# Electromechanical devices

**TESA**

**ASSA ABLOY**

# Electromechanical devices

TESA ASSA ABLOY is complementing its catalogue with a wide range of Electric Strikes, Electromagnetic Locks and Electromechanical Locks in order to ensure the highest level of active security, not forgetting those passive security features that vary depending on each chosen product: monitoring of the door status, placement of the lever, handle status, cylinder status…

## Opening and locking: safety and reliability

A Residence, a Bank Office, a R+D Department or a Chemist's Shop: in some places, Security has become a top priority. The security level afforded by TESA ASSA ABLOY's Electromechanical Devices meets the most demanding standards, going further than most traditional mechanical systems in many aspects, while adding peerless advantages in terms of user-friendliness and passive security.

## The latest technology, above all

Electromechanical Devices are always at the forefront of the latest technologic developments.

Continuous improvements and permanent optimizing guarantee the quality of our products, reinforcing our aim of keeping a range of products capable of meeting always our customer's requirements.

## Make your choice

Each specific place has its own security demands, which is why TESA ASSA ABLOY's electromechanical devices can adapt to each installation's particular needs. Depending on these, choices will vary in terms of technology and complexity: from the simplicity of the CEL electric strike for traffic control in internal doors to the complexity of the motorized electromechanical lock, which combines the best security and user-friendliness available in the market

## Guaranteed products

TESA ASSA ABLOY can guarantee the perfect functioning of its electromechanical parts, as long as they are employed according to current standards and they have been installed according to the accompanying instructions. The installation will always be performed by qualified staff, and the handling of the product demands that certain minimum security measures are observed. The set-up of any kind of electric installation must always be performed following the advice of current standards for workplace risk prevention.

## We offer an integral locking solution

In order to install an electromechanical solution in a door, we need: a door closer that ensures that the door reaches the "closed" position before being blocked, a cylinder that allows the mechanical opening of the door, and an exit panic device that ensures an emergency exit. For this reason, TESA ASSA ABLOY brings you the widest range of locking products for the complete installation of a door.

### Fail secure, fail safe

Sometimes it's just as important a solid closing as an easy exit, which is why our electromechanical solutions haven't just been conceived for closing doors – they can also be extremely useful when installing electrically controlled exit ways. Electromechanical devices have been conceived basically for operating according to Fail Secure logic, that is, if power supply fails the door must remain locked solid. But we may also find situations in which it's vital to ensure the correct evacuation of the premises through a door we may wish to control electrically. In these cases we will use Fail Safe locks: if power supply fails, the door will open wide. We will then generically use Electromagnetic Locks, even if in some cases we may choose Electromechanical Locks or Electric Strikes in reverse operation mode.

### Electromechanical solutions are, first and foremost, mechanical.

Although mechanical solutions don't always offer the desired security or versatility levels when equipping a door, strictly electrical solutions can be regarded with suspicion, as is the case when locks depend on power supply for their proper operation. Except for electromagnetic locks, electromechanical locking devices are essentially mechanical elements (levers, latches); therefore, intrusion resistance can be as high as that of TESA ASSA ABLOY's mechanical locks.

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CODE HANDLE


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# Solutions for special applications

## Stand-alone access control



**Easy and comfortable**
CodeHandle is a set of handles with access control without any cards or keys, simple and effective. Its suitable for any kind of interior door, in residential or institutional environments where comfortable and ease of use its a priority. Code handle is the solution for most of the restricted areas: offices, warehouses, private areas, wardrobe, etc.

**Attractive design and easy to install**
As the keyboard is integrated in the handle is a more attractive option than the wall readers. Also is very easy to install: without cables, without special drills... you can install it as any other handle.

**Technical features:**
» In doors: patented stand alone access control with code for internal door. A complete set is supplied including handles, rosettes, spindle, fixing through bolts and instructions. For 35 - 80 mm door thickness.
» In windows, the handle is supplied with fixing screws and instructions.
» Fits lock cases DIN standard. 8 mm spindle.
» One master code and up to nine different user codes.
» Auto locking function available.
» Two CR2, 3V lithium batteries in the outer handle.
» Visual and acoustic feedback.
» Easy to fit, no cables.
» Available for right- and left hand doors.
» Only for indoor use.
» Material: brushed stainless steel and satin chrome zink.

**Normative**
CE according to EN 61000-6-1, EN 61000-6-3, EN 61000-4-2, EN 61000-4-3, EN61000-4-8
Fire certificate EN 1634



**Function:**
» Four buttons to press a four- to six digit code to unlock and one button to lock.
» Green light flashes and a sound is heard when the buttons are pressed for unlocking.
» Red light flashes and a sound is heard when locking.
» Master code and user code is programmed at installation. Can be changed unlimitedly.
» If wrong code is pressed five times the handle is blocked for three minutes.
» Free swing from the outside when locked, always possible to open with the handle from the inside.
» The two batteries gives approximately 2 years.
» Red light indicates low battery when approximately 500 operations left



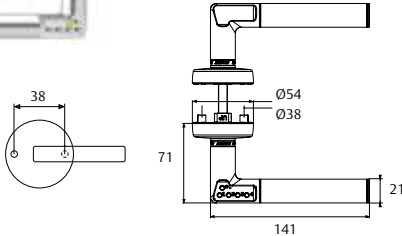How to install and program the CodeHandle

# Solutions for special applications

## Stand-alone access control
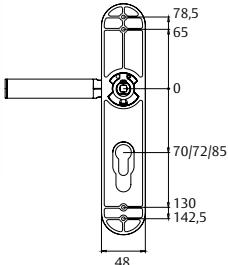
## Rosette Ø54

| Handle for door | Product code | Finish | Hand | Lock |
|---|---|---|---|---|
| | MCHDR800CM | CM | Right | 134 |
| | MCHIR800CM | CM | Left | 134 PLUS |
| | MCHSIR800CM (without electronic) | CM | Right / Left | 2030 |
| | | | | 2035 |
| | | | | 2UB0F |

Ø54
Ø38
38
71
141
21

## Long plate

| Handle for door | Product code | Finish | Hand | Lock |
|---|---|---|---|---|
| | MCHDL800CM | CM | Right | 134 |
| | MCHDL872CM | CM | Right | 134 PLUS |
| | MCHDL885CM | CM | Right | 2004U |
| | MCHIL800CM | CM | Left | 2030 |
| | MCHIL872CM | CM | Left | 2035 |
| | MCHIL885CM | CM | Left | 2UB0F |
| | | | | 2015 |
| | | | | 135 |

78,5
65
0
70/72/85
130
142,5
48

## 3500 (retrofit) Ø70

| Handle for door | Product code | Finish | Hand | Lock |
|---|---|---|---|---|
| | MCHD3500CM | CM | Right | |
| | MCHI3500CM | CM | Left | |
| | | | | Included 3500 60 |
| | | | | latch |

Rosette: ø 70 mm

# Electronic Access management

## Traka 21 Key-Storing Cabinet

Traka21 is a sophisticated standalone key management system that features the advanced management of 21 keys or bunches in a plug-and-play unit.

**Details**
» A standalone plug and play solution with advanced RFID technology
» Touch screen
» Access via PIN code to allocated keys or bunches, individually blocked
» Blocked keys with security
» Easy to set-up
» No need for online connection or a computer
» Solid, hidden securing points for securing to the wall
» Mains electricity plus an optional emergency battery

**Features**
» Management of access rights to user keys
» Multilanguage
» On-screen audit report and/or export to USN
» 21 iFob, solid and long-lasting, with security seals
» 21 blocked positions with integrated LED
» Manual release and door opening in case of emergency
» Aural alarms

**Technical features**
» Sizes 427x246x95mm
» Weight 3.94 Kg
» 100-240 V AC Output 15V DC 0.7 amp.
» Optional DC12V support battery
» For internal use -5º +50º
» Mounted on the wall
» 21 positions for keys
» Number of users per system: 1,000
» CE, FCC, IC certifications.

| Product code | Description |
|---|---|
| TRAKA21 | Traka21 cabinet |
| TRAKA21RA25 | 25 spare rings |
| TRAKA21RT5 | 5 spare iFobs |
| TRAKA21BAT | Backup battery |

**iFob**
Once it has been linked to an iFob, each key or bunch will be assigned to a receiver in the Traka cabinet and will remain blocked until an authorized user releases it.

**Security Seal**
It is used to connect the key(s) of the iFOB. Once the seal has been crimped, the only way to detach the keys from the iFob is to cut the security seal by using a heavy duty cutter.

**How does it work?**
It ensures that the keys are available for authorized users at the right times.

The user identifies himself/herself through his/her PIN code in order to access the cabinet

The green LEDs show the user which keys he/she has access to. The user cannot take any keys when the LED is red, as they remain blocked.

The orange position(s) show(s) where the key must be returned to.

# Electric strikes

Electric strikes are devices whose mounting is carried out on the frame, with no need to wire the leaf. An electric signal releases the tab that holds the latch, which allows for the opening of the door.
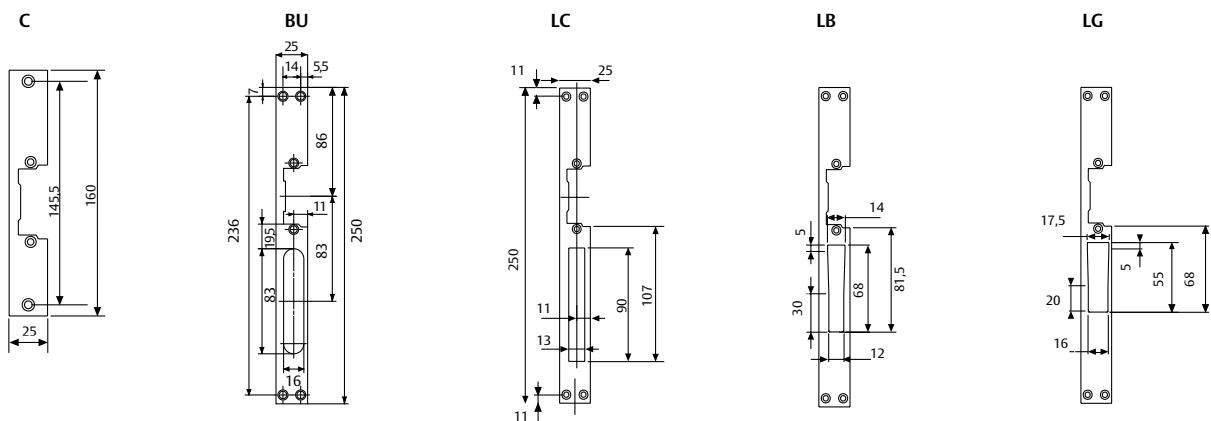
We have a wide range of applications: wood, metal, aluminium, firebreak doors, glass, etc.

| Monitoring features | | |
|---|---|---|
| **NOR** | **Normal** | It allows for the opening of the door while the signal is being received |
| **D** | **With manual unblocking** | It features a lever that, when manually activated, allows the user to leave the tab unblocked in case this is required. |
| **AUT** | **Automatic** | The lever remains unblocked from the moment the electric signal arrives until its first opening. |

| Features | | |
|---|---|---|
| **AN** | **Fail-secure** | In case of electricity failure, the lock is blocked |
| **CN** | **Fail-secure D100%** | In case of electricity failure, the lock is blocked. For applications with working cycles of 100% |
| **CP** | **Fail-safe (Opposite)** | In case of electricity failure, the lock is not blocked |

| Features | | |
|---|---|---|
| **M** | **Micro door status** | Optional for several models |

| Face plates | |
|---|---|
| **C** | Short for entrance door locks |
| **BU** | Long for bolt locks |
| **LC** | Long for locks with sliding lever |
| **LB** | Long for locks with swing lever |
| **LG** | Long for locks with a hook |



| Product code | Face Plate | Finish |
|---|---|---|
| **CELFRECIN** | C | Inox |
| **CELFREBUI** | BU | Inox |
| **CELFREBRE** | BU | AE |
| **CELFRELCI** | LC | Inox |
| **CELFRELCE** | LC | AE |
| **CELFRELBI** | LB | Inox |
| **CELFRELGI** | LG | Inox |

# Electric strikes

## Standard series

Electric strikes for wooden or metalwork doors.

**Technical features**
» Resistance: 3500N
» Sizes: 75.4 x 28 x 21mm.
» Mounting: Reversible
» Tab adjustment: 3mm
» Working temperature: -15º to +40º
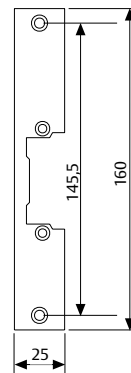» Stainless steel face plates

**Electric features**

| Standard coil | Consumption |
|---|---|
| 12V | 470mA (12Vac) / 550mA (12Vdc) |

| Special coils | | Consumption |
|---|---|---|
| AN | 24V | 400mA(24Vac)/550mA(24Vdc) |
| CN | 12V (D100%) | 270mA(12Vdc) |
| CN | 24V (D100%) | 120mA (24Vdc) |
| CP | 12V (D100%) | 270mA (12Vdc) |
| CP | 24V (D100%) | 120mA (24Vdc) |

The indicated codes are supplied with a standard reel:
12V; Fail-secure

Available in special versions by adding the following digits after the code:

| | |
|---|---|
| 24Vac; AN | (-2ANA) |
| 12Vdc (D100%); CN | (-1CNA) |
| 24Vdc (D100%); CN | (-2CNA) |
| 12Vdc (D100%); CP | (-1CPA) |
| 24Vdc (D100%); CP | (-2CPA) |

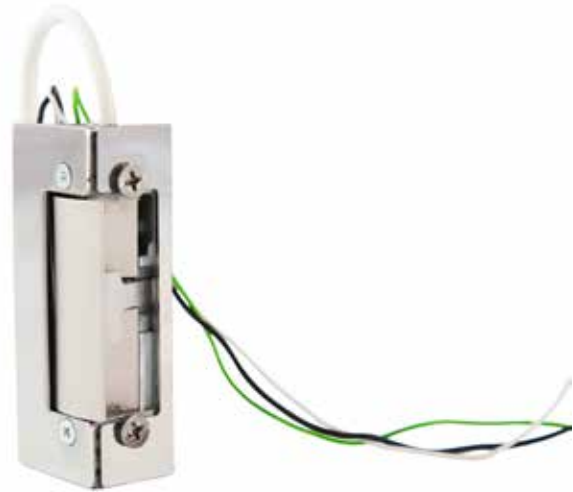| Product code | Function | Face plates | Finish |
|---|---|---|---|
| CELCARNOR | NOR | - | - |
| CELCARNOD | NOR + D | - | - |
| CELCARAUT | AUT | - | - |
| CELCARAUD | AUT+D | - | - |
| | | | |
| CERNORCIN | NOR | C | Inox (stainless) |
| CERNODCIN | NOR + D | C | Inox (stainless) |
| CERAUTCIN | AUT | C | Inox (stainless) |
| CERAUDCIN | AUT+D | C | Inox (stainless) |
| | | | |
| CERNORBUE | | BU | AE |
| CERNODBUE | NOR + D | BU | AE |
| CERAUTBUE | AUT | BU | AE |
| CERAUDBUE | AUT+D | BU | AE |
| CERNORBUI | NOR | BU | Inox (stainless) |
| CERNODBUI | NOR + D | BU | Inox (stainless) |
| CERAUTBUI | AUT | BU | Inox (stainless) |
| CERAUDBUI | AUT+D | BU | Inox (stainless) |
| | | | |
| CERNORLCE | NOR | LC | AE |
| CERNODLCE | NOR + D | LC | AE |
| CERAUTLCE | AUT | LC | AE |
| CERAUDLCE | AUT+D | LC | AE |
| CERNORLCI | NOR | LC | Inox (stainless) |
| CERNODLCI | NOR + D | LC | Inox (stainless) |
| CERAUTLCI | AUT | LC | Inox (stainless) |
| CERAUDLCI | AUT+D | LC | Inox (stainless) |
| | | | |
| CERNORLBI | NOR | LB | Inox (stainless) |
| CERNODLBI | NOR + D | LB | Inox (stainless) |
| CERAUTLBI | AUT | LB | Inox (stainless) |
| CERAUDLBI | AUT+D | LB | Inox (stainless) |
| | | | |
| CERNORLGI | NOR | LG | Inox (stainless) |
| CERNODLGI | NOR + D | LG | Inox (stainless) |
| CERAUTLGI | AUT | LG | Inox (stainless) |
| CERAUDLGI | AUT+D | LG | Inox (stainless) |

# Electric mortise strikes

## Standard series with micro

Electric strikes for wooden or metalwork doors.

**Technical features**
» Resistance: 8,000N
» Sizes: 75 x 28 x 21mm.
» Mounting: Reversible
» Working temperature: -15º to +40º
» Stainless steel face plates

**Electric features**

| Voltage | Function | Consumption |
|---------|----------|-------------|
| 12V | NC | 440mA(12Vac) / 550mA (12Vdc) |
| 24V | NC | 130mA (24Vac) |
| 12V (D100%) | NC | 390mA (12Vdc) |
| 24V (D100%) | NC | 180mA(24Vdc) |
| 12V (D100%) | NA | 200mA(12Vdc) |
| 24V (D100%) | NA | 100mA(24Vdc) |

| Product code | Function | Face Plate | Function | Voltage |
|--------------|----------|------------|----------|---------|
| CERAUTCINSM | AUT | Corto | NC | 12V |
| CERAUTCINSM1CNA | AUT | Corto | NC | 12V (D100%) |
| CERAUTCINSM2CNA | AUT | Corto | NC | 24V (D100%) |
| CERNORCINSM | NOR | Corto | NC | 12V |
| CERNORCINSM1CNA | NOR | Corto | NC | 12V (D100%) |
| CERNORCINSM1CPA | NOR | Corto | NA | 12V (D100%) |
| CERNORCINSM2CNA | NOR | Corto | NC | 24V (D100%) |
| CERNORCINSM2CPA | NOR | Corto | NA | 24V (D100%) |

## Narrow series with thermal break

Electric strikes suitable for narrow profiles. As well as being of small size, they come with a radial-rotation tab that reduces the motion perimeter, which provides an easier mounting.

**Technical features**
» Resistance: 3,000N
» Sizes: 67 x 28 x 16.4mm.
» Mounting: Reversible
» Tab adjustment: 1mm
» Working temperature: -15º to +40º
» Stainless steel face plates

**Electric features**

| Standard reel | Consumption |
|---------------|-------------|
| 12V | 440mA (12Vac) / 550mA (12Vdc) |

| Special reels | | Consumption |
|---------------|------|-------------|
| AN | 24V | 130mA(24Vac) |
| CN | 12V (D100%) | 390mA(12Vdc) |
| CN | 24V (D100%) | 180mA (24Vdc) |
| CP | 12V (D100%) | 200mA (12Vdc) |
| CP | 24V (D100%) | 100mA (24Vdc) |

| Product code | Function | Face Plate | Acabado |
|--------------|----------|------------|---------|
| CESCARNOR | NOR | - | - |
| CESCARNOD | NOR + D | - | - |
| CESCARAUT | AUT | - | - |
| CESCARAUD | AUT+D | - | - |
| | | | |
| CESNORCIN | NOR | C | Inox (stainless) |
| CESNODCIN | NOR + D | C | Inox (stainless) |
| CESAUTCIN | AUT | C | Inox (stainless) |
| CESAUDCIN | AUT+D | C | Inox (stainless) |
| | | | |
| CESNORLCI | NOR | LC | Inox (stainless) |
| CESNODLCI | NOR + D | LC | Inox (stainless) |
| CESAUTLCI | AUT | LC | Inox (stainless) |
| CESAUDLCI | AUT+D | LC | Inox (stainless) |
| | | | |
| CESNORLBI | NOR | LB | Inox (stainless) |
| CESNODLBI | NOR + D | LB | Inox (stainless) |
| CESAUTLBI | AUT | LB | Inox (stainless) |
| CESAUDLBI | AUT+D | LB | Inox (stainless) |
| | | | |
| CESNORLGI | NOR | LG | Inox (stainless) |
| CESNODLGI | NOR + D | LG | Inox (stainless) |
| CESAUTLGI | AUT | LG | Inox (stainless) |
| CESAUDLGI | AUT+D | LG | Inox (stainless) |

\* Standard: 12V; Fail-secure
\* Available in special versions on request

# Electric mortise strikes

## Fire rated series

When applied to firebreak doors, the model must provide the following features:
» Normal monitoring feature in order to prevent the strike from being unblocked.
» Fail-secure, which ensures the blocking in absence of electricity supply.

## Standard

**Technical features**
» Resistance: 8,000N
» Sizes: 75.4 x 28 x 21mm.
» Mounting: Reversible
» Steel tab
» Working temperature: -25ºC to +70ºC
» Stainless steel face plates
» Optional micro
» EC certification according to EN 14846

**Características eléctricas**

| Voltage | Function | Consumption |
|---|---|---|
| 12V | NC | 440mA(12Vac) / 550mA (12Vdc) |
| 24V | NC | 130mA (24Vac) |
| 12V (D100%) | NC | 390mA (12Vdc) |
| 24V (D100%) | NC | 180mA(24Vdc) |

| Product code | Face plate | Consumption | Micro |
|---|---|---|---|
| CELCARNORF | - | 12V | - |
| CELCARNORF1CNA | - | 12V (D100%) | - |
| CELCARNORF2CNA | - | 24V (D100%) | - |
| CERNORBUIF | BU | 12V | - |
| CERNORCINF | Corto | 12V | - |
| CERNORCINF1CNA | Corto | 12V (D100%) | - |
| CERNORCINF2CNA | Corto | 24V (D100%) | - |
| CERNORCINFM | Corto | 12V | Yes |

Available in more versions on request

# Rim Electric strikes

## Rim Electric strikes

Rim Electric strikes, totally adjustable to panic exit devices for emergency exits.

**Models**
» **Concave tab** (For the QUICK, LITE and UNIVERSAL series of panic exit devices)
» **Flat flexible tab**, which allows for perfect adjustment with a 4mm margin. (For panic exit bars from the TOP series)

**Mechanical features**
» Resistance:
    8,000N (concave tab)
    6,000N (flat tab)
» Sizes: 141 x 40 x 24mm.
» Installation: Reversible
» Steel tab
» Working temperature: -15º to +40º
» Housing: Black (optional GREY) Supplied with eight 2.5mm supplements

| Standard coil | | Consumption |
|---|---|---|
| | 12V | 560mA(12Vac)/700mA(12Vdc) |
| CN | 12V (D100%) | 180mA(12Vdc) |

| Special coils | | Consumption |
|---|---|---|
| AN | 24V | 330mA(24Vac) |
| CN | 24V (D100%) | 180mA (24Vdc) |
| CP | 12V (D100%) | 150mA (12Vdc) |
| CP | 24V (D100%) | 120mA (24Vdc) |

| Product code | Function | Keeper | Voltage |
|---|---|---|---|
| CELNORPAN | NOR | Cóncave | 12V |
| CELNORPAC | NOR | Cóncave | 12V (D100%) |
| CELNORPAD | NOR | Flat | 12V |
| CELNORPADC | NOR | Flat | 12V (D100%) |
| CELAUTPAN | AUT | Cóncave | 12V |
| CELAUTPAC | AUT | Cóncave | 12V (D100%) |
| CELAUTPAD | AUT | Flat | 12V |
| CELAUTPADC | AUT | Flat | 12V (D100%) |

Standard: 12V and 12V (D100%); Fail-secure
Available in special versions on request
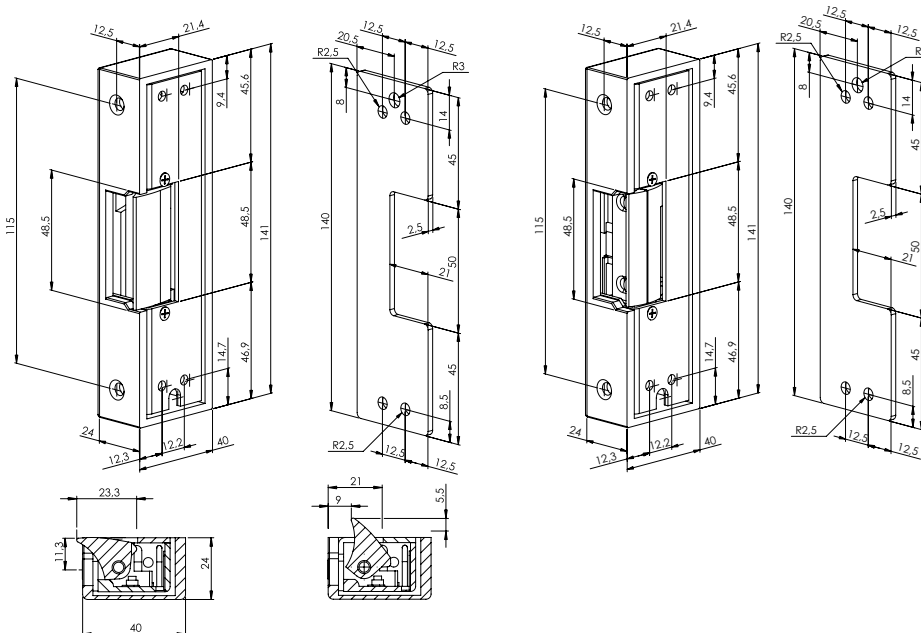
# Electromechanical locks

## TCP electro-retractable lock

This security lock presents a similar mounting to that of regular electric strikes. The lock remains the mechanical element and the strike remains the electromechanical element. The lock is reversible, therefore there is no need of choosing the hand.

**Application**
Entrance doors.

**Security and convenience**
When the door is locked, the trigger is activated and the security lever is automatically projected.
The door will remain locked, with no need to close with the key.
The locking can be released through the cylinder of the handle.

**Electric control**
When the strike receives the signal, the locking point is released.

**Mechanical features**
» Sliding lever
» Backset: 20, 25, 30, 35, 50, 60 mm.
» Distance between axes: 85mm.
» Follower: 8mm.
» Stainless steel forend and strike.

**Electric features**
» Voltage: 12Vac/Vdc
» Current at rest: 1150mA a 12Vdc
              950mA a 12Vac
» Working temperature: -10ºC a 50ºC

| Product code | Backset (E*) | Depth (C*) |
|---|---|---|
| TCP20 | 20mm | 34mm |
| TCP25 | 25mm | 39mm |
| TCP30 | 30mm | 44mm |
| TCP35 | 35mm | 49mm |
| TCP40 | 40mm | 54mm |
| TCP50 | 50mm | 64mm |
| TCP60 | 60mm | 74mm |
| TCPCER | * Only strike | |

**Dimensions**
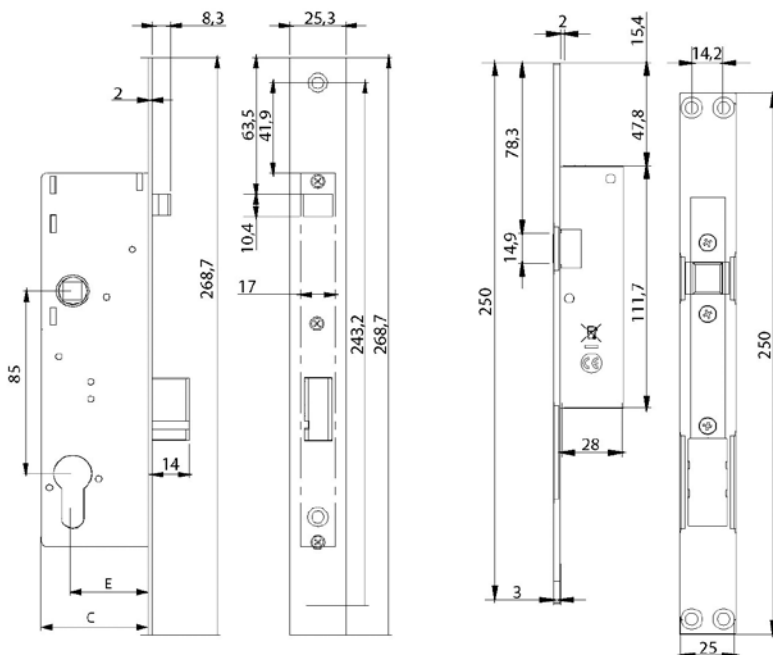
# Fire doors hardware

## CF60 solenoid Series

### Mechanical features
» CF60 lock, cylinder not included, panic function for all versions
» Suitable to be used in FR doors
» Certified according UNE-EN1125:2009
» Certified according UNE-EN 12209: 2004.
» Steel latch, suitable to be used in FR doors
» Non-friction guide between latch and frontplate
» 9x9 mm follower
» Backset 65 mm
» Distance between each axis 72 mm
» Reversible (non handed)
» Front plate finish: zinc plated (Z) or stainless steel (I)

### Electrical features
» Power supply: 12Vdc / 24Vdc
» Consumption : max 550mA (12Vdc) / 270mA (24Vdc)
» Consumption: stop 240mA (12Vdc) / 110mA (24Vdc)

| Product code | Inner function | Frontplate finish |
|---|---|---|
| CF6SNPTRSR9ICER | No Panic | Stainless steel |
| CF6SNPTRSR9ZCER | No Panic | Zinc plated |
| CF6STRSR9ICEROB | Panic | Stainless steel |
| CF6STRSR9ZCEROB | Panic | Zinc plated |
| CF6SIRSR9ICEROB | Panic (Inwards opening) | Stainless steel |

### CF60 with panic function

#### Performance
» Locking the cylinder, the external follower of the lock gets blocked and the door can not be opened. However, as it is an panic lock, the door can always be open from inside by activating the lever or the panic exit device.
» With an electric signal, the electro switch clutches the inner mechanism of the lock allowing the door to be opened from outside operating the lever.
» When the signal disappears, the lock becomes blocked again from outside.
» Version "Inwards opening" (CF6SIRSR9ICEROB) - only with Stainless Steel frontplate.

#### Certification
» CE certified according UNE-EN12209 & UNE-EN1125

### CF60 without panic function

#### Performance
» Locking the cylinder, the lock gets blocked and the door can not be opened, neither from inside nor from outside.
» With an electric signal, the electro switch clutches the inner mechanism of the lock allowing the door to be opened from inside and outside operating the lever.
» When the signal disappears, the lock becomes blocked again.
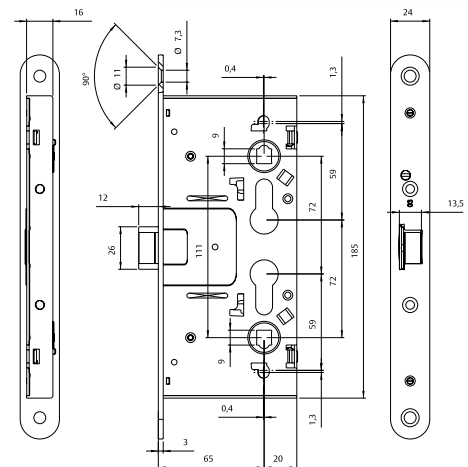
#### Certification
» CE certified according UNE-EN12209.

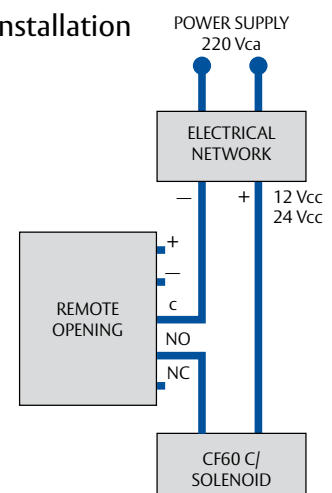CERTIFIED ACCORDING
UNE-EN
12209:2004
1125:2009

## General dimensions

## Power consumption

| Voltage | | |
|---|---|---|
| 12-24 VDC (-10%/+15%) | | |
| Power consumption | | |
| máx. 550 mA (12 VDC) | | |
| nominal 240 mA (12 VDC) | | |
| máx. 270 mA (24 VDC) | | |
| nominal 110 mA (24 VDC) | | |

## Installation

POWER SUPPLY
220 Vca

ELECTRICAL NETWORK

12 Vcc
24 Vcc

REMOTE OPENING

+
−
C
NO
NC

CF60 C/
SOLENOID

# Electromechanical locks

## Handle controlled electromechanical locks EFS

**Applications**
Handle controlled locks are suitable for medium traffic doors, such us offices, meeting rooms, etc.

**High security and confort**
Theses locks are also characterized by being security locks. They feature self-locking function. When the door closes the deadbolt throws out automatically. In this locked state not only the dead-bolt is projected but also the latch bolt is blocked.

**Electrical function**
They are electrically controlled and the signal could be given by an access control or any other remote system.

» Fail secure (fail locked)
» Fail safe (fail unlocked)

**Electrically controlled side**
» Only outside handle is electrically controlled.
   The lock can always be opened by inside handle.
 » Both sides handles are electrically controlled.

**Mechanical features**
» Double action latch
» Bolt trhrow: 20 mm
» Backset: 35, 55 mm.
» Distance between axes: 92mm
» Follower: 8x8 mm
» Forend: 22mm
» Finish: Stainles Steel forend, zinc plated lockase
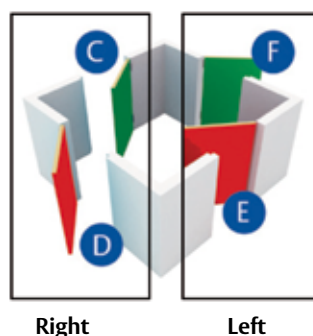» Hand: Right or left

**Electrical features**
» Voltage : 12Vdc
» Current consumption: 220mA (12Vdc) (máx.900mA)
» Operating temperature: -20ºC to 60ºC

**Monitoring outputs**
» Bolt position
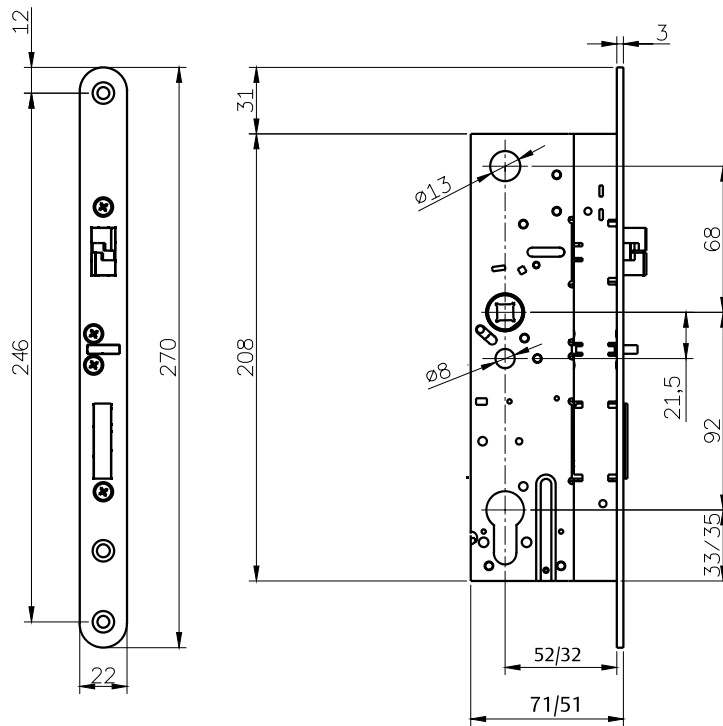» Trigger bolt position
» Handle used
» Sabotage loop

**Handing**

**Right**          **Left**
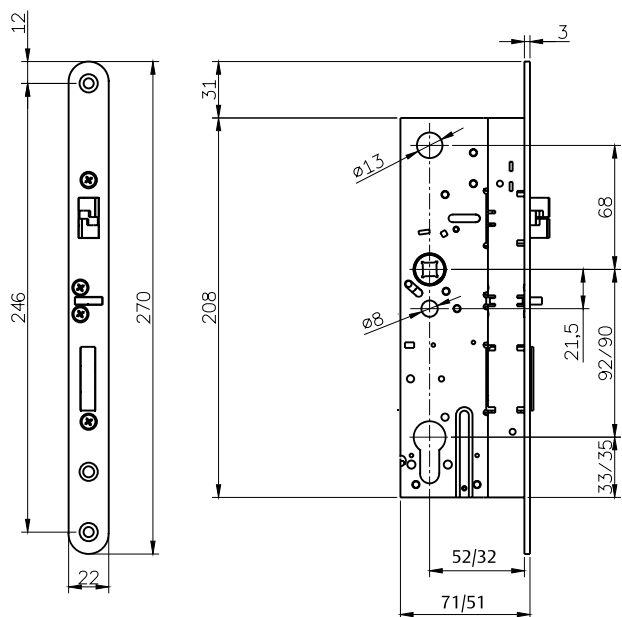
# Electromechanical locks

## Dimensions



| Product code | Description | Backset | Handing | Function | Controlled side |
|---|---|---|---|---|---|
| EFS11352N1 | Lockcase | 35 | Right | Fail secure | 1 side (panic) |
| EFS11352N2 | Lockcase | 35 | Left | Fail secure | 1 side (panic) |
| EFS11352P1 | Lockcase | 35 | Right | Fail safe | 1 side (panic) |
| EFS11352P2 | Lockcase | 35 | Left | Fail safe | 1 side (panic) |
| EFS11552N1 | Lockcase | 55 | Right | Fail secure | 1 side (panic) |
| EFS11552N2 | Lockcase | 55 | Left | Fail secure | 1 side (panic) |
| EFS11552P1 | Lockcase | 55 | Right | Fail safe | 1 side (panic) |
| EFS11552P2 | Lockcase | 55 | Left | Fail safe | 1 side (panic) |
| EFS12352N1 | Lockcase | 35 | Right | Fail secure | Both |
| EFS12352N2 | Lockcase | 35 | Left | Fail secure | Both |
| EFS12352P1 | Lockcase | 35 | Right | Fail safe | Both |
| EFS12352P2 | Lockcase | 35 | Left | Fail safe | Both |
| EFS12552N1 | Lockcase | 55 | Right | Fail secure | Both |
| EFS12552N2 | Lockcase | 55 | Left | Fail secure | Both |
| EFS12552P1 | Lockcase | 55 | Right | Fail safe | Both |
| EFS12552P2 | Lockcase | 55 | Left | Fail safe | Both |
| CFS124AI | Striking plate | | | | |
| CFS1314 | Cable 3m | | | | |

# Electromechanical locks

## Motor locks EFM

**Applications**
Motor locks are suitable for high traffic doors, such as shopping centers, public buildings, etc.

**High security and comfort**
These locks are also characterized by being security locks. They feature self-locking function. When the door closes the deadbolt throws out automatically. In this locked state not only the deadbolt is projected but also the latch bolt is blocked.

**Electrical function**
They are electrically controlled and the signal could be given by an access control or any other remote system. The electrical signal retracts the deadbolt and you can easily open the door without using the door handle. It can be also open by key or internal handle.
» Fail secure (fail locked)

**Opening time**
When the signal disappears the lock is open during 10sec and then the lock automatically locks again.

**Electrically controlled side**
Both sides can be electrically controlled.
If internal handle is installed it always opens
*Mechanical opening by cylinder is always possible.

**Mechanical features**
» Double action latch
» Bolt trhrow: 20 mm
» Backset: 35, 55 mm.
» Distance between axes: 92mm
» Follower: 8x8 mm
» Forend: 22mm
» Finish: Stainles Steel forend, zinc plated lockase
» Hand: Right or left

**Electrical features**
» Voltage : 12Vdc
» Current consumption: 220mA (12Vdc) (máx.165mA)
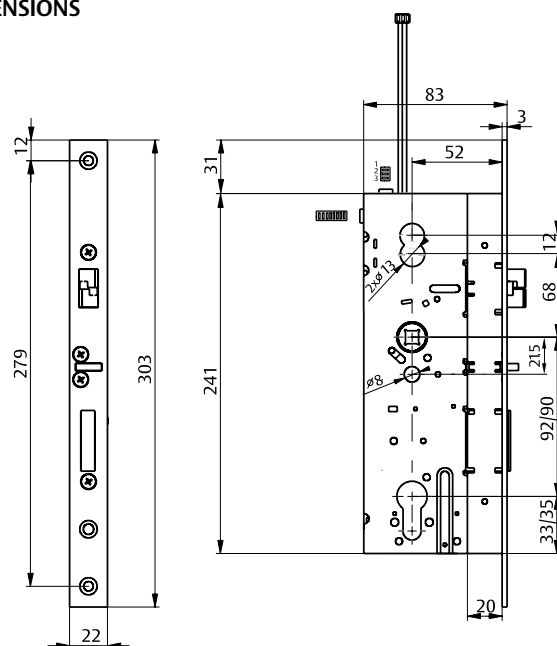» Operating temperature: -20ºC to 60ºC

**Monitoring outputs**
» Bolt position
» Trigger bolt position
» Handle used
» Sabotage loop

| Product code | Description | Backset |
|---|---|---|
| EFM00352N0 | Lockcase | 35 |
| EFM00552N0 | Lockcase | 55 |
| CFM0244AI | Striking plate | |
| CFM0514 | Cable 5m | |

**DIMENSIONS**

# Electromechanical locks

## Electric bolt locks

**High security and convenience**
The lock features two types of deadlocks that make it suitable for swing doors. It can be mounted on the door's frame and several models can be mounted horizontally, which makes it suitable for sliding doors.

**Electric control**
When the lock receives the signal, the deadlock goes back and the door can be opened by either pushing or pulling.

There are both fail-safe and fail-secure models available.

» It allows for the air-lock interconnection of doors.
» Programmable self-locking

**Mechanical features**
» Deadlock: models:
   Bolt: 20mm length and 18mm diameter Latch: 16.5 + 5mm length and 18mm diameter
» Inlet: 25 mm
» Depth: 35 mm
» Face plates: 25mm
» Case: nickel-plated steel
» Face plates finish: chrome-plated steel
» Strike plate: stainless steel

**Electric features**
» Voltage : 12-24Vdc
» Current at rest: 250mA a 12Vdc (max. 3A)
   180mA a 24Vdc (max. 1,5A)

| Product code | Deadlock | Feature | Backset |
|---|---|---|---|
| 5553625 | Bolt | Fail safe | 25 |
| 5553825 | Bolt | Fail secure | 25 |
| 5553925 | Latch | Fail secure | 25 |

*Available backset 30mm, 35mm

I

# Electromechanical locks

Electromagnetic locks are a good option to lock doors that need to be controlled by an electrical signal. At the same time, they are an appropriate solution in electrically controlled exit doors since they remain unlocked in case of power failure. They can work as a conventional electromechanical lock. Besides that, these locks are ideal to give extra security to other devices. A conventional application is to connect them to a panic exit bar with micro switch in order to increase the security of goods.

TESA offers several models of electromagnetic locks according to different requirements (voltage, strength, door type, etc.). Additionally, there are accessories which make it possible to adapt these locks to each installation.

**Function**: Normally open (fail safe), when there is no power, there is not holding force.

**Monitoring**:
» Hall Sensor: Gives the status of the lock (locked/unlocked). Includes a LED for visual signalization.
» Reed Sensor: Door position sensing (open/close).

# Rim electromagnetic locks

Rim electromagnetic locks are a good choice when an easy installation is required without having to make a recess in the door. They allow different installations: vertical and horizontal, in single or double doors and in out-swinging or in-swinging doors thanks to the optional brackets supplied.

## Standard range

**Características técnicas**
» Aluminium housing
» Operation temperature: -10ºC to +55ºC
» Voltage:12/24Vdc (Selectable) Tolerance ±10
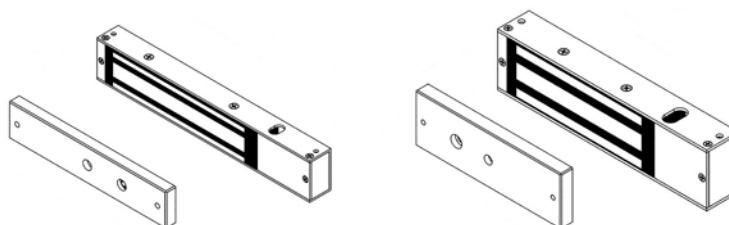


| Product code | Holding force | Monitoring | Dimensions | Weight | Consumption |
|---|---|---|---|---|---|
| CEM300SS0E | 3000N | Hall | Lock: 250 x 42,2 x 25mm. Armature: 185 x 38,5 x 12mm. | 2Kg | 500mA (12Vdc) 250mA(24Vdc) |
| CEM300SS0G | 3000N | Hall + Reed | Lock: 238 x 48 x 26,5mm. Armature: 185 x 38 x 12,5 mm. | 2Kg | 500mA (12Vdc) 250mA(24Vdc) |
| CEM600SS0E | 6000N | Hall | Lock: 266 x 67 x 40 mm. Armature: 185 x 60,8 x 16mm. | 4Kg | 500mA (12Vdc) 250mA(24Vdc) |
| CEM600SS0G | 6000N | Hall + Reed | Lock: 266 x 72 x 40mm. Armature: 185 x 61 x 16mm. | 4Kg | 500mA (12Vdc) 250mA(24Vdc) |
| CEM600DS0G | 2 X 6000N | Hall + Reed | Lock: 532 x 72 x 40mm. Armature: 185 x 61 x 16mm. | 8Kg | 1A (12Vdc) 500mA (24Vdc) |

# Rim electromagnetic locks

## "L" Brackets for narrow door frames

"L" brackets are required when the frame is narrow and there is no space to mount the electromagnet.

| Product code | Description |
|---|---|
| SLCEM300E | Bracket for CEM300SSE when the space of the frem is less than 42mm |
| SLCEM300G | Bracket forCEM300SSG when the space of the frem is less than 42mm |
| SLCEM600E | Bracket for CEM600SSE when the space of the frem is less than 60mm |
| SLCEM600G | Bracket for CEM300SSG when the space of the frem is less than 60mm |
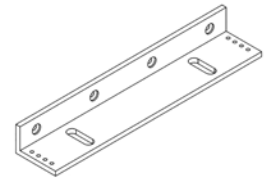
## "Z" Brackets for In-swinging doors

Electromagnetic locks are designed to be installed in out swinging doors. Therefore, for inwards-opening doors a "Z" shaped bracket is needed to ensure that the electromagnet is inside and prevents tampering.
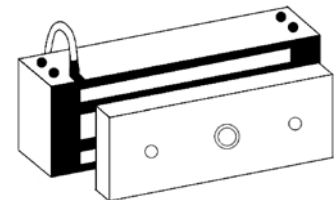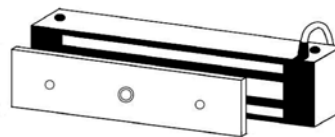
| Product code | Description |
|---|---|
| SZCEM300E | "Z" bracket for CEM300SS0E |
| SZCEM300G | "Z" bracket for CEM300SS0G |
| SZCEM600E | "Z" bracket for CEM600SS0E |
| SZCEM600G | "Z" bracket for CEM600SS0G |
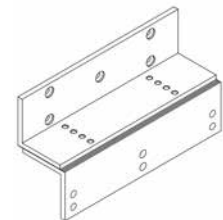
## High range

**Technical features**
» Aluminium housing
» Operation temperature: -40ºC to +60ºC
» Voltage:12/24Vdc (Auto)

| Product code | Holding force | Monitoring | Dimensions | Weight | Consumption |
|---|---|---|---|---|---|
| SCGG030SS | 3000N | Hall | Lock: 203 x 47 x 38mm. Armature: 153 x 40 x 12mm. | 2,8Kg | 300mA(12Vcc) 150mA(24Vcc) |
| SCGG054SS | 6000N | Hall | Lock: 203 x 74 x 45mm. Armature: 153x 70 x 14mm. | 5Kg | 250mA(12Vcc) 125mA(24Vcc) |

## Accessories for glass doors

To securely mount Electromagnet to glass doors, it is necessary to install a Glass DoorBracket. The bracket is affixed directly to the glass via a specially engineered adhesive and the strike plate is then affixed to the bracket conventionally. A stainless steel self adhesive "dress plate" is included.The plate will prevent viewing the glass door bracket through the glass, from the outside.

Glass door

Glass door bracket          Strike
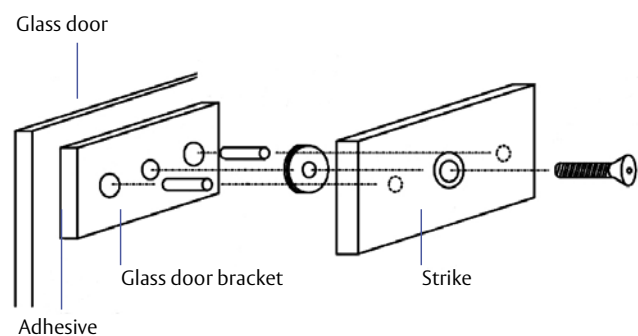
Adhesive

| Product code | Description |
|---|---|
| SCGGDB00S | Glass Door Bracket |
| SCGAKG00S | Adhesive Kit (up to 10 applications) |

# Mortise electromagnetic locks

These locks are embedded in the door avoiding visual impact and offering several mounting options. They may be installed in any position; horizontally, vertically, bottom, top or side in sliding doors and swinging doors. The mortise electromagnetic locks combine magnetic force with mechanical shear force. The share force comes from two bolts which are located in the electromagnet and sit on the seats placed in the strike plate.

## Standard range

**Technical features**
» Aluminium housing
» Operation temperature: -30ºC to +55ºC
» Voltage:12/24Vdc (Selectable) Tolerance ±10

CEM750SS0E                    CEM150SS0E
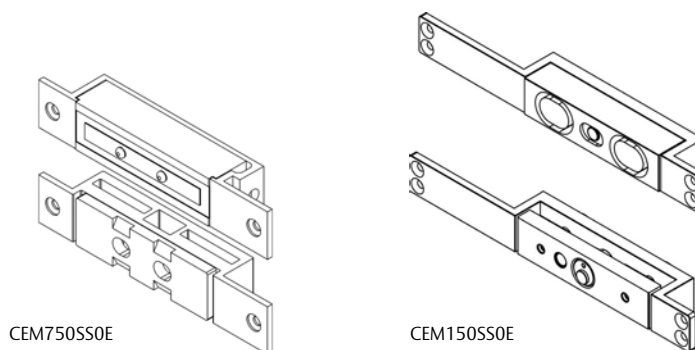
| Product code | Holding force | Monitoring | Dimensions | Weight | Consumption |
|---|---|---|---|---|---|
| CEM750SS0E | 5700N | Hall | Lock: 167 x 30 x 27,5mm. Armature: 167 x 30 x 26 mm. | 1,2Kg | 420mA(12Vcc)210mA (24Vcc) |
| CEM150SS0E | 15000N | Hall | Lock: 267 x 30 x 34mm. Armature: 267 x 30 x 34mm. | 1,8Kg | 500mA(12Vcc)320mA(24Vcc) |

## High range

**Technical features**
» Stainless Steel housing
» Operation temperature: -40ºC to +60ºC
» Voltage:12/24Vdc (Auto)
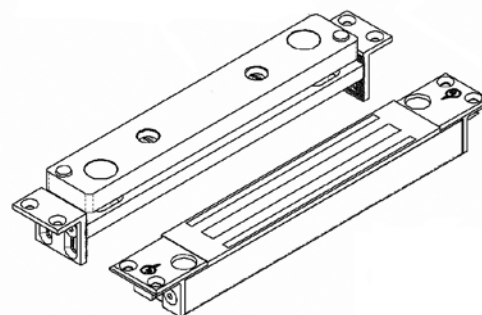
| Product code | Holding force | Monitoring | Dimensions | Weight | Consumption |
|---|---|---|---|---|---|
| SCGG030EN | 3000N | | Lock: 181 x 29 x 24mm. Armature:181 x 29 x 25mm. | 1,2Kg | 68mA (24Vcc) |
| SCGG045ES | 6000N | Hall | Lock: 268 x 38 x 30mm. Armature: 275 x 37 x 36mm. | 2,8Kg | 320mA(12Vcc)170mA(24Vcc) |

# Accessories

## Key switches

Key switches activates electrical circuits by turning a key.

**Mechanical features**
» Protection class: IP 54
» These key switches require a 30x10, 8 position cylinder with the cam placed at 90º to the left. (Cylinder cam 25º for maintained models with key removal).
» Dimensions:
  Aluminium box: 75 x 75 x 52mm.
  Frontplate  (Mortise model): 100 x 125mm.

**Electrical features**
» Micro-switch:
  Máx. Voltage:  220Vac
  Máx. Current draw: 5A
» Led:  Máx. Voltage: 12Vac

**Available models:**
» Surface or Mortise model
» 2 or 3 posicions
» Optional LED
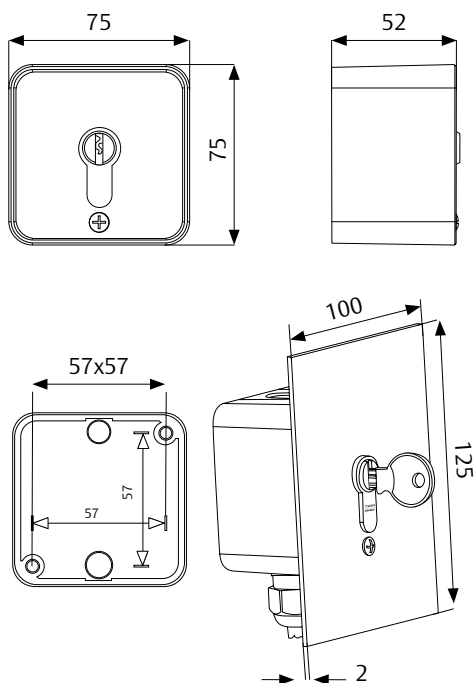
### Functions

The multifunctional micro switch allows the user to set the appropriate function for the application. The same model can operate with both momentary or maintained contact.

### Applications

» **Momentary contact:**  In applications where the micro-switch activation operates the electrical circuit. Example: garage door. Once the key is turned, it activates the microswitch and, later, a spring will prompt the return for removing the key.

» **Maintained contact:**  In applications where the electrical circuit have to remain activated.  Example: In hotel rooms as energy saving device. When turning the key, it will activate the microswitch and remain fixed.

There are two applications available only by changing the position of the cylinder cam.

1. **Cam 90º  to the left:** (9 hours): When turning the key the circuit is clo-sed. The key must return to the original position to remove it. In that case the circuit will be disconnected.

2. **Cam 25º to the right:** It allows to maintain the circuit connected or disconnected when removing the key

| Product code | Position | LED | Instalation |
|---|---|---|---|
| CEL1LE | 2 | Si | Mortise |
| CEL1LS | 2 | Si | Surface |
| CEL1ME | 2 | No | Mortise |
| CEL1MS | 2 | No | Surface |
| CEL2LE | 3 | Si | Mortise |
| CEL2LS | 3 | Si | Surface |
| CEL2ME | 3 | No | Mortise |
| CEL2MS | 3 | No | Surface |

*Cylinder not included

# Accessories

## Power supplies

**Application**
» Electric power supply for all kinds of electromechanical, electromagnetic locks and direct current electric strikes..

**Features**
» Input installation: 220 Vac/50 Hz.
» Size: 122 x 60 x 35mm.
» Connector wire equipped with earth connection.
» Including support for installation.

| Product code | Output voltage | Current |
|---|---|---|
| EA700_000000 | 12Vdc | 5A |
| EA701_000000 | 24Vdc | 2,7A |

## Transformer 12Vac

**Application**
» Electric power supply for electric strikes and low consumption electromechanical locks.

**Features**
» Input installation 220Vac/50 Hz.
» Output voltage 12Vac/0,5A.
» Sizes: 79 x 44 x 32mm.
» Internal fuse.
» Weight: 0,325 K

| Product code |
|---|
| TRFCERBIT |

## Power supply 24Vdc

**Application**
» Electric power supply for all kinds of electromechanical, electromagnetic locks and direct current electric strikes.

**Features**
» Input installation: 220 Vac/50 Hz.
» Output: 24Vdc/1,2 A.
» Size: 91 x 58 x 54mm.
» Weight: 0,2 Kg.
» Includes green led

| Product code |
|---|
| FA24DC07A |

## Lead covers

Lead covers are needed for power transfer to the devices installed on the leaf of the door. The lead cover consists on a cable and the base to attach the cable to the door (frame and leaf).

Mortise models

| Product code | Length | Internal diameter |
|---|---|---|
| EA280_100000 | 250mm. | 7,5 mm. |
| EA281_100000 | 460mm. | 7,5 mm. |

Rim models

| Product code | Length | Internal diameter |
|---|---|---|
| PASCAB00S | 300mm. | 7,5 mm. |

# Accessories

## Fire prevention magnetic door holder

Magnetic door holders are used in fire protection doors. These holders keep the doors open during day to day operations .When smoke is detected the fire alarm transmit a signal which cuts off the power feed and the mechanism releases the door. This avoids fire and smoke expansion. These door holders also have a push button which allows releasing and closing the door manually.

Door holders can also be installed in any door that needs to be kept open.

| Product code | Description |
|---|---|
| CEM4024PB | Magnet and adjustable keeper plate |

**Technical features:**
» EN 1155 Certified
» Holding force: 40Kg
» Voltage: 24Vdc (1,6W)
» Electronic protection integrated
» Protection  magnet :IP54 / conexion: IP42
» 30% Glass fibre housing , resistant to shocks, color deterioration and corrosion.
» Articulated armature plate (ajustable up to 60°)
» Interchangeable cable entry
» Interchangeable push button position
» Reliable, no mechanical part
» Without residual magnetism
» Silence operation

**Dimensions**
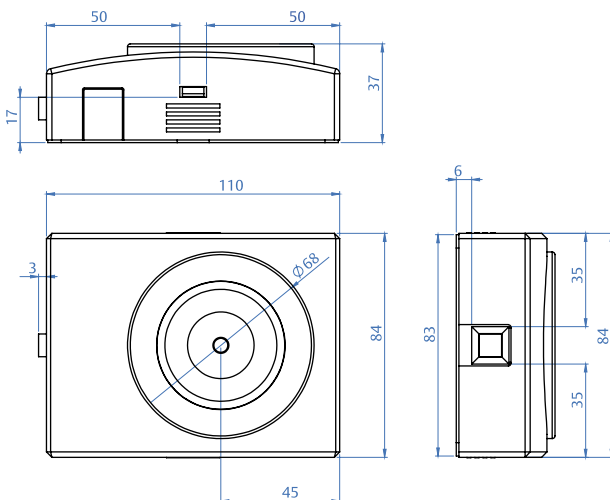
# Accessories

## Door status detector

Magnetic door status detectors are operated via a Reed switch that is activated by a magnetic field. The sensor is mortised on the frame and the magnet is mounted on the door's leaf. If the door is locked, the magnet acts on the contact (closed contact).

Mortise mounting on aluminium, doors, wood and windows.

**Dimensions**
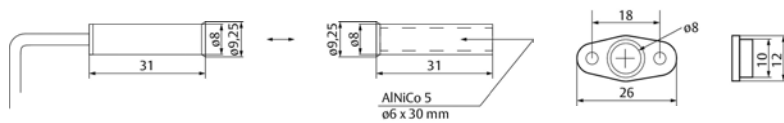


**Technical features**
» Contact type: NO/NC
» Max. Switching interval:15mm
» Class of protection: IP 67
» Dimension: Ø 8 x 31 mm
» Cable length: 6m
» Number of wires: 3
» Material housing: plastic
» Operating temperature range: -25ºC a +70ºC

| Product code |
| --- |
| 10382U-6-----10 |

**Technical features**
» Contact type: NA
» Max. Switching interval: 13mm
» Class of protection: IP 67
» Dimension:Ø 8 x 35 mm
» Cable length: 6m
» Number of wires: 4
» Material housing: plastic
» Operating temperature range: -40ºC a +70ºC
» VdS Class: C

| Product code |
| --- |
| 10295-6------10 |

## Lever status detector

This micro contact alerts of the lever status (blocked door/unblocked door). It is mounted behind the strike on the door's frame, being activated by the lever's motion. There are no restrictions in terms of lever projection.

**Technical features**
» Type of contact: NO/NC
» IP 54 protection
» Minimum reaction distance: 3mm
» Wire length: 4m
» Breaking power: 25 V AC/DC-1,5 A
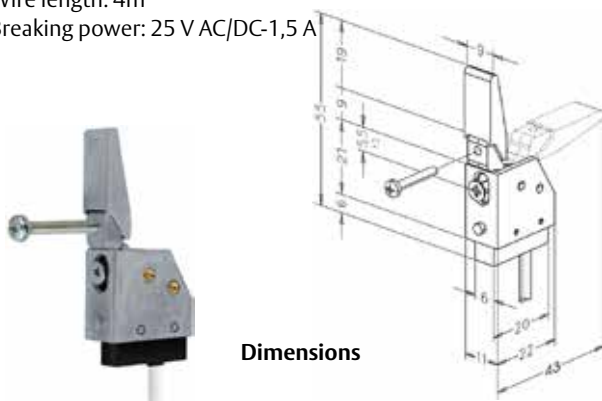


**Dimensions**

| Product code |
| --- |
| BSC4M0000 |

## Steel installation set 10296

Mounting component for installing the round reed contact 10295 in ferromagnetic materials, such as steel.



| Product code |
| --- |
| 10296--------10 |