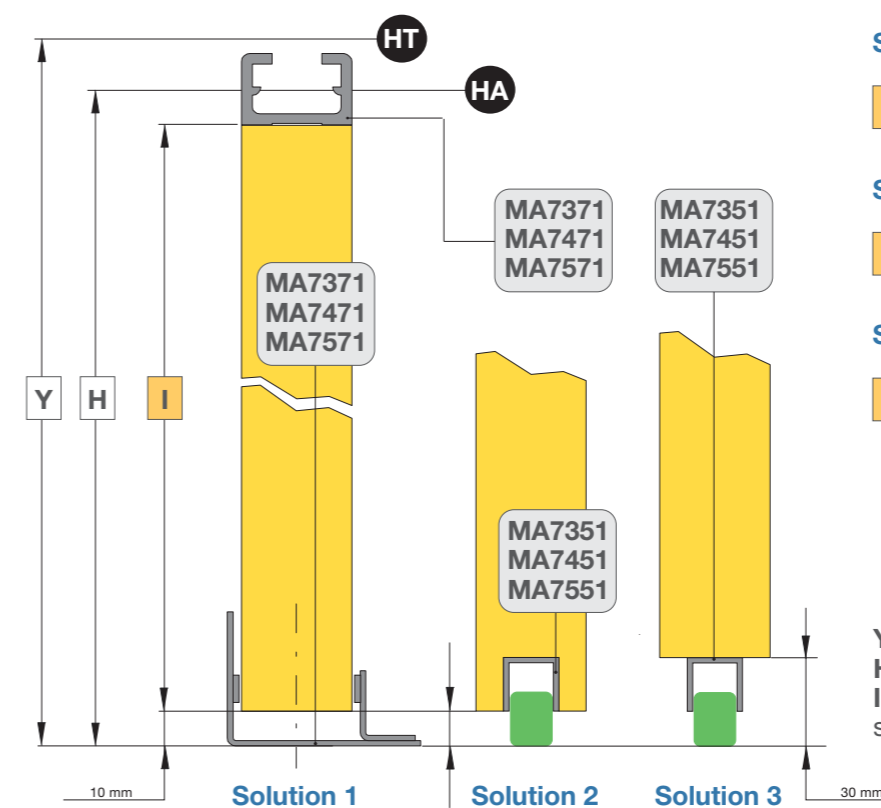
$$V = \begin{matrix} H - 22 \text{ mm} \\ Y - 40 \text{ mm} \end{matrix}$$

Y = Height from the ground of beam profile fixing  
H = Height from ground of the lintel  
V = Height of glass with shown profiles

#### Weight of door

2.5 Kg x m<sup>2</sup> x 1 mm thickness

### Framed leaves



#### Solution 1

$$I = \begin{matrix} H - 28 \text{ mm} \\ Y - 46 \text{ mm} \end{matrix}$$

#### Solution 2

$$I = \begin{matrix} H - 28 \text{ mm} \\ Y - 46 \text{ mm} \end{matrix}$$

#### Solution 3

$$I = \begin{matrix} H - 48 \text{ mm} \\ Y - 66 \text{ mm} \end{matrix}$$

Y = Height from the ground of beam profile fixing  
H = Height from ground of the lintel  
I = Height of the framed door-leaf with the shown profiles

Dimensions in millimetres (25.4 mm = 1 in)



# Corsa-Rodeo

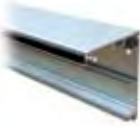







up to 75 and 125 Kg  
up to 165 and 280 lb



## The complete range

Doors Turnstiles  
& Access Control  
Catalogue

### Covering and support aluminium profiles

-  **001PLCD1** Beam profile and slide guide. Length = 6.85m
-  **001LC68** Natural anodized profile cover. Length = 6.85m
-  **001LC68G** Unfinished profile cover. Length = 6.85m
-  **001LTC** Natural grey painted caps for LC00 profile cover.
-  **001LTCG** Unfinished caps for LC01 profile cover.
-  **001LD68** Natural anodized extra-size profile cover. Length = 6.85m
-  **001LD68G** Unfinished extra-size profile cover. Length = 6.85m
-  **001LTD** Caps with hinges for LD00 and LD01 profile covers.

NOTES:



### Special varnishing and oxidation treatments made to order

The varnishing and oxidation treatments can be applied to the following items: LC00 - LC01 - LTCG - LD01 - LD00 - MA7371 - MA7471 - MA7571 - MA7351 - MA7451 - MA7551 - MA7370 - MA7470 - MA7570 - MA7353 - MA7453 - MA7553 and for S20 - S40 profiles.

Please keep in mind that electrostatic powder varnish jobs provide a high level of colour continuity when the profiles are treated in one, single phase. Subsequent applications, even when maintaining the same colour code, could result in slight variations of hue.

Please contact us to discuss your requirements.

## The complete range

### Universal alu-profile for door leaves

**Upper hooking profile for framed door leaves, with castor securing brackets and above-surface floor rails**



- 001MA7371** Complete kit for two door leaves of up to 500 mm wide or one door leaf up to 1,000 mm wide.
- 001MA7471** Complete kit for two door leaves of up to 750 mm wide or one door leaf up to 1,500 mm wide.
- 001MA7571** Complete kit for two door leaves of up to 1,000 mm wide or one door leaf up to 2,000 mm wide.

**Inner guiding profile for framed door leaves with flush floor rails**



- 001MA7351** Complete kit for two door leaves of up to 500 mm wide or one door leaf up to 1,000 mm wide.
- 001MA7451** Complete kit for two door leaves of up to 750 mm wide or one door leaf up to 1,500 mm wide.
- 001MA7551** Complete kit for two door leaves of up to 1,000 mm wide or one door leaf up to 2,000 mm wide.

**Upper hooking profile for 10 mm thick tempered glass door leaves with castor securing brackets and above surface floor rails**



- 001MA7370** Complete kit for two door leaves of up to 500 mm wide or one door leaf up to 1,000 mm wide.
- 001MA7470** Complete kit for two door leaves of up to 750 mm wide or one door leaf up to 1,500 mm wide.
- 001MA7570** Complete kit for two door leaves of up to 1,000 mm wide or one door leaf up to 2,000 mm wide.

**Lower guiding profile for 10 mm thick tempered glass door leaves with flush floor rails**



- 001MA7353** Complete kit for two door leaves of up to 500 mm wide or one door leaf up to 1,000 mm wide.
- 001MA7453** Complete kit for two door leaves of up to 750 mm wide or one door leaf up to 1,500 mm wide.
- 001MA7553** Complete kit for two door leaves of up to 1,000 mm wide or one door leaf up to 2,000 mm wide.

**Grip trim for 10 mm thick tempered glass door leaves (30 m / 98'5" ft packages)**



- 001MAM601** Black grip trim for fixed and sliding door leaves.
- 001MAM601T** Transparent grip trim for fixed and sliding door leaves.
- 001MAM600** Black central grip trim for sliding doors.
- 001MAM600T** Transparent central grip trim for sliding doors.

# Accessories



## Accessories for automatic doors

Specific products for automatic entrances. A truly complete range for installation of automatic sliding and swing doors – in any application setting. CAME provides complete automatic door solutions; made to meet the needs of the user, the type of installation and operator chosen.



**Remote controlled.**  
The MR8104, MR8105 and MR8106 can be set at a distance thanks to the infrared remote control which enables you to manage their sensitivity parameters and field of activation (optional).



## The advantages of original accessories

An automatic sliding or swing door is equipped with a range of accessories that optimise the automation system's functionality while at the same time allow it to respond to a variety of special installation situations with customised performance. CAME's complete range of automatic door accessories meets the requirements of every application: volumetric and infrared radar, also with anti-screening technology, touch sensors, infrared-beam micro-photocells and sensitive ground plates. A complete range of accessories made to meet even the most diverse needs.

\* The anti-masking sensors are capable of detecting still objects within the sensor's activation field.

**Infrared sensors.**  
Although they are usually employed on sliding doors, they are also often applied to swing doors, opposite the door's swing arc. Various models with adjustable field mode are available, as well as ones with anti-masking function.\* (see note)



**Touch sensors.**  
These are specifically designed for applications requiring a local command that can be activated by swiping the hand near, but not actually touching the switch. A typical example, for hygienic reasons, would be a hospital environment.



**Volumetric sensors.**  
These are mostly used on sliding door operators where obstacle and person detection is a must. They are typically used in shopping centres, supermarkets and general warehousing.

## The complete range



### Micro photocells

- 001MF9011** Pair of 24V A.C.-D.C. flush mount infrared micro photocells with 7 m / 23' ft range and complete with shielded cable.
- 001MF9111** Double pair of 24V A.C.-D.C. flush mount infrared micro photocells with 7 m / 23' ft range and complete with shielded cable.

### Active infrared radar

- 001MR8003** 12 - 24V A.C.-D.C. radar with adjustable field. Max application height : 3 m / 9'10" ft. Detection is equal to: depth of field = 0.41 - 1.77 m. Depth of field 3.1 m / 10'2" ft.

## The complete range

### Infrared safety radar with anti-masking function

\* Length of device

- 001MR8334** 12 - 24V A.C.-D.C. safety radar with anti-masking function. L = 340 mm\*. Max application height: 2.5 m / 8'2" ft. 2 m / 6'5" ft Detection band diameter = 0.13 m. Max detection depth = 0.53 m. Effective range is adjustable from 0.7 m to 2.5 m.
- 001MR8370** 12 - 24V A.C.-D.C. safety radar with anti-masking function. L = 700 mm\*. Max application height: 2.5 m / 8'2" ft. 2 m / 6'5" ft Detection band diameter = 0.13 m. Max detection depth = 0.53 m. Effective range is adjustable from 0.7 to 2.5 m.
- 001MR8390** 24 - 700V A.C.-D.C. safety radar with anti-masking function. L = 900 mm\*. Max application height: 2.5 m / 8'2" ft. 2 m Detection band diameter = 0.13 m. Max detection depth = 0.53 m. Effective range is adjustable from 0.7 to 2.5 m.

### 12 - 24V A.C. - D.C. Microwave volumetric radars

- 001MR8104** Bi-directional microwave volumetric radar. Max application height: 4 m / 13'1" ft. Detection area: WIDE ANTENNA depth of field = 2 m / 6'5" ft and width of field 4 m / 13'1" ft. NARROW ANTENNA depth pf field = 2.5 m / 8'2" ft and width of field 2 m / 6'5" ft. Adjustments through MRT001 remote control.
- 001MR8105** Bi-directional microwave volumetric radar. Max application height: 5 m / 16'4" ft. Detection area: Depth of field = 2.5 m / 8'2" ft and width of field 4 m / 13'1" ft. Adjustments through MRT001 remote control.
- 001MR8106** Mono / bi-directional microwave volumetric radar. Max application height: 4 m / 13'1" ft. Detection area: WIDE ANTENNA depth of field = 2 m / 6'5" ft and width of field 4 m / 13'1" ft. NARROW ANTENNA depth pf field = 2.5 m / 8'2" ft and width of field 2 m / 6'5" ft. Adjustments through MRT001 remote control.
- 001MR8107** Bi-directional microwave volumetric radar. Max application height: 4 m / 13'1" ft. Detection area: WIDE ANTENNA depth of field = 2 m / 6'5" ft and width of field 4 m / 13'1" ft. NARROW ANTENNA depth of field = 2.5 m / 8'2" ft and width of field 2 m / 6'5" ft. Manual adjustments.

### Bidirectional radar with movement and presence detection



- 001MR8202** Radar with adjustable field 12 - 24V A.C. -D.C. Height of application from 1.8 to 4 m / 5'9" to 13'1" ft  
  
MOVEMENT DETECTION:  
Detection mode: movement - bidirectional  
Technology: iperfrequency and microprocessor  
Detection field: Field depth 2 m / 6'5" ft - Field width 4 m / 13'1" ft  
angle: from 15° to 50° in elevation (adjustable)  
  
PRESENCE DETECTION  
Detection mode: presence  
Technology: active and focused infrared beam  
Detection field: Field depth 0.35 m / 1'1" ft - Field width 2 m / 6'5" ft  
angle: from -4° to +4° (adjustable)

### Accessories

- 001MRT001** Remote control for MR8104 - MR 8105 - MR8106 microwave volumetric radars.
- 001MRWPC** Protective cover for MR8104 - MR 8105 - MR8106 - MR8107 microwave volumetric radars.
- 001MS9502** Brush activated volumetric sensor 12 - 24V A.C.-D.C. with microwave reflection. Detection field: from 1 to 50 cm
- 001MP8030** 800 x 300 mm sensitive pad.
- 001MP8060** 800 x 600 mm sensitive pad.

## Panic-release systems

Emergency panic release system for sliding doors.

In high-traffic settings, or anywhere emergency exits are required by law, automatic sliding doors must be fitted with an emergency release device. This lets you use the automatic access way as a regular emergency exit.



Meant for the S40 series. All the details are planned to perfectly integrate with the S40 series framed doors. However, you can use the kit with many other commercial-type profiles that have a minimum section of 40 mm.



Floor guides. A special floor-guide profile, which allows the moving door-leaf to rotate, is necessary when installing the panic-release system.



Commercial Security. The special MAL229 profile prevents doors fitted with the panic-release system from being opened from the outside. This helps protect the premises from unauthorised entry during non-business hours.



## Emergency exits

The European standards for emergency exits require a minimum passage width of 1200 mm and for the door to swing open when pushed by a person.



## Security and peace of mind

A full supply of accessories to use with the S40 series of framed profiles and with many other available profiles. The set of components is installed on either the doors or the operator. Emergency exit release systems can be applied to all of the door-leaves, moving or not. This is normally referred to as the integral panic-release solution, and is the most widely used because it best guarantees evacuation of the building in emergency situations. The panic-release system makes it so that the entire door width can be opened – which is also useful for loading/unloading situations and even on hot sunny days!

### Limits to use

Model	Max width of leaf/leaves (mm)	Mobile/fixed leaves
MI6010	1100	YES / NO
MI6110	1500	YES / NO
MI6020	1100 + 1100	YES / NO
MI6120	1500 + 1500	YES / NO
MI6030	1100	YES / YES
MI6130	1500	YES / YES
MI6040	1100 + 1100	YES / YES
MI6140	1500 + 1500	YES / YES
Width of leaf (mm)	Max weight of leaf (Kg/lb)	Max weight of leaf (Kg/lb)
500	75 / 165	120 / 265
600	75 / 165	90 / 198
700	75 / 165	80 / 176
800	60 / 132	70 / 154
900	50 / 110	60 / 132
1000	45 / 99	50 / 110
1100	40 / 88	40 / 88

NOTES: a jockey wheel must be inserted with door-leaves wider than 1100 mm.

## The complete range

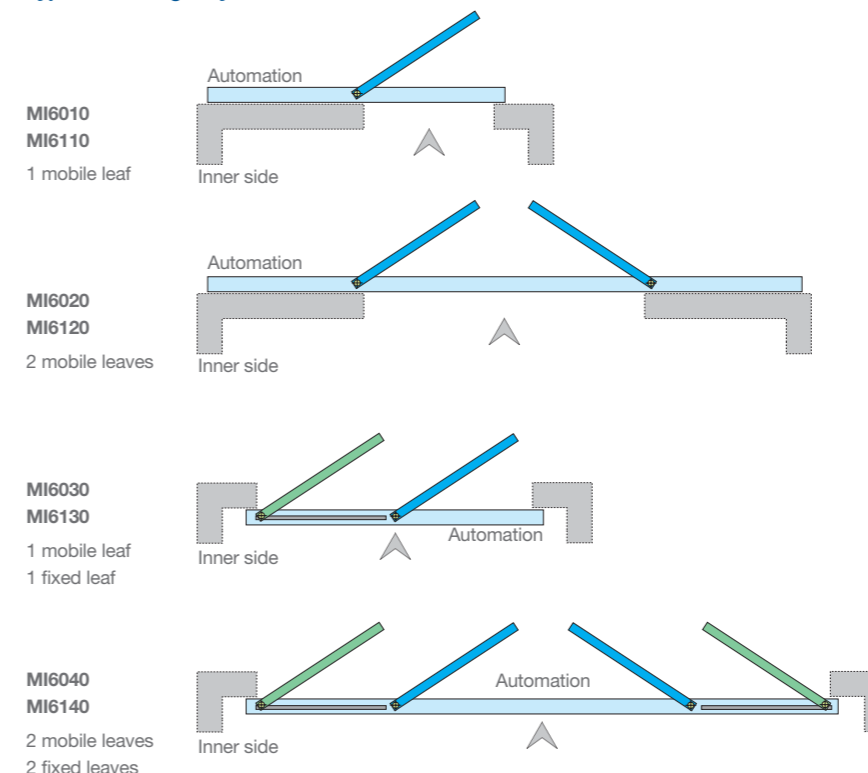
### Complete emergency breakaway systems for sliding door leaves with S40 profiles

001MI6010	Complete system for one mobile door leaf. Max width: 1,100 mm.
001MI6110	Complete system for one mobile door leaf. Max width: 1,500 mm.
001MI6020	Complete system for two mobile door leaves. Max width: 1,100 + 1,100 mm.
001MI6120	Complete system for two mobile door leaves. Max width: 1,500 + 1,500 mm.
001MI6030	Complete system for one mobile door leaf and one fixed door leaf. Max width: 1,100 mm.
001MI6130	Complete system for one mobile door leaf and one fixed door leaf. Max width: 1,500 mm.
001MI6040	Complete system for two mobile door leaves and two fixed door leaves. Max width: 1,100 + 1,100 mm.
001MI6140	Complete system for two mobile door leaves and two fixed door leaves. Max width: 1,500 + 1,500 mm.



## Installation

### Types of emergency exit



We suggest using Mi panic-release systems on the Rodeo series operators as they are best suited for the size and type of castors used on the door-leaves. In any case, before installing, check the following:

- The operator must be installed in a position that allows the doors to be opened in panic-release mode.
- On single door leaves with fixed door leaves, or doors not fitted with panic-release devices, make sure the operator is mounted so that the door is free to swing open.
- Minimum widths for emergency exits must be adhered to. Please refer to Part B (emergency exits) and Part M (access to buildings) of the UK Building regulations.
- When installing on other commercial profiles you must take into account the proper minimum dimensions for mounting the devices and proper movement of the door-leaves.

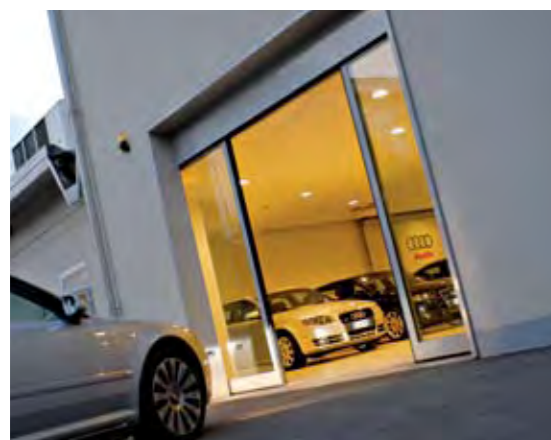
# S20

## Profiles for doors

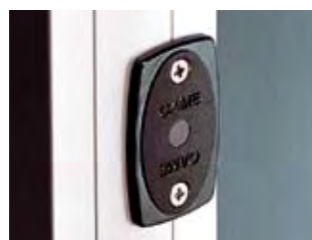
### Elegance and design.

CAME's S20 line of profiles, for tempered glass doors, is specifically designed to create a very bright and attractive door.

Also, CAME S20 is made for quick-and-easy assembly of the doors – no special alterations are required.



Complete with all the accessories. Every detail in the S20 series is designed for quick-and-easy assembly of the aluminium profiles and seamless installation of the door.



## S20 series advantages

Sturdy, elegant and easy to assemble; these are just some of the characteristics you find in the S20 tempered glass door profiles. They are suitable for glass sheets of between 4 and 15 mm thickness, with standard 10 mm wide glass mounting kit.

They also work in a host of different door application contexts – whether these be at the front or back-of-the-house. Moreover, the S20 series give you a door that fits perfectly with the Corsa and Rodeo operators; in terms of aesthetics and design.

### Weight

Model	Weight (gr / m)
001MAL199	0.366
001MAL200	0.509
001MAL201	0.186
001MAL202	0.2
001MAL203	1.802
001MAL204	0.813
001MAM612	1.325
001MAL790	0.478
009P3	0.028
009P4	0.05
009P5	0.068
009P6	0.078
009P7	0.128

The S20 series is supplied with a silver, anodised finish, but is also available with a rough finish or on-request varnishing/oxidation. Please contact us to discuss your requirements.

## The complete range

### Aluminium profiles for 4 to 15 mm thick glass doors leaves (standard length: 5 m / 16'4" ft)



- 001MAL199 Vertical post for fixed and mobile door leaves.
- 001MAL200 Wall-mounting frame for fixed door leaves.
- 001MAL203 Upper hooking profile.
- 001MAL204 Vertical photocell containment and door leaf endpoint profile for one door leaf.
- 001MAM612 Lower guiding profile.
- 001MAL790 Reduced photocell containment profile.

### Plastic grip profile (Packages of 30 m / 98'5" ft).

- 001MAL201 Lateral grip trim for fixed and mobile door leaves.
- 001MAL202 Central grip trim for mobile door leaves.
- 001MAL791 Finishing profile for MAL790 (10 pieces of 3 m / 9'10" ft each).

### Assembling accessories

- 001MAF001 Complete assembling kit for one fixed door leaf.
- 001MAM001 Complete assembling kit for one mobile door leaf with slide rails.

### Rubber grip trim. (Packages of 30 m / 98'5" ft).

- 009P3 3 mm grip trim for glass.
- 009P4 4 mm grip trim for glass.
- 009P5 5 mm grip trim for glass.
- 009P6 6 mm grip trim for glass.
- 009P7 7 mm grip trim for glass.

# S40

## Profiles for doors

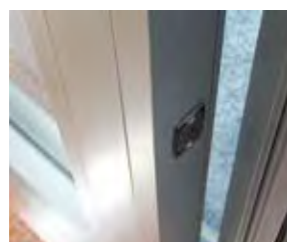
### Sturdiness and rigidity.

The S40 line of framed-door profiles, is specifically designed to provide extremely sturdy doors for those heavy-duty situations found in large commercial facilities.

They are designed to fit together with the panic-proof breakaway system, are easy to assemble and provide multiple combination possibilities.



Complete with all the accessories. You will find that, every detail in the S40 series is designed for quick-and-easy assembly of the aluminium profiles and perfect installation of the door.



## S40 series advantages

The S40 range is designed to provide door solutions, especially for those high-traffic environments.

Typical settings would be shopping malls, public buildings and hospital entrances where daily traffic volumes are high. The profile sections are, therefore generously thick, while assembly requires brackets and mounting accessories which are supplied standard with the kit.

It is fitted to combine with the MI panic-proof breakaway systems, the S40 series is the solution which provides maximum performance when it comes to toughness, reliability and durability.

### Weight

Model	Weight (gr/m)
001MAL225	686
001MAL226	1030
001MAL227	841
001MAL228	472
001MAL229	138
001MAL230	242
001MAL231	121
001MAL223	104
001MAL224	468
009P3	28
009P4	5
009P5	68
009P6	78
009P7	128

The S40 series is supplied with a silver, anodised finish, but is also available with a rough finish or on-request varnishing/oxidation. Please contact us to discuss your requirements.

## The complete range

### Aluminium profiles for 4 to 15 mm thick crystal doors leaves (standard length: 5 m / 16'4" ft)

- 001MAM613 Upper hooking profile for framed door leaves.
- 001MAM699 Lower guiding profile for framed door leaves.
- 001MAL225 Wall-mounting frame for fixed door leaves.
- 001MAL226 Vertical post and upper hooking profile for fixed and mobile door leaves.
- 001MAL227 Lower slide guiding profile.
- 001MAL228 Flush floor profile for aligning and blocking fixed door leaves.
- 001MAL229 Door leaf blocking profile for emergency release system.
- 001MAL230 Vertical photocell containment and door leaf endpoint profile.
- 001MAL231 Glass holding profile for MAL226 and MAL227.

### Assembling accessories

- 001MAF002 Bracket to pair fixed door leaf to frame.
- 001MAF003 Upper and lower anchoring angle brackets for fixed door leaves.
- 001MAM002 Finishing for mobile door leaves with emergency release system.
- 001MAM003 Package of accessories to hook the mobile door leaf to the slide guide.
- 001MAMF01 Package of nuts and bolts for one door leaf assembly.
- 001MAMF02 Adjusting angle bracket for one door leaf.
- 001MAMF03 Angle bracket for frame.

### Rubber grip trim (Packages of 30 m / 98'5" ft).

- 009P3 3 mm grip trim for glass.
- 009P4 4 mm grip trim for glass.
- 009P5 5 mm grip trim for glass.
- 009P6 6 mm grip trim for glass.
- 009P7 7 mm grip trim for glass.

### Plastic grip trim (Packages of 30 m / 98'5" ft).

- 001MAL223 Multi-use trim. 10 pieces of 3 m / 9'10" ft.
- 001MAL224 Central grip trim for mobile door leaves. 10 pieces of 3 m / 9'10"

# Terms and Conditions of Sale



## CAME UNITED KINGDOM, A TRADING DIVISION OF UMC GROUP LTD (“THE SELLER”)

1. INTERPRETATION

“Buyer” means the person firm or company who buys or agrees to buy the Goods from the Seller;

“Buyer’s Premises” means the Buyer’s premises detailed on the quotation given by the Seller to the Buyer in respect of the Goods;

“Delivery Date” means the date specified by the Seller when the Goods are to be delivered;

“Conditions” means these terms and conditions of sale;

“Contract” means the contract for the sale by the Seller and purchase by the Buyer of Goods;

“Goods” means all goods supplied by the Seller to the Buyer pursuant to the Contract;

“Price” means the price of the Goods plus VAT plus Additional Charges as referred to in Conditions 6.3 and 4.8;

“Seller” means CAME United Kingdom, a trading division of UMC GROUP LTD. whose registered office is at Unit 3, Orchard Park Industrial Estate, Town Street, Sandiacre, Nottingham, NG10 5BP;

“Surcharge” means the sum of £10.00 (ten pounds);

“Wasted Time Rate” means the charge for wasted time at the Seller’s standard rate for wasted time of £1 (one pound) per minute up to and including 30 (thirty) minutes and thereafter at a charge of £2 (two pounds) per minute, or such other charge as notified to the Buyer from time to time;

“writing” includes facsimile transmission but excludes writing on the screen of a visual display unit or other similar device.
2. BASIS OF SALE
  - 2.1 These Conditions shall apply to the sale by the Seller of all Goods purchased by the Buyer and these Conditions shall govern the contract to the exclusion of any other terms and conditions introduced or submitted by the Buyer.
  - 2.2 No variation of these Conditions may be given by any of the Seller’s employees unless confirmed in writing by an authorised director of the Seller and no collateral or supplemental contract may be made or construed unless confirmed in writing by an authorised director of the Seller on the Seller’s official stationery.

Any tenders or quotations submitted to the Buyer shall remain valid for the period stated therein, but if no period is specified such tenders and quotations shall be valid for [30] days from the date thereof. All tenders and quotations shall be subject to these Conditions. Any tenders or quotations will not constitute an offer and the Contract shall be made when the Seller acknowledges the order placed by the Buyer in writing and not before.

Where the Seller acknowledges or confirms the details of the Contract in writing, the Buyer shall be under a duty to bring any discrepancies to the Seller’s notice immediately, and if the Buyer fails to do so, the Buyer shall, if the Seller so elects, be bound by the details contained mentioned or referred to in the written confirmation of the Contract.

Any typographical, clerical or other error or omission in any sales literature, quotation, price list, acceptance of offer, invoice or other documentation or information issued by the Seller shall be subject to correction without any liability on the part of the Seller.

The Seller’s employees or agents are not authorised to make any representations concerning the Goods unless confirmed by an authorised director of the Seller in writing. In entering into the Contract the Buyer acknowledges that it does not rely on any such representations which are not so confirmed, save that nothing in these Conditions shall exclude the Sellers liability for fraudulent misrepresentation.

No order which has been accepted by the Seller may be cancelled by the Buyer except with the agreement in writing of the Seller and on terms that the Buyer shall indemnify the Seller in full against all loss (including loss of profit), costs (including the cost of all labour and materials used), damages, charges and expenses incurred by the Seller as a result of cancellation.
- 2.9 The Seller reserves the right to make any changes to the Goods:-
  - 2.9.1 which are required so that the Goods conform with any applicable statutory or EU requirement; or
  - 2.9.2 where such changes to the Goods do not materially affect the quality or performance of the Goods.
3. SAFETY

Any Goods supplied by the Seller must be handled correctly. The Buyer must ensure that all appropriate safety precautions are taken and that its staff are aware of and comply with all storage and usage instructions.
4. DELIVERY
  - 4.1 Unless otherwise agreed by the Seller in writing, delivery shall take place at the Buyer’s Premises. The Seller shall reasonably endeavour to deliver the Goods to the Buyer’s Premises or such other address as may be agreed between the parties in writing on the date indicated by the Seller or the date agreed between the parties, but the time of delivery or performance shall not be of the essence and if despite those endeavours, the Seller is unable for any reason to fulfil any delivery of the Goods on the date so indicated, the Seller shall not be deemed to be in breach of contract or have any liability to the Buyer.

The Seller shall notify the Buyer when the Goods are ready for delivery. In the event that the Buyer shall not be able to take delivery of the Goods within [10] working days from the date of receipt of such notification, the Seller shall be entitled, but not obliged, to arrange storage of the Goods until actual delivery and charge the Buyer for the reasonable costs (including insurance) of storage.

The Buyer shall provide the Seller with clear delivery instructions in the event that the Seller agrees to deliver the Goods to any point other than the Seller’s premises.

Upon delivery the Buyer will sign a delivery note which will be conclusive evidence that delivery of the Goods has been made.
  - 4.5 The Seller shall have the right to deliver any Goods ordered in instalments.
  - 4.6 Failure by the Seller to deliver any one or more of the instalments in accordance with these Conditions or any claim by the Buyer in respect of the Goods delivered in any one or more instalments shall not entitle the Buyer either to treat the Contract as a whole as repudiated or to reject or refuse to take delivery of any of the Goods delivered in any other instalment.
  - 4.7 If the Seller fails to deliver the Goods (or any instalment thereof) for any reason other than any cause beyond the Seller’s reasonable control or the Buyer’s fault, and the Seller is accordingly liable to the Buyer, the Seller’s liability shall be limited to the excess (if any) of the cost to the Buyer (in the cheapest available market) of similar goods to replace those not delivered over the Price of the Goods.
  - 4.8 The Buyer shall be ready to accept delivery on the agreed Delivery Date and unless the Seller agrees otherwise, the Seller shall unload the Goods. The Buyer shall ensure that at least one representative is available to assist the Seller during the unloading of the Goods and the Buyer shall be charged the Wasted Time Rate and any other expenses incurred by the Seller (“Additional Charges”) for:-
    - 4.8.1 wasted time for any delay;
    - 4.8.2 each repeat delivery where the Seller or Seller’s carrier leaves the delivery point and subsequently returns to the delivery point with the Goods as a result of the Buyer’s inability or unwillingness to accept delivery and/or delay in unloading the Goods and/or the Buyer’s failure to provide a representative to assist the Seller in the unloading of the Goods.

The Buyer shall notify any loss of or damage to the Goods in writing to the Seller and to the carriers (if applicable) within 3 days of the Delivery Date in respect of any damage of the Goods and within 10 days of the Delivery Date in respect of any loss of the Goods, which will enable the Seller to comply with the carrier’s conditions affecting such loss or damage. Where Goods are delivered by carrier, unless the Goods are checked on receipt, the carrier’s documentation shall be endorsed “unexamined”.
  - 4.10 If the Buyer fails to take delivery of the Goods (otherwise than by reason of the Seller’s fault) or fails to give the Seller adequate instructions for delivery then, without prejudice to any other right or remedy available to the Seller, the Seller may:-
    - 4.10.1 store the Goods until actual delivery and charge the Buyer for the reasonable costs (including insurance) of storage and the Goods shall remain in all aspects at the Buyer’s risk; or
    - 4.10.2 sell the Goods at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) charge the Buyer for any shortfall below the Price under the contract;

be entitled to full payment in respect of the Goods refused;

without prejudice to any right on the Seller’s part to damages or payment in respect thereof, the Seller shall be entitled to cancel any further consignments under the contract.
5. RISK

Risk of damage to or loss of the Goods shall pass to the Buyer at the time of delivery, or if the Buyer wrongfully fails to take delivery, the time when the Seller has tendered delivery of the Goods.
6. PRICE
  - 6.1 The Price for the Goods shall be the price specified by the Seller in the quotation and unless otherwise stated prices are quoted:-
    - 6.1.1 exclusive of Value Added Tax (which the Buyer shall be additionally liable to pay to the Seller); and
    - 6.1.2 on an Ex-Works basis.
  - 6.2 Where the Seller is required to deliver the Goods on any basis other than ExWorks unless any specific fee or charge is agreed by the Buyer with the Seller, the Seller reserves the right to charge a reasonable fee to the Buyer for the cost of any carriage and/or other expenses incurred by the Seller in relation to the delivery of the Goods (“Additional Charges”).
  - 6.3 The Buyer shall bear all additional costs incurred by the Seller on account of any materials or designs supplied by the Buyer requiring any additional process not taken into account in determining the Price.
7. PAYMENT TERMS
  - 7.1 The payment terms in this Condition apply save to the extent that they are inconsistent with any specific payment terms agreed in writing between the Seller and the Buyer.
  - 7.2 The Buyer shall pay the Price of the Goods and any Additional Charges in accordance with the payment terms set out on the quotation.
  - 7.3 The Seller shall be entitled to invoice the Buyer for the Price of the Goods on or at any time before despatch of the Goods or any instalment thereof.
  - 7.4 The Buyer shall make payment for the Price of the Goods in sterling, unless agreed otherwise in writing. Any payment received by the Seller in any other currency will not be deemed to be payment for the Goods in question.
  - 7.5 Where the Buyer makes payment for the Goods by cheque the Seller reserves the right to charge a Surcharge in the event that any cheque rendered in payment of the Sellers invoice is initially refused.
  - 7.6 Unless the Seller agrees that Condition 7.7 shall apply the Buyer shall pay each invoice from the Seller on demand.
  - 7.7 Where the Seller agrees that this Condition 7.7 shall apply the Buyer shall pay each invoice from the Seller within 30 days of the date the Seller’s invoice is issued.
- 7.8 In the event that the Buyer fails to pay any invoice from the Seller by the due date, all invoices issued to the Buyer by the Seller in respect of any goods sold or supplied pursuant to any other contract shall immediately fall due for payment and any credit offered or extended by the Seller to the Buyer in respect of the same shall be cancelled forthwith.
- 7.9 The Seller’s invoices shall be payable in accordance with these Conditions, notwithstanding that delivery may not have taken place and the property in the Goods may not have passed to the Buyer. The time of payment of the Seller’s invoices shall be of the essence of the Contract.
- 7.10 If the Buyer fails to make payment on the due date then, without prejudice to any other right or remedy available to the Seller:-
  - 7.10.1 the Seller shall be entitled to charge the Buyer interest (both before and after any judgement) on the amount unpaid, at the rate of 3% per annum above the Seller’s bankers base rate current from time to time; and
  - 7.10.2 the Seller shall be entitled to withhold delivery of any Goods agreed to be sold by the Seller to the Buyer or any instalment thereof (being the subject of the contract or any other contract) until the overdue payment is made in full.
8. TITLE
  - 8.1 Notwithstanding delivery and the passing of risk in the Goods, or any other provision of these Conditions, title in the Goods shall not pass to the Buyer until the Seller has received in cash or cleared funds payment in full of the Price of the Goods and all other goods agreed to be sold by the Seller to the Buyer for which payment is then due.
  - 8.2 Until such time as title in the Goods passes to the Buyer, the Buyer shall hold the Goods as the Seller’s fiduciary agent and bailee, and shall keep the Goods separate from those of the Buyer and third parties and properly stored, protected and insured and identified as the Seller’s property, but shall be entitled to resell or use the Goods in the ordinary course of its business.
  - 8.3 Until such time as the title in the Goods passes to the Buyer, the Seller shall be entitled at any time to require the Buyer to deliver up the Goods to the Seller and if the Buyer fails to do so forthwith, to enter upon any premises of the Buyer or said party where the Goods are stored and mark identify and repossess the Goods.
  - 8.4 The Buyer shall not be entitled to pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller, but if the Buyer does so all monies owing by the Buyer to the Seller shall (without prejudice to any other right or remedy of the Seller) forthwith become due and payable.
9. WARRANTIES AND LIABILITY
  - 9.1 Subject to the Conditions set out below and clause 10.2 subject to the proviso that the Seller shall be under no liability arising from failure to follow the Seller’s or the manufacturer’s instructions (whether oral or in writing), inappropriate storage, improper use, inadequate maintenance or misuse of the Goods, the Seller warrants that:-
    - 9.1.1 the Goods will correspond with the Seller’s specification for them on delivery;
    - 9.1.2 save as provided in and subject to the provisions in sub-clause 9.1.3 below (unless otherwise agreed between the parties) the Goods will be free from material defects for 3 years from the Delivery Date; and
    - 9.1.3 this warranty does not cover wear items that are listed in the Operations Guide relating to the Goods.
  - 9.2 The Buyer shall be under a duty to inspect the Goods in accordance with the provision of clause 4.9. In the event of any patent defect the Buyer shall inform the Seller of such defect immediately on discovery but in any event within [14 days] of delivery. In the event of a latent defect being discovered, the Buyer shall inform the Seller of such defect immediately on discovery of the same. Any claim for breach of warranty by the Buyer shall not be accepted by the Seller unless the Buyer notifies the Seller in writing of the nature of the claim within the time limit specified within this Condition.
  - 9.3 The Seller shall not be liable for any defect in the specification or performance of the Goods if such defect is due to inaccurate or insufficient information instructions or drawings being supplied to the Seller by the Buyer (or agent/employee/representative thereof) at the request of the Seller or otherwise.
  - 9.4 Any warranty given in these Conditions shall not apply to any modification and/or repair carried out to the Goods without the Seller’s prior approval in writing.
  - 9.5 Subject as expressly provided in these Conditions, all warranties conditions or other terms implied by statute or common law are excluded to the fullest extent permitted by law.
  - 9.6 The Buyer shall not be entitled to reject the Goods where the alleged defect or breach of contract is so slight that it would be unreasonable for the Buyer to reject the Goods.
  - 9.7 Where any valid claim in respect of the Goods is made by the Buyer the Seller shall be entitled to replace or repair the Goods (or the part in question), at the Seller’s sole discretion, refund to the Buyer the price of the relevant Goods (or a proportionate part of the price for the relevant Goods), and the Seller shall have no further liability to the Buyer. The Buyer acknowledges that any such valid claim is to be assessed and resolved in accordance with this Condition by the Seller working in conjunction with Came Cancelli Automatici Spa (the manufacturer).
  - 9.8 The Seller’s liability in connection with the sale of the Goods and the provision of the Services to the Buyer shall be as follows:-
    - 9.8.1 in respect of death or personal injury, the Seller’s liability shall be unlimited;
    - 9.8.2 in respect of physical damage to or loss of the Buyer’s tangible property to the extent that it results from the wilful default or negligence of the Seller, its employees, agents or contractors the Seller’s liability shall be limited to an amount of £5 million in respect of each incident or series of connected incidents;
- 9.8.3 in respect of all other direct loss (whether in contract, tort, or otherwise) the Seller’s liability shall not exceed £5 million; and
- 9.8.4 in respect of any loss goodwill or for any type of consequential, special or indirect loss or damage the Seller’s liability shall be nil.
- 9.9 The Seller shall not be liable to the Buyer nor be deemed to be in breach of contract by reason of any delay in performing, or any failure to perform, any of the Seller’s obligations in relation to the contract if the delay or failure was due to any cause beyond the Seller’s reasonable control. The following shall (without limitation), be regarded as cause beyond the Seller’s reasonable control:-
  - 9.9.1 act of God, explosion, flood, tempest, fire or accident;
  - 9.9.2 war or threat of war, sabotage, insurrection, terrorism, civil disturbance or requisition;
  - 9.9.3 acts, restrictions, regulations, bye-laws, prohibitions or measures of any kind on the part of any governmental, parliamentary or local authority;
  - 9.9.4 import or export regulations or embargoes;
  - 9.9.5 strikes, lock-outs or other industrial actions or trade disputes (whether involving employees of the Seller or of a third party);
  - 9.9.6 difficulties in obtaining raw materials, labour, fuel, parts or machinery;
  - 9.9.7 power failure or breakdown in machinery.
10. SPECIFICATIONS AND INSTRUCTIONS
  - 10.1 Unless the Seller agrees otherwise, only the specifications referred to in the quotation shall form part of the Contract.
  - 10.2 The Seller reserves the right subject to giving prior written notice to the Buyer to modify the said specifications where the Goods cannot in the opinion of the Seller be manufactured according to the said specifications and the Buyer agrees to accept the Goods as manufactured according to the specifications so modified in satisfaction of the Sellers obligations as to manufacture of the Goods under the Contract.
11. INTELLECTUAL PROPERTY
  - 11.1 All specifications, drawings, designs and technical description, and all Information and “know-how” whatsoever supplied by the Seller to the Buyer is as between the Seller and the Buyer the Seller’s copyright and property and shall at all times be treated by the Buyer as confidential and shall not without the prior written consent of the Seller be used by the Buyer except for the purposes of the Contract.
  - 11.2 The Buyer will indemnify the Seller against all actions claims demands costs charges, penalties, royalties and expenses arising directly or indirectly or incurred by reason of any infringement or alleged infringement of or any right attributable to any letters patent, registered design trade mark, trade name, copyright or proprietary right arising from the use of any instructions, specifications or designs whether express or implied supplied by the Buyer to the Seller.
12. INSOLVENCY OF BUYER
  - 12.1 This Condition applies if:-
    - 12.1.1 the Buyer makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or
    - 12.1.2 an encumbrancer takes possession or a receiver is appointed, of any of the property or assets of the Buyer; or
    - 12.1.3 the Buyer ceases, or threatens to cease, to carry on business; or
    - 12.1.4 the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly.
  - 12.2 If this Condition applies then, without prejudice to any other right or remedy available to the Seller, the Seller shall be entitled to cancel the contract and suspend any further deliveries under the contract without any liability to the Buyer, and if the Goods have been delivered but not paid for, all of the Seller’s outstanding invoices to the Buyer become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.
13. GENERAL
  - 13.1 Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to that other party at his registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.
  - 13.2 If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Conditions shall remain in full force and effect.
  - 13.3 No waiver by the Seller of any breach of the contract by the Buyer shall be considered as a waiver of any subsequent breach of the same or any other provision.
  - 13.4 A person who is not a party to the contract has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of these Conditions but this does not affect any right or remedy of a third party which exists or is available apart from that Act).
  - 13.5 These Conditions constitute the entire contract between the parties to the extent that the subject matter is dealt with herein and may only be varied or modified in writing under the hands of the parties or their authorised representatives.
  - 13.6 The contract shall be governed by the laws of England, and the Buyer agrees to submit to the non-exclusive jurisdiction of the English courts.

**Made in Italy**



For its quality processes management Came Cancelli Automatici is **ISO 9001:2000** certified, and for its environmental management it is **ISO 14001** certified. Came designs and manufactures entirely in Italy.

**PRODUCTS**



**Came United Kingdom**

Nottingham - UK

**Came Cancelli Automatici**

Dossone di Casier - Treviso - Italy

**Came Service**

Dossone di Casier - Treviso - Italy

**Came Nord**

Cologno Monzese - Milano - Italy

**Came Sud**

Napoli - Italy

**Came France**

Nanterre Cedex - Paris - France

**Came Automatismes**

Marseille - France

**Came Automatismos**

Madrid - Spain

**Came Automatismos Catalunya**

Sant Vicenç dels Horts - Barcelona - Spain

**Came Galizia**

A Coruña - Spain

**Came Portugal**

Rio de Mouro - Lisbon - Portugal

**Came Belgium**

Lessines - Belgium

**Came GmbH Seefeld**

Berlin - Germany

**Came GmbH**

Stuttgart - Germany

**Came Americas Automation**

Miami - USA

**Came Middle East**

Dubai - UAE

**Came PL**

Warszawa - Poland

**Came Romania**

Bucarest - Romania

**Came Russia**

Mosca - Russia

**Came Shanghai**

Shanghai - China

**Urbaco sa**

Entraigues - France

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