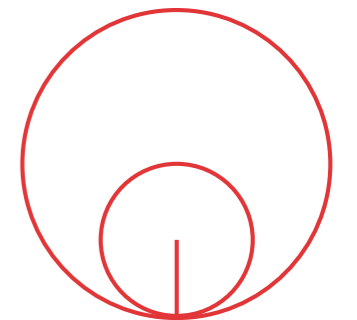
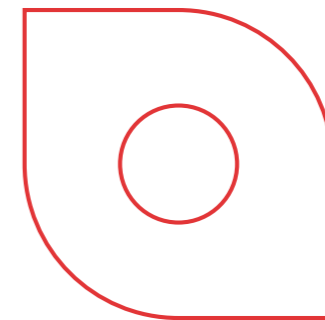
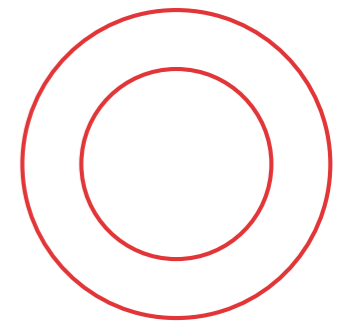
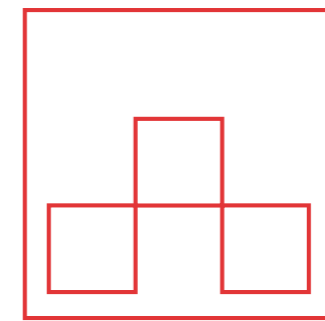
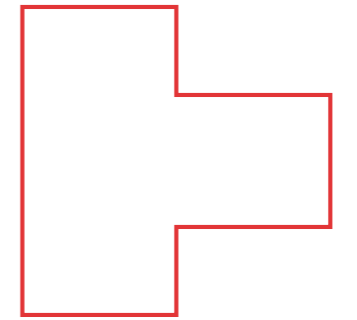
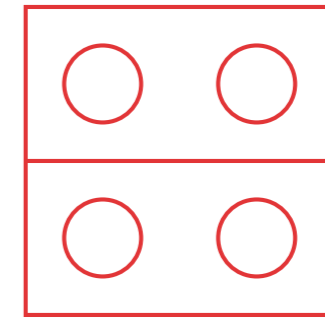


OPENERS CLOSERS

ELECTRIC AND ELECTRONIC STRIKES · ELECTROMAGNETIC LOCKS
ELECTROMECHANICAL LOCKS · ACTUATORS · ACCESSORIES

The key is
inside



OPENERS & CLOSERS

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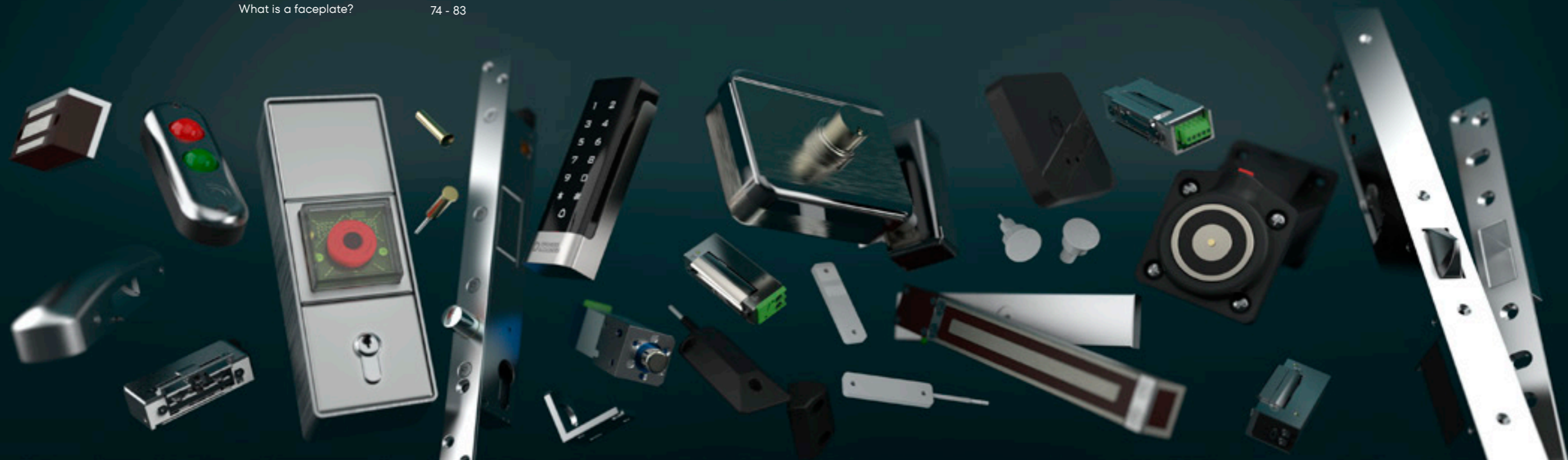
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GENERAL CATALOGUE



FOR RELEASES & ACCESS CONTROL SYSTEMS
ELECTROMAGNETS FOR
CLOSERS

WHO WE ARE

FAMILY AND INTERNATIONAL SPIRIT

From our beginnings in 1989, where we only had a map and a lot of enthusiasm for entrepreneurship, we started our international adventure by manufacturing our first electric strike for the UK.

In a tour garage in Barcelona, we designed and manufactured the Series 2 in an artisan way to gradually distribute it throughout Europe. Over the years, we moved to a 2.000 m2 facility and incorporated more electric strike models to meet the needs of the market and our customers.

With 10 years of experience in the international market, we landed in Spain in the year 2000 with great enthusiasm. The beginnings was difficult because OPENERS & CLOSERS as a brand was unknown at a national level and there was also a strong competition in the sector, but we never gave up, and with a lot of energy and perseverance we continue to move forward until today.

In 2016 we moved the OPENERS & CLOSERS headquarters again to increase our production capacity. We completely refurbished an industrial building located in Sant Feliu de Llobregat, which offered the ideal space to equip it with the latest technologies and continue with our innovative spirit.

Who would have thought that over the next 5 years we would be working non-stop to create new door locking solutions and meet the growing demand for more technological and sustainable products. Also, like everyone else, we had to overcome the global pandemic of 2020.

We're very proud of the path we've been walking these last 33 years, but nothing would have been possible without the efforts of the people who make up OPENERS & CLOSERS and the ongoing trust of our clients. Without them, our passion for creating door locking mechanisms and access control systems that make life easier in wouldn't have been possible.

We want to keep growing with you.

CATALOGO 2022
INCONTRI ELETTRICI - SERRATURE ELETTRICHE - ACCESSORI

The key to our know-how

PASSION, EFFORT AND CONSISTENCY

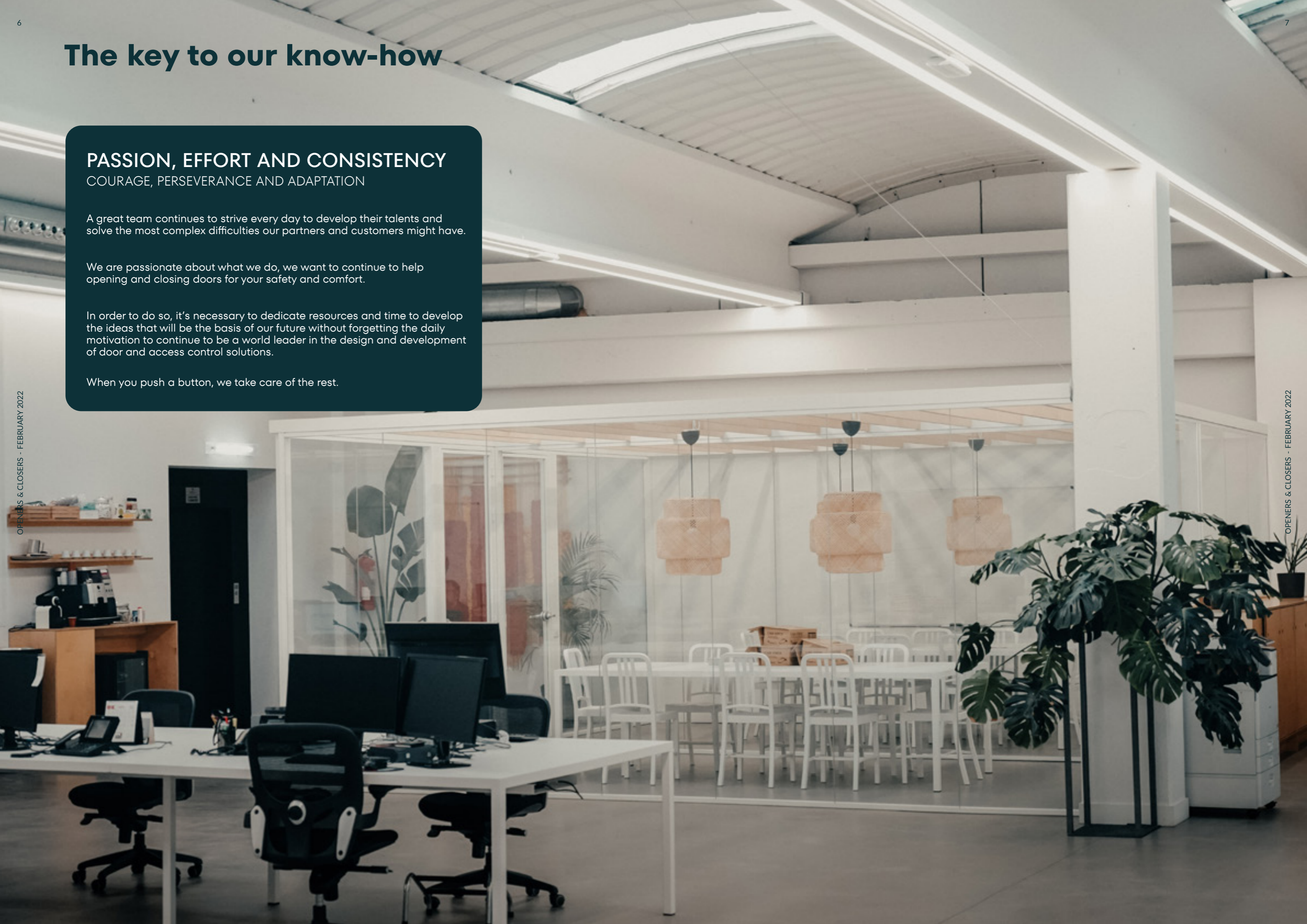
COURAGE, PERSEVERANCE AND ADAPTATION

A great team continues to strive every day to develop their talents and solve the most complex difficulties our partners and customers might have.

We are passionate about what we do, we want to continue to help opening and closing doors for your safety and comfort.

In order to do so, it's necessary to dedicate resources and time to develop the ideas that will be the basis of our future without forgetting the daily motivation to continue to be a world leader in the design and development of door and access control solutions.

When you push a button, we take care of the rest.



The power of an idea



OUR SOLUTIONS

VISION, DESIGN AND ENTHUSIASM TO CREATE

The design of each electro-mechanism starts with a sketch.

OPENERS & CLOSERS has a rich history of manufacturing high quality strikes and locks that are relevant for today and designed to endure.

At our headquarters in Barcelona, the design and innovation department creates cutting-edge prototypes for tomorrow with the latest state-of-the-art machinery.

The in-house laboratory subjects our solutions to a rigorous quality process, homologating the strikes and locks in accordance with European standards to ensure optimal performance.

Our objective is to guarantee the safety and security of people improving convenience and comfort in their daily lives.

What can we offer you?

CONSULTING

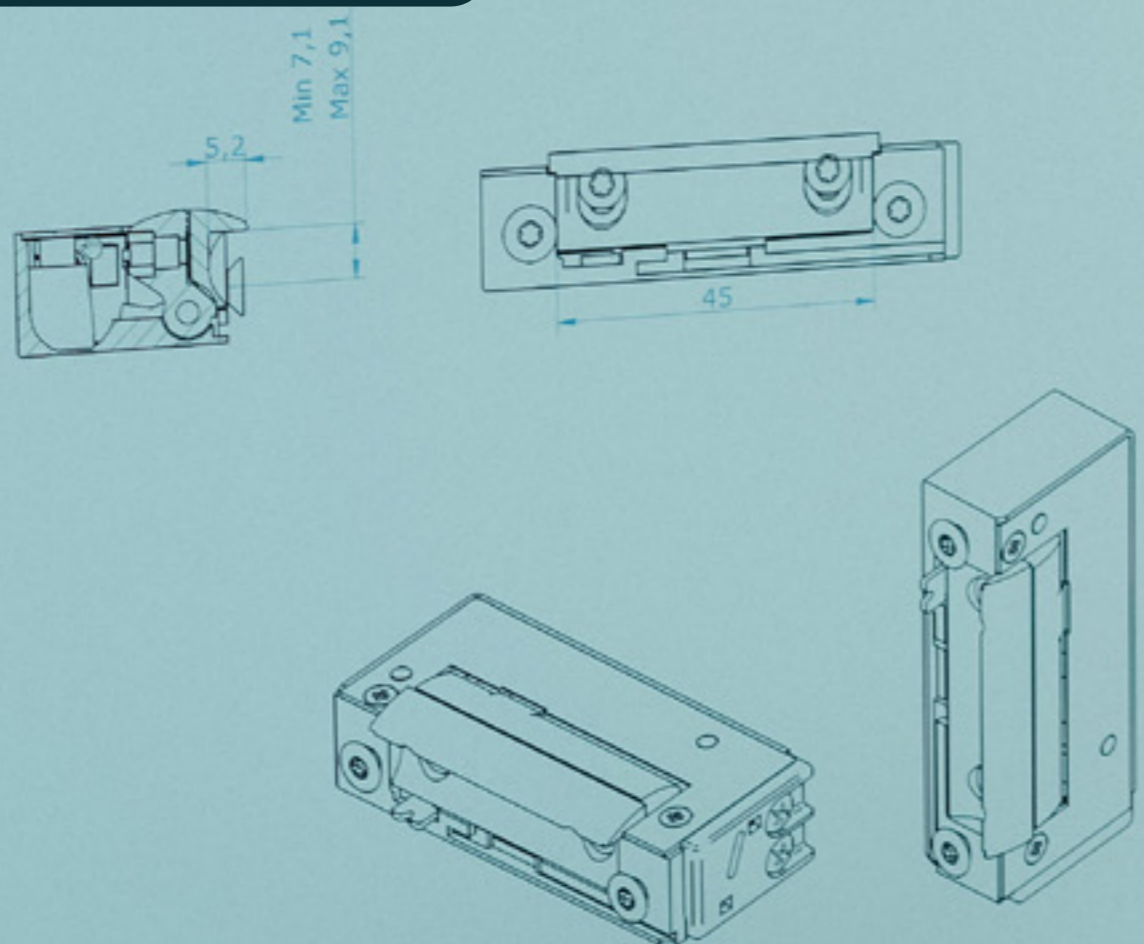
CUSTOMER SERVICE AND TECHNICAL SUPPORT

We attend to any enquiry about our solutions before, during and after the purchase.

Our project specification experts will advise on the best solution for your project and guide you towards it.

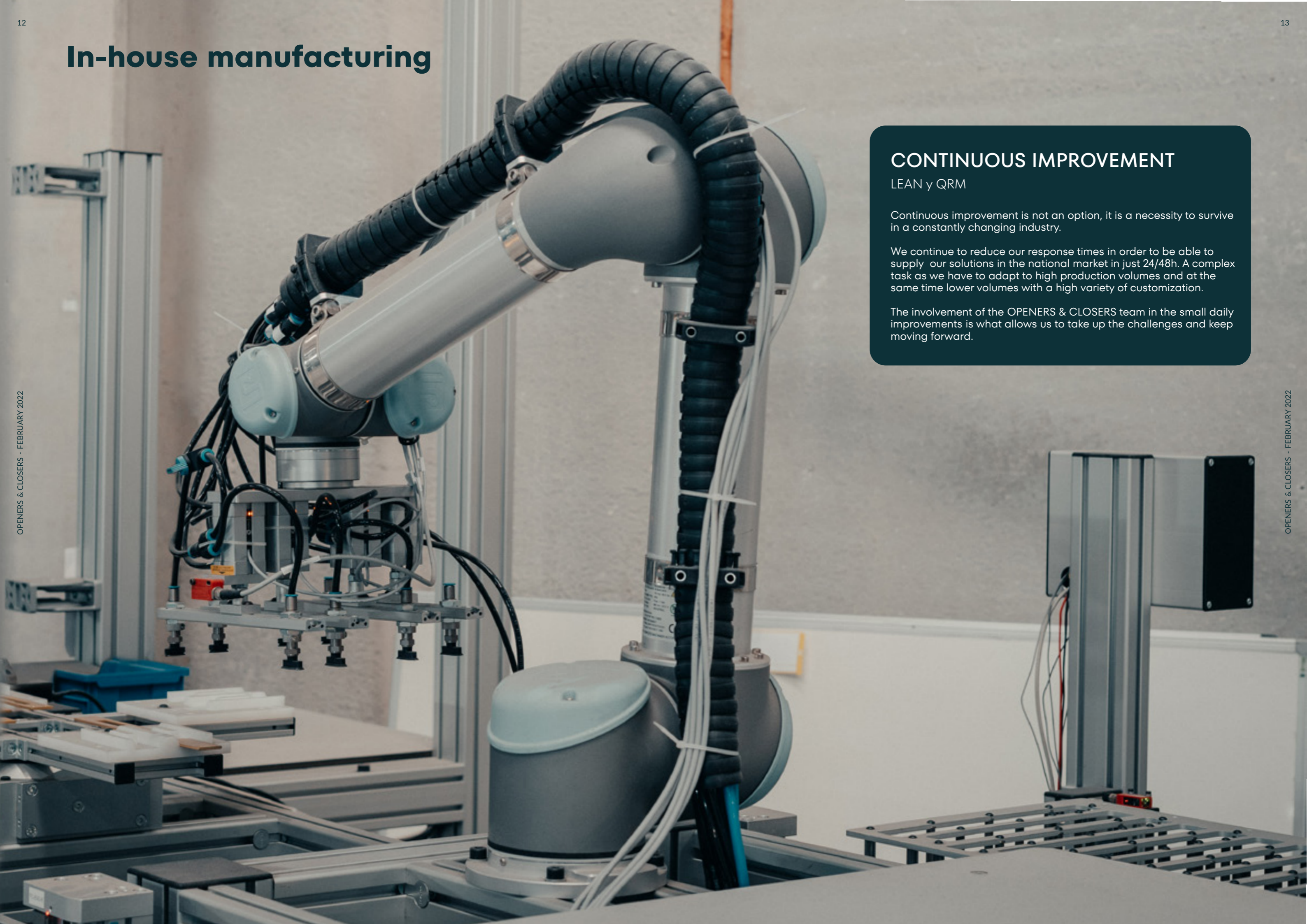
We help to arrange and develop all technical documentation required for door locking systems.

We're here to help you.



NOTIFICAR MODIFICACION A CERTIFICADORA					
Applus+					
DBI					
Efectis					
ift					
MPA					
MATERIAL		TOLERANCIA NO INDICADA ISO 286-1:2010.		NOMBRE	
ACABADO		AGUJERO: h12 / EJE: h12 / DISTANCIA: JS12		FECHA	
OBSERVACIONES				DISEÑO	
ARCHIVO 3D	SE1Z10	MASA	0.000 g	COMPROBADO	
ARCHIVO 2D	SE1Z10	VOLUMEN	0.00 mm ³	ESCALA	
PROYECTO		MOLDE/MATRIZ		1:1	
				FORMATO	
				A4	
				OPENERS & CLOSE	
				Secure Locking	
				CÓDIGO	
				5E1Z10	

In-house manufacturing



CONTINUOUS IMPROVEMENT

LEAN y QRM

Continuous improvement is not an option, it is a necessity to survive in a constantly changing industry.

We continue to reduce our response times in order to be able to supply our solutions in the national market in just 24/48h. A complex task as we have to adapt to high production volumes and at the same time lower volumes with a high variety of customization.

The involvement of the OPENERS & CLOSERS team in the small daily improvements is what allows us to take up the challenges and keep moving forward.

OEM

WE CUSTOMIZE

WORKING WITH YOU

At OPENERS & CLOSERS we want to contribute to your success.

Speed up and streamline the launch of your solutions to market with our full product cycle OEM service, from concept to launch.

We put all our know-how to create the electromechanical mechanisms that you need and we customize them with your brand.

Let our innovation work for you.

Digitisation

DIGITAL TRANSFORMATION

LISTEN TO COMMUNICATE

Digital transformation has been driven by the pandemic, changing workflows and adding new business challenges.

We are updating our processes to automate them and exchange as much information as possible with our customers, so that they are up to date with the latest developments and have all the technical documentation just a click away.

We empathize to understand our customers' needs and provide the necessary documentation.





Electric and electronic strikes



What is an electric strike?

Electric strikes are electromechanical mechanisms used as an integral part of an access control system.

They are installed in the door frame and their main function is to allow access to a building remotely with a single electrical pulse.

Our strikes don't offer polarity between the connection terminals, and the wires can be connected indistinctly to the terminal strip.

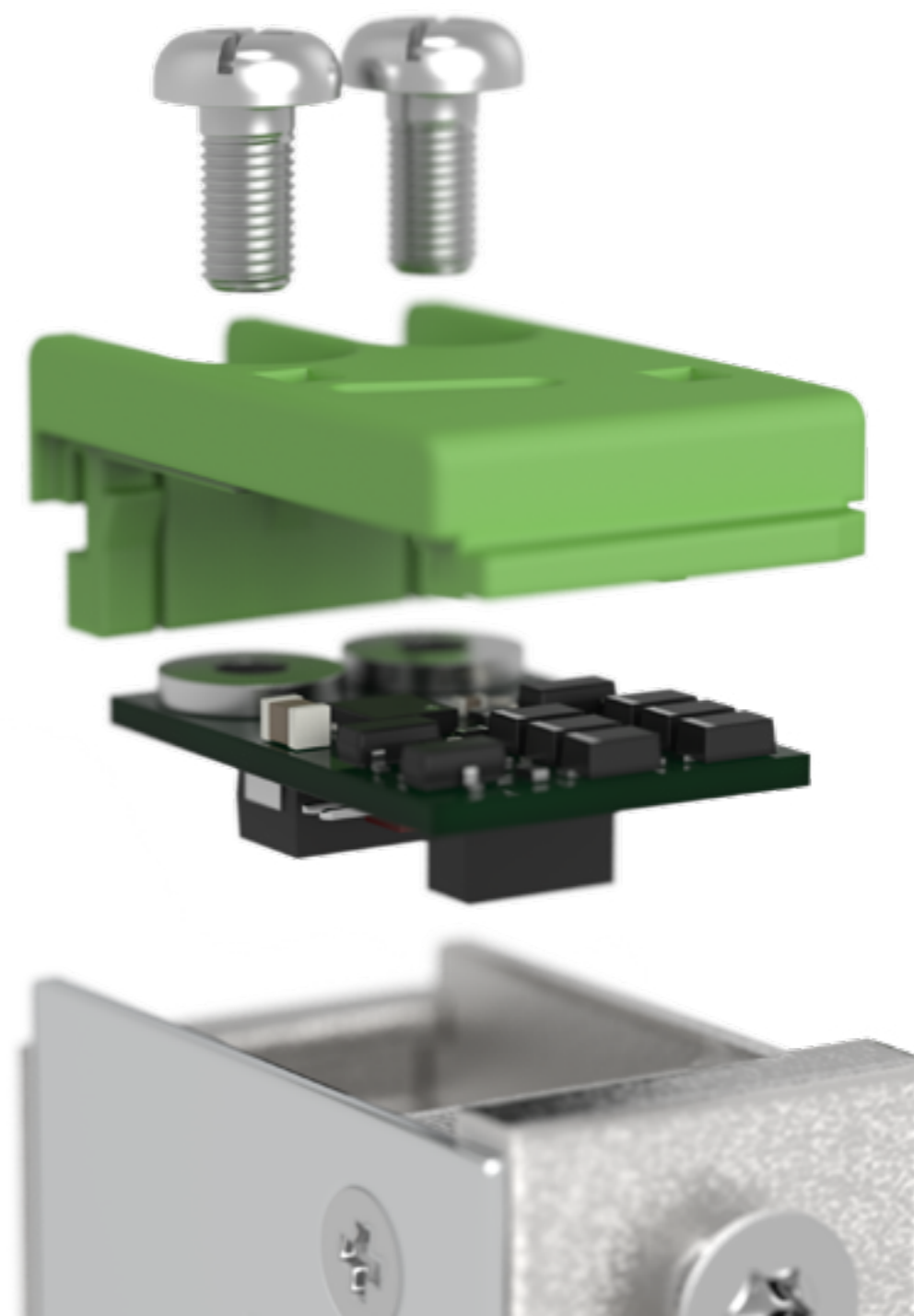
In order to offer high operation reliability, all mechanisms are subjected to climatic, ageing and pressure tests.

What is an electronic strike?

Electronic strikes are the new generation of electric strikes.

For more than four years, the OPENERS & CLOSERS team have set themselves the challenge of making a disruptive innovation in the sector and thanks to constant technological innovation, we were able to create a design that would allow the assembly of all the microcomponents inside an electronic strike without affecting its symmetry.

All electronic strikes incorporate a microprocessor in order to improve functionalities, simplify model selection, facilitate installation and/or reduce stock in your warehouse.



Evolution in symmetry

Asymmetric strikes are those that require to take into account the type of door in which they will be installed. DIN 107 is used as a standard to choose the correct hand of the door and avoid confusion.

Over the years, the evolution of electric strikes has been aimed to offer 100% reversible solutions without having to check the direction of the door or the position of the hinges.



DIN 107 Standard

To check the direction of the door, look at the visible side where the hinges are located.

Left hinge - DIN L

When the hinges are visible on the left side, it will be a DIN Left door and a DIN L or Reversible strike must be ordered.



Right hinge - DIN R

When the hinges are visible on the right side, it will be a DIN Right door and a DIN R or Reversible strike must be ordered.

Components of an electric or electronic strike

Each and every one of the elements that make up our electric and electronic strikes are part of the OPENERS & CLOSERS' DNA. We create complex and carefully designed mechanisms for long-lasting and reliable operation.

OPENERS & CLOSERS - FEBRUARY 2022

ELECTRIC AND ELECTRONIC STRIKES

Fixed or adjustable latch

Its function is to adapt to different fits between the door and the strike.

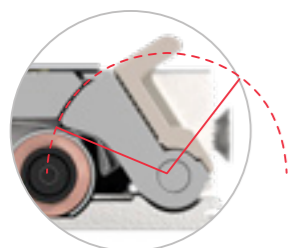
It's the strike element that has to withstand the greatest physical impact while opening and closing doors constantly. It offers a wide variety of adjustability depths and degrees of rotation.

We differentiate between internal and external radian latches:

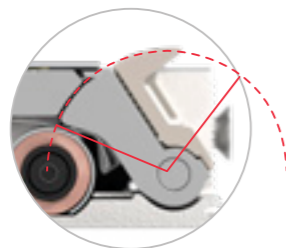
The internal radian latch has a shallower depth, but keeps the tip of the latch inside the arc whose length is that of the radius.

The external radian latch has a greater depth and does not keep the tip of the latch within the arc whose length is that of the radius.

External radian



Internal radian



Coil

The heart of every electric or electronic strike is in the electric coil. Its function is to activate the core at a specific speed that allows the release of the short lever. To assure the best performance of the strike, the coil is designed to avoid overheating allowing operation without interruptions.

Springs

To assure a perfect performance of an electric or electronic strike, internal turns, diameter and compression must be precisely calculated.

Short and long levers

Levers are essential pieces for the strike's correct operation. They must be perfectly aligned to withstand strong impacts while still moving smoothly to allow an efficient unlocking process. The key is to find the perfect balance.

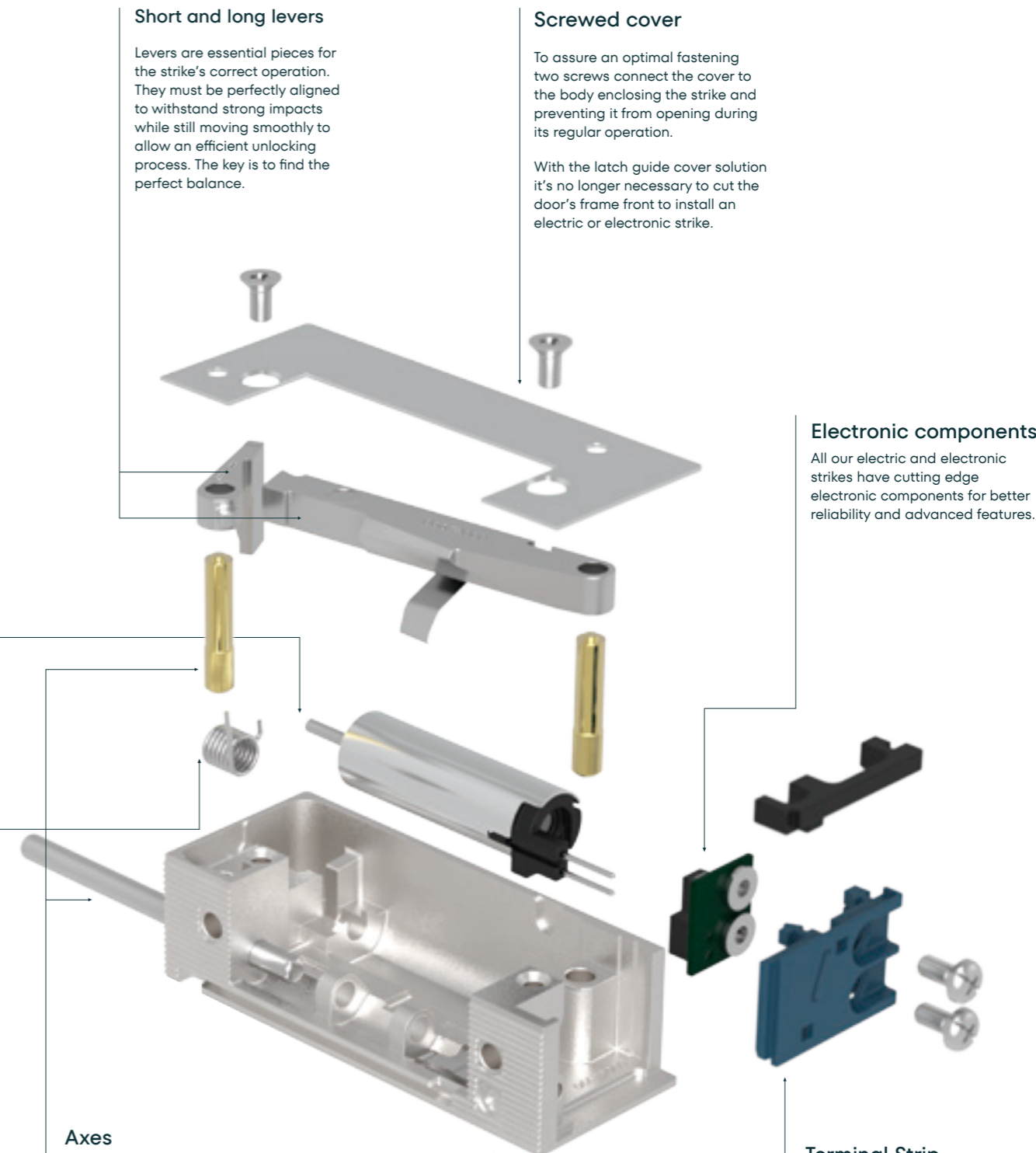
Screwed cover

To assure an optimal fastening two screws connect the cover to the body enclosing the strike and preventing it from opening during its regular operation.

With the latch guide cover solution it's no longer necessary to cut the door's frame front to install an electric or electronic strike.

Electronic components

All our electric and electronic strikes have cutting edge electronic components for better reliability and advanced features.



Axes

The axes allow rotation of the short and long levers as well as the latch and absorb physical stress and impacts. Their resistance will vary according to the diameter and manufacturing material, thus it's important to use resistant materials to assure durability of the strike.

Body

The key of every electric or electronic strike. It protects the internal mechanism from impacts and unwanted vibrations.

Terminal Strip

The simplest terminal strip yet the most ingenious. All of our electric and electronic strikes have a Transient Voltage Suppressor to shield its circuits from any momentary or sudden overvoltage. Its wiring can also be connected to either of the pins (+/-) both in AC and DC current as it offers no polarity.

Ribbed body



Smooth body



Strikes functionalities

We offer the widest range of features in the market for each of our series. We can adapt our strikes to any solution and we manage to create any function that our clients might ask for.

First of all, it is very important to make a difference between Alternating current (AC) and direct current (DC).

Voltage/intensity



Direct current

It was invented by Alessandro Volta and had Tomas Alva Edison as its main proponent.

It is known for maintaining a constant and unidirectional flow. Its main advantages are that it doesn't need as much insulation, it can be stored in batteries and works with lower voltages.

Electric strikes must be installed with a power supply and do not make a buzzing sound during its operation. They're ideal for permanently connected systems, however, only electronic strikes can be used in doors that have higher side loads.

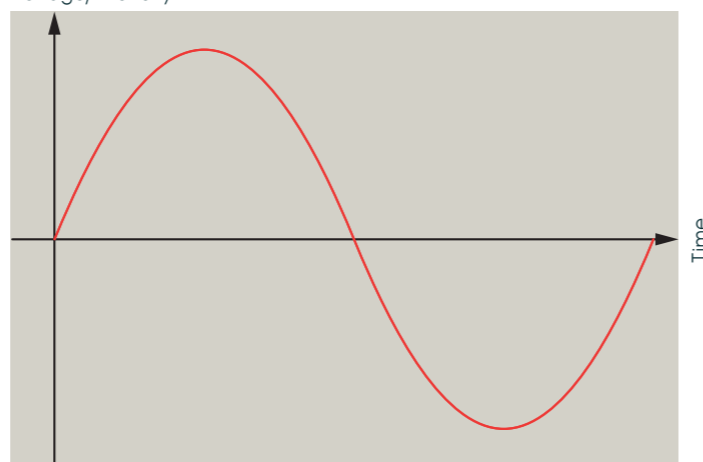
Alternating current

Invented by Nikola Tesla, it's the most commonly used type of current in power lines.

It is known for maintaining a cyclic flow and its magnitude and direction fluctuates in regular intervals. Its main advantage is that it loses a lower amount of energy when carried through long distances. It can easily be transformed to direct current.

Electric strikes must be connected using a transformer and they make a characteristic buzzing sound.

Voltage/intensity



We've managed to make **electronic strikes** work with both types of current to allow more flexibility, reduce product stock and, most importantly, to open doors with high side loads even with ED 100% direct current.



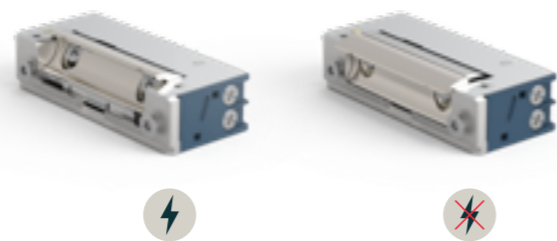
Electric and **electronic** strikes functions

These are the two main functionalities we can find in the market.

Fail-secure

Fail-secure functionality refers to the models whose base state without electric connection is locked.

The strike is only unlocked when the coil is activated. This means that in case of an electric outage the strike will remain locked.

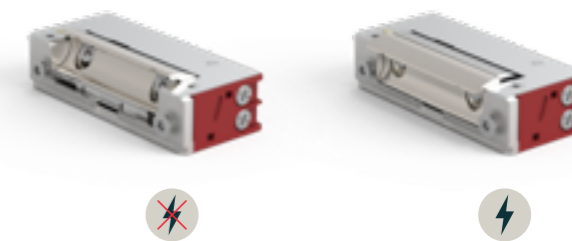


NC (Normally Closed)

Fail-safe

Fail-safe functionality refers to the models whose base state without electric connection is unlocked.

The strike is only unlocked when the coil is deactivated. This means that in case of an electric outage the strike will remain unlocked.



NA (Normally Opened)



Fail-secure



Fail-secure with mechanical unlocking



Fail-secure hold-open



Fail-safe



Fail-secure hold-open with mechanical unlocking



Fail-secure with monitoring



Fail-secure with double monitoring



Fail-safe with monitoring



Fail-secure with internal hold-open



Fail-secure with internal hold-open and mechanical unlocking



Fail-safe with double monitoring

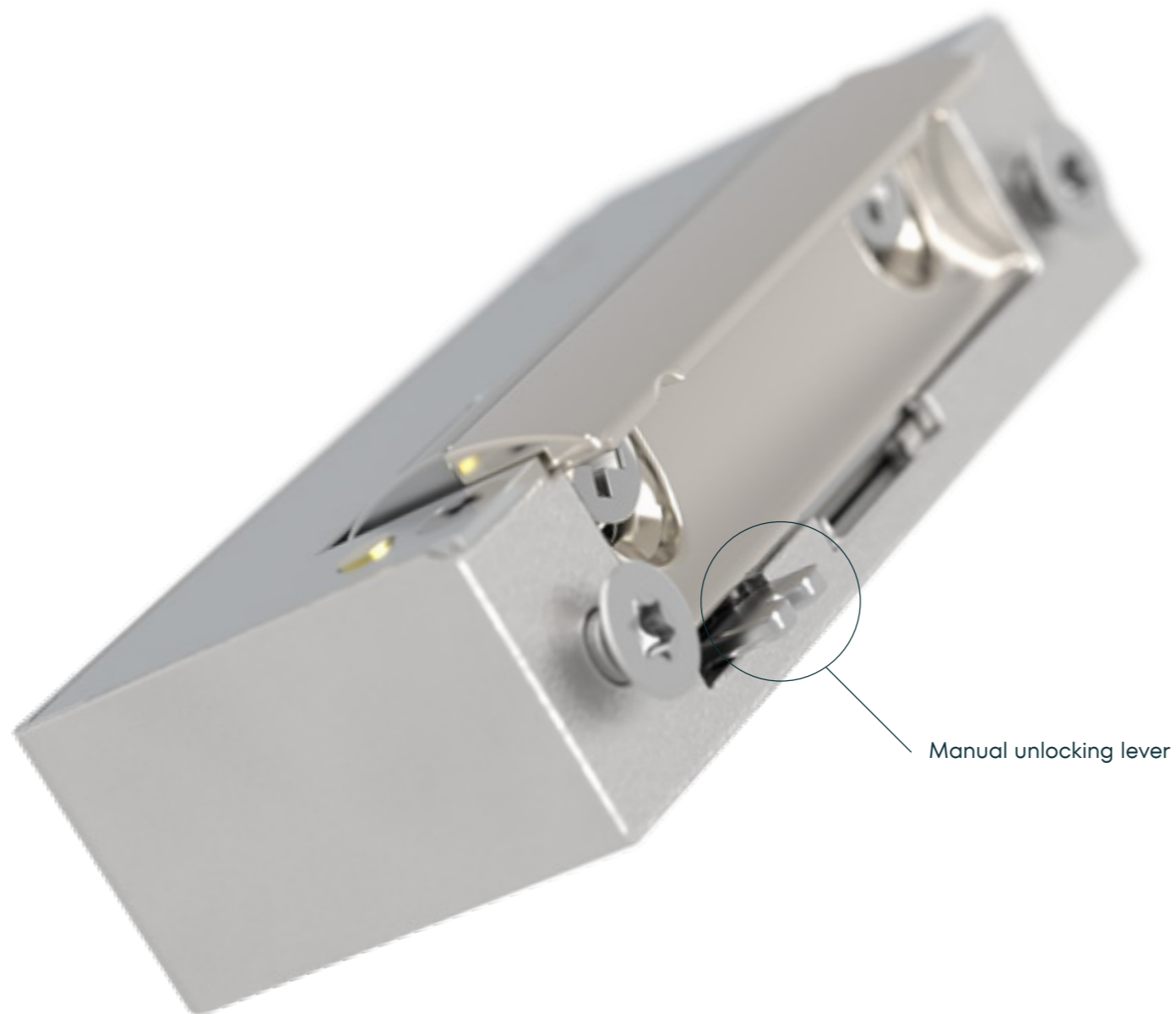
The 3 most relevant characteristics

Mechanical unlocking

It's a mechanical lever that allows the user to unlock the strike.

If the door must remain unlocked, just moving the lever leaves the strike unlocked without the need of an electric pulse.

To reactivate the strike's regular operation the lever must be put back in its original position.



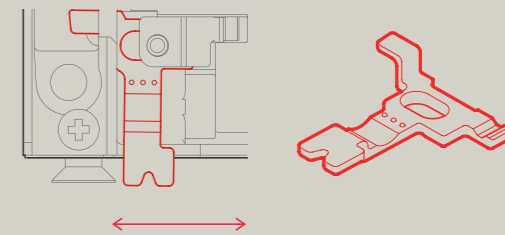
Manual unlocking lever

OPENERS & CLOSERS mechanism

Our unlocking levers are a groundbreaking system.

Using lateral movement we maintain the blocking resistance and durability of the strike.

Our lab has managed to reach more than 500.000 cycles of locking and unlocking.



Hold-open system

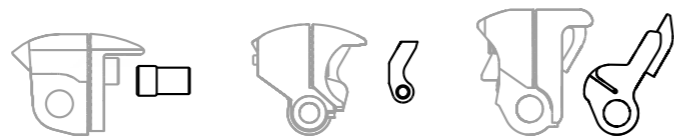
There're two types of hold-open systems, mechanical and electronic. Both allow you to unlock the strike and maintain it open with just an electric pulse.

Mechanical hold-open system

Their activation unlocks them for an indefinite amount of time.

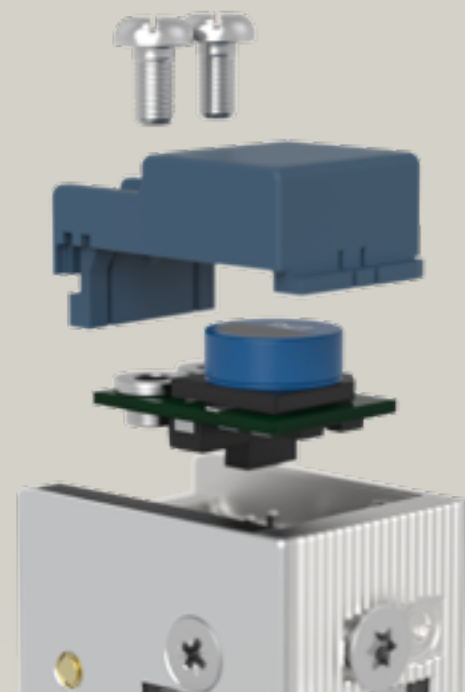
Only when the door has been opened the hold-open mechanism will lock the strike.

There are three types of systems, the bushing system, the external lever on the latch front system and the newest system on the latch's shaft.

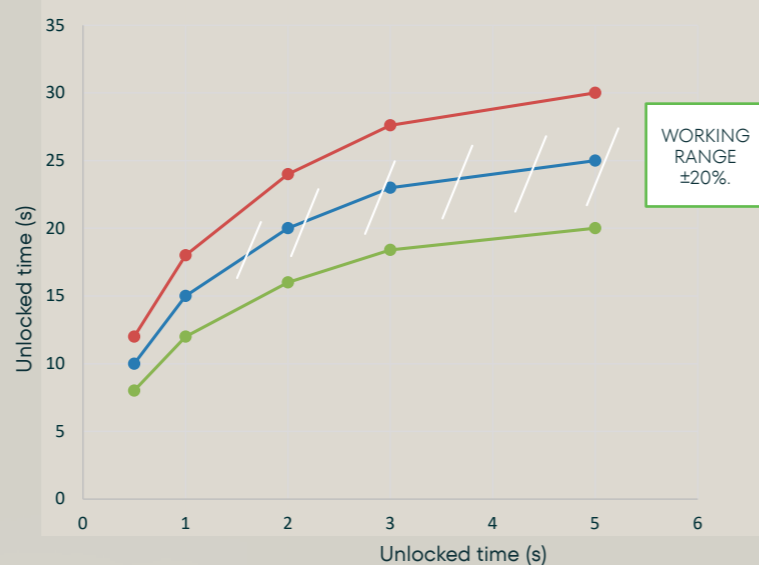


Electronic hold-open system

The door stays unlocked for a provided amount of time then the strike locks it automatically. This is the most secure option.



ELECTRIC PULSE-UNLOCK



—●— AVERAGE VALUE —●— MAXIMUM VALUE —●— MINIMUM VALUE

Monitoring system

Depending on the desired protection degree we can choose to have one or two microswitches for the door's signalling.

Simple microswitch

The microswitch detects the door's state (opened, closed).

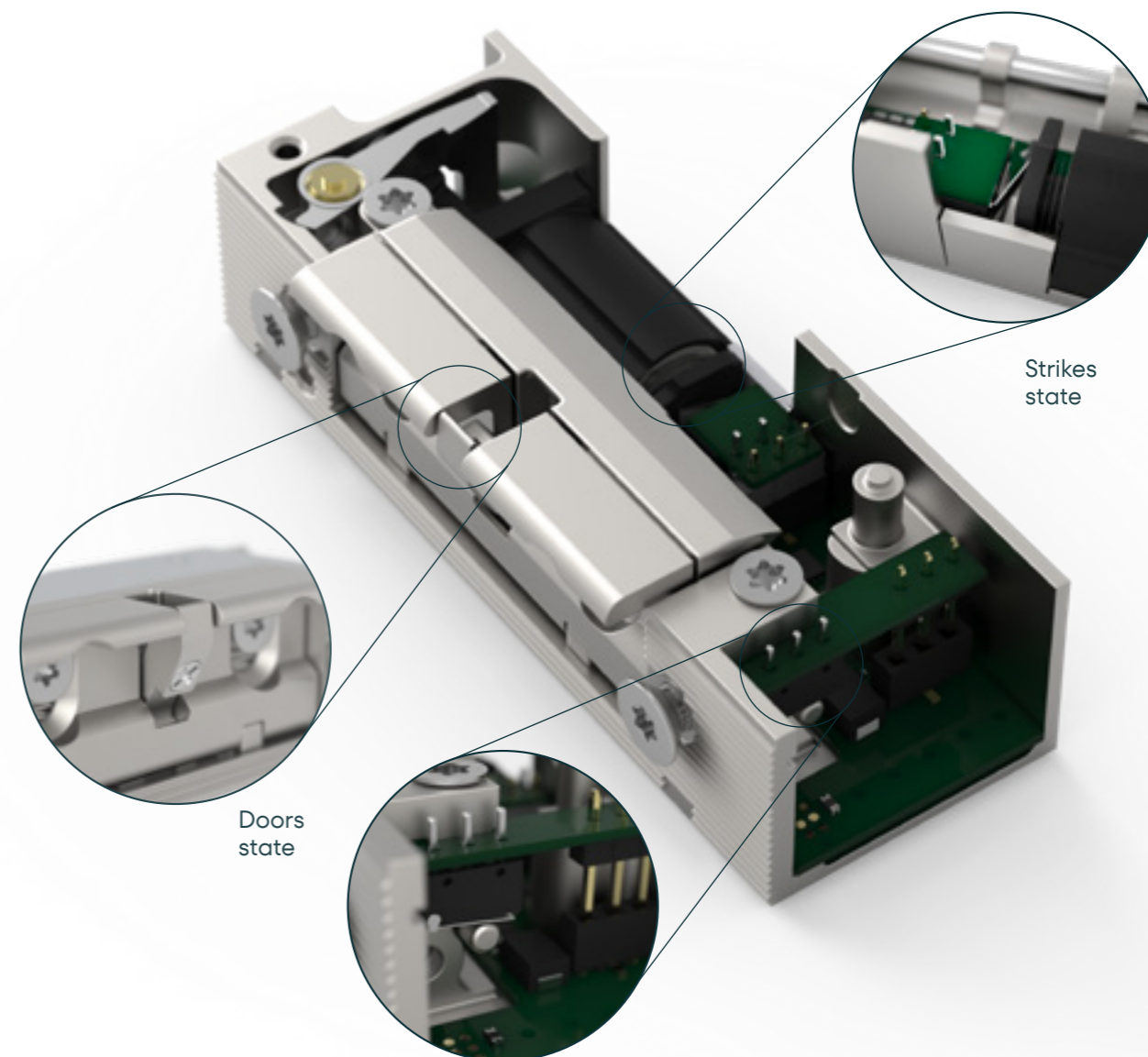
The new models have the possibility to incorporate the microswitch in the strike's interior to avoid changing the strike's symmetry.

Double microswitch

To increase the security of access systems a double microswitch can be chosen.

When two microswitches are added we can know both the door's state (opened closed) and strikes state (locked or unlocked).

We mount all the components inside the strike to avoid interfering with its symmetry.



Available models

BASIC

Versatile and functional.

Basic models have been the starting point of electric strikes. They're models with fixed voltages and not a wide range.

We can offer a wide array of personalized coils with optimum operation for specific and detailed applications.

DUAL



Double functionality.

The Dual models creation was the first evolution made by OPENERS & CLOSERS to unify the amount of models and simplify the selection process for our clients.

The demand for a two in one model and to reduce the available voltages made us create two coils in the same spool and therefore offering a voltage of 12/24V AC <1min and 12/24V DC 100% ED.

Unlike the basic models, the Dual model incorporates a voltage selector or switch that allows easy exchange of voltage according to the installation.

UNIVERSAL



High tech and compact.

The Universal model followed the Dual model with the advantage of offering a wider range of voltages without the need to select a specific one.

The improvement in its internal pieces and powerful coil allows for a balance between mechanisms to allow a multi voltage of 9-24V AC/DC or 22-28V AC/DC.

SIDE LOAD

Universal models allow you to open doors with side loads

Up to 200N with AC current

Up to 50N with DC current



ELECTRONIC

Innovation.

Electronic strikes are the next generation, our commitment to the future leading a sustainable change. They are the all in one strikes.

Some years ago we presented the first electronic strike in the world and had a great market approval. Thanks to that, we have put our efforts into getting an improved second version.

Our flagship product offers cutting edge technology. We offer a wide range of models and offer some of the market's most requested solutions with a voltage of de 6-28 AC/DC 100% ED.



SIDE LOAD

Electronic models allow you to open doors with side loads

Up to 500N with AC current

Up to 500N with DC current



Most relevant characteristics of electronic or electric strikes

OPENERS & CLOSERS electronic or electric strikes are the only ones that offer real universal operation.

100% universal operation guaranteed

The key was redesigning the coil.

They offer a voltage operation between 6-28V AC/DC 100%ED with precise unlocking performance. This voltage range is the widest in the market so an electronic strike can be installed no matter the voltage without worrying about its operation.

Smart management

The M2 microchip is OPENERS & CLOSERS' second generation of microprocessors that allows for more data storage and a better and faster unlocking.

The program controls the temperature of the strike to prevent it from exceeding 40°C. This ensures a better performance and greater number of operations with a high flow while avoiding possible burns with the front plate.

Lower power consumption

We are aware of the importance of energy efficiency in construction. In all our electronic strikes, energy consumption is remarkably low.

Depending if it's AC or DC current, the minimums vary from 0,03 A to a maximum of 0,14 A as maintenance consumption.

Quieter

Our electronic strikes are now much quieter thanks to the M2 microprocessor. Only 65-69 decibels during 0,4 seconds.

Allows you to unlock the door in microseconds with little perception of noise, just enough to show it is working.

For use cases where even this little noise is an inconvenience, we can customize an electronic strike for our clients, reducing the noise or even removing it.

Higher side load

With our electronic strikes we are able to open doors with higher side loads without affecting the unlocking operation.

The microprocessor manages the unlocking process smartly and can open heavy and airtight doors without a challenge.

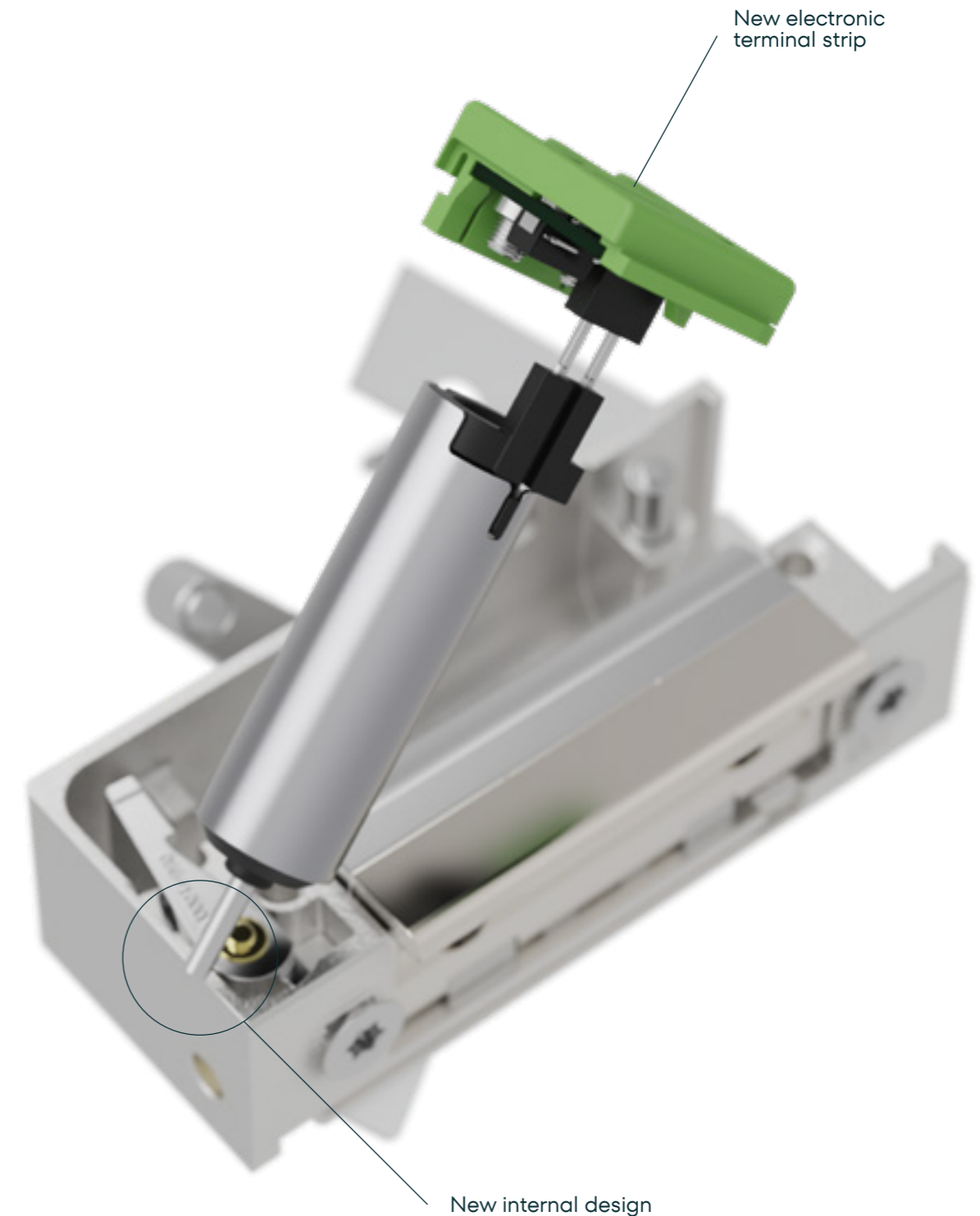
Our technical department can adjust the strikes side load on request to adapt to the needs of our clients and the market.

Electric strikes

10N in DC
Between 10N and 250N in AC

Electronic strikes

Up to 500N both in AC and DC



Featured solutions

FIRE AND SMOKE

Resistance at reach.

Fire door certified strikes require complex solutions to make sure people are protected and fire does not spread through the building.

Each strike is associated with a door typology and a fire resistance which can vary from 15 to 120 minutes. Their tests are performed in a specialized approved certifying facility.

To correctly determine that an electric or electronic strike complies with the fireproof norm, it is important to have the certificate of conformity, the CPR code and to perform yearly updates.



WEATHERPROOF IP68

Solution for exterior installations.

If our strikes have to be exposed to the elements, we offer an IP68 degree protection for the electronic components. The highest in our industry.

Our strikes are protected from any particles as they are able to withstand full liquid submersion without any filtration.

Our strikes undergo corrosion and cloud chamber tests to verify that they conform with the weatherproof requirements.





SERIES 2

THE ORIGINAL



Since 1989

Our first asymmetrical locks.

An historical series that we can not forget as it meant the beginning of OPENERS.



Model Series 2

We started the manufacturing of this emblematic strike 33 years ago and it is a classic of the replacement sector due to its features.

As it is an asymmetric model, it is important to consider the opening direction of the door and to choose the correct DIN 107.

To automate the opening of mechanical locks, there is also a version available for surface mounted installations.

They are built with a cavity to accommodate the bolt of either 90 mm or 120 mm.

Fail-secure/ Fail-safe

3.500N

Basic Embedded



2L/2R

Basic Surface mounted



S2L/S2R



Shaped coil

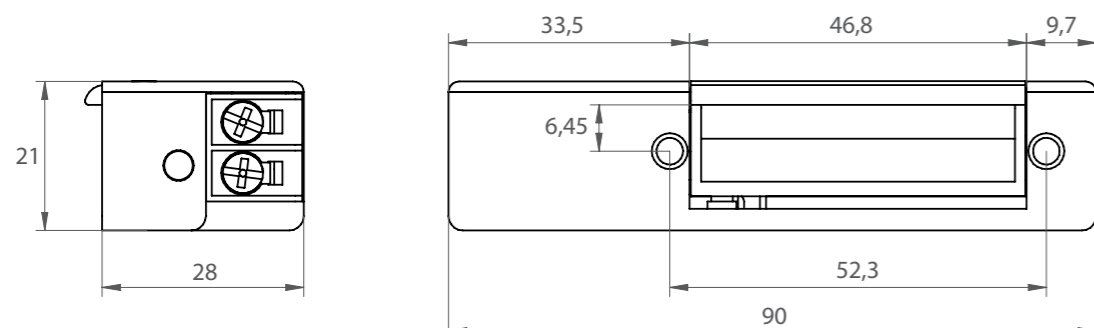
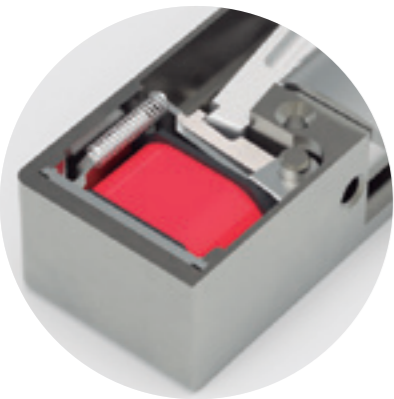
We fasten the coil without screws. Our T shape design protects the coil from vibrations or movements inside the housing.

Positive or negative?

The connection has no polarity. This makes the installation of our electric strike safe and easy. You just connect it to the proper voltage and you are ready to go.

Bigger terminal block

The external curved design of the terminal block has been designed to avoid short circuits with the housing. The internal cables are protected and correctly positioned to avoid any damage.



Models

2L/R S2L/S2R(functions 0,4,A)

Functions

0	1	2	3	4	A	B
Fail-secure	Fail-secure with mechanical unlocking	Fail-secure hold-open	Fail-secure hold-open with mechanical unlocking	Fail-safe	Fail-secure internal hold-open with mechanical unlocking	Fail-secure internal hold-open

Coils

	B	E	F
Electrical information	6 -14V AC/DC	12 V DC	24V DC
Continuous duty AC	<1 min	-	-
Continuous duty DC	<1 min	ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	-	-	-
Rated resistance	8 Ω	60 Ω	220 Ω
Current consumption AC (start)	0,53 A .. 6V 1 A12V 1,24 A ... 14V	-	-
Current consumption AC (maintenance)	-	-	-
Current consumption DC (start)	-	-	-
Current consumption DC (maintenance)	0,75 A .. 6V 1,5 A 12V 1,75 A ... 14V	0,2 A 12V	0,11 A 24V
Maximum side-load on AC	12V - 120 N	-	-
Maximum side-load on DC (stabilized)	12V - 10 N	10 N	10 N



Keepers

	0	1
Keeper's depth	8,25 mm	7,75 mm
Keeper's adjustability	-	3 mm

Cover

	0	Boxes S2	B09K	B10K	B11K	B12K	B81Z	B84Z
Types of covers	Standard cover	DIN 107 Height	DIN R 90mm	DIN L 90mm	DIN R 120mm	DIN L 120mm	Reversible 104,5mm	Reversible 145mm



SERIES 3 EVOLUTION!



The first symmetric strike

The interior of the strike has been designed so that it can operate in any position.

It can be used for any door opening no matter on what side the hinges are.



Series 3 models

Smaller and more compact than the series 2 models that also incorporate new functionalities to adapt to more types of doors.

This model reduces storage cost by virtue of its symmetry and adds a more versatile coil with the electronic models.

New Dual 12/24V AC/DC model with a double wound solenoid allows you to configure your desired voltage via a pin selector.

Fail-secure/ Fail-safe

3.500N

Basic



3

Dual

12/24V AC/DC
AC < 1 min



3D

Electronic

10-30V AC/DC 100%

Side load:
12V 150N
24V 180N

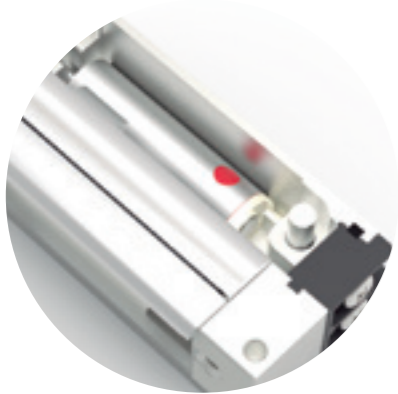


3E



More protection

Our aim is to guarantee a longer lifespan for your electric strike. Our DC 100% coils are equipped with an electronic protector to prevent any electric overvoltage.



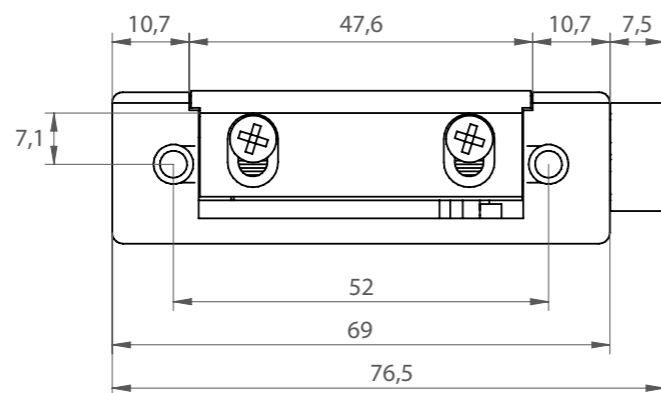
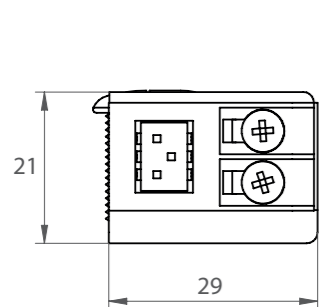
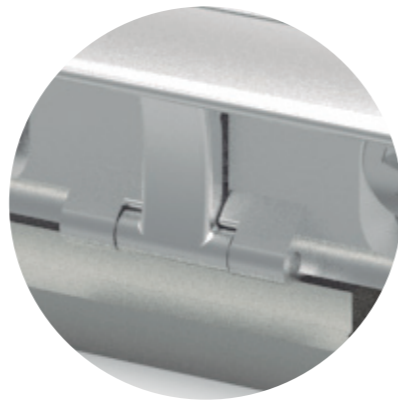
Reversible

Its reliability is assured by the innovative coil's positioning. The internal mechanism is more accurate and allows our product to work on any kind of door, whether it opens to the right or to the left.



Hold-open system

The goal was to unify the keeper with the automatic switch. When adjusting the keeper of the electric strike, this new hold-open system will move alongside it to avoid gaps and provide better contact with the door latch.



Models

3 3D 3E

Functions

0 1 2 3 4 A B

Fail-secure | Fail-secure with mechanical unlocking | Fail-secure hold-open | Fail-secure hold-open with mechanical unlocking | Fail-safe | Fail-secure internal hold-open with mechanical unlocking | Fail-secure internal hold-open

Coils

B E F W V

Electrical information	B	E	F	W	V
Electrical information	6 -14V AC/DC	12 V DC	24V DC	12/24V AC/DC	10-30V AC/DC
Continuous duty AC	<1 min	-	-	<1 min	ED 100%
Continuous duty DC	<1 min	ED 100%	ED 100%	ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	-	Yes	Yes	Yes	Yes
Rated resistance	8,5 Ω	50 Ω	185 Ω	12V - 35 Ω 24V - 140 Ω	8,5 Ω
Current consumption AC (start)	0,50 A ... 6V 1 A12V 1,16 A 14V	-	-	0,24 A ...12V 0,12 A24V	0,94 A ...10V 0,10 A.....12V 0,65 A 24V 0,47 A 30V
Current consumption AC (maintenance)	-	-	-	-	0,19 A ...10V 0,16 A.....12V 0,14 A 24V 0,07 A 30V
Current consumption DC (start)	-	-	-	-	0,87 A ...10V 1,05 A.....12V 0,59 A ... 24V 0,52 A ... 30V
Current consumption DC (maintenance)	0,71 A 6V 1,41 A 12V 1,65 A 14V	0,24 A ... 12V	0,13 A 24V	0,34 A ... 12V 0,17 A 24V	0,14 A ...10V 0,11 A.....12V 0,11 A 24V 0,05 A ... 30V
Maximum side-load on AC	12V - 120 N	-	-	12V - 10N 24V - 30N	12V - 150 N 24V - 180 N
Maximum side-load on DC (stabilized)	12V - 10 N	10 N	10 N	12V - 10 N 24V - 10N	12V - 150 N 24V - 180 N



Keepers

External Radian 0 External Radian 1

Keeper's depth	9 mm	5,4 mm
Keeper's adjustability	-	3 mm

Cover



Types of covers	Tapa Estándar
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SERIES 4 REINFORCED



Double security

Double microswitch functionality allows to detect the state of the door and the strike's status to find possible external manipulations.



Models Series 4

For heavier doors we have created reinforced strikes that increase the impact resistance up to 6500 N.

If a higher protection is required, the 4 support points of the latch increase its strength, and the two micro switches make it ideal for access control systems.

The 4F model is made of a special alloy that can withstand temperatures of up to 1.150°C for up to 60 minutes. It's the ideal model for fire doors.

Fail-secure/
Fail-safe

6.500N

Fire
Ei 60
8.000N

Basic



4L/4R

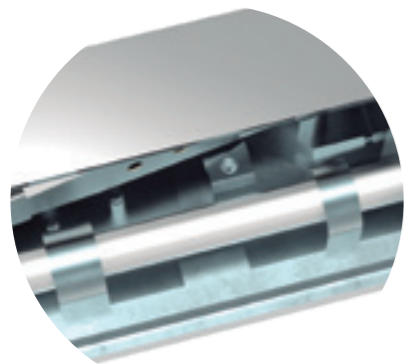


4FL/4FR



4 support points

We are the only manufacturer to add 4 support points to the keeper to distribute the strain, making ours the strongest electric strike of its category.



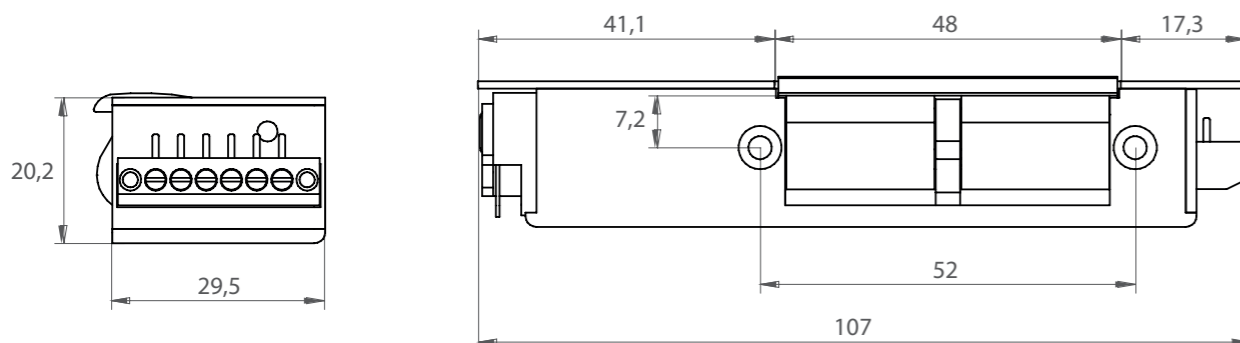
Low energy consumption

Series 4 strikes unlock the internal levers with a double inner coil that has the lowest power consumption on the market



2 Sensors

We added two microswitches inside the mechanism to provide information about the status of the door and the position of the internal levers. In this way we ensure that there is no possible external manipulation of the electric strike.



Models

4L/R 4FL/4FR 4A

Functions

0	1	2	3	4	6	7	8	9	A	B
Fail-secure	Fail-secure with mechanical unlocking	Fail-secure hold-open	Fail-secure hold-open with mechanical unlocking	Fail-safe	Fail-secure with monitoring	Fail-secure with double monitoring	Fail-safe with monitoring	Fail-safe with double monitoring	Fail-secure internal hold-open with mechanical unlocking	Fail-secure internal hold-open

Coils

	L	M	N	P
Electrical information	8 -14V AC/DC	12 V DC	24V DC	12V DC
Continuous duty AC	<1 min	-	-	-
Continuous duty DC	<1 min	ED 100%	ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	-	Yes	Yes	Yes
Rated resistance	20 Ω	70 Ω	240 Ω	54 Ω
Current consumption AC (start)	0,28 A ...8V 0,42 A ...12V 0,49 A ...14V	-	-	-
Current consumption AC (maintenance)	-	-	-	-
Current consumption DC (start)	-	-	-	-
Current consumption DC (maintenance)	0,40 A ... 8V 0,60A ... 12V 0,70 A ... 14V	0,17 A 12V	0,10 A 24V	0,22 A ... 12V
Maximum side-load on AC	12V - 120 N	-	-	-
Maximum side-load on DC (stabilized)	12V - 10 N	10 N	10 N	10 N



Keepers

	4	6
Keeper's depth	9,50 mm	R20 mm
Keeper's	-	-

Cover

	0	Surface boxes	
Types of covers	Standard cover	Box for anti-panic bars (keeper 6)	Reversible 170x35x37
			Reversible 170x35x37

Surface boxes





SERIES 5 MINI



Narrow profiles

A compact electric strike that is only 16 mm wide. Ideal to install in doors with narrow wood, aluminium or PVC frames.



Models Series 5

These models are favourite for their small size and installation versatility.

Our designers have renewed the latch to improve its adjustment to 3 mm, and have created a model with IP68 waterproof protection of its electronic components.

The functionality of both the automatic and monitored systems has been reimagined to provide better contact and make its size as small as possible.

Fail-secure/
Fail-safe

4.500N

Fire
Ei 90
8.000N

Waterproof
IP68
4.500N

Basic



5



5F



5W

Universal

9-24V y 22-28 AC/DC
AC < 1 min

Side load:
200N en AC
50N en DC



5U



5UF



5UW

Electronic

6-28V AC/DC 100%

Side load:
500N a 12-28V AC/DC



5E



5EF



5EW



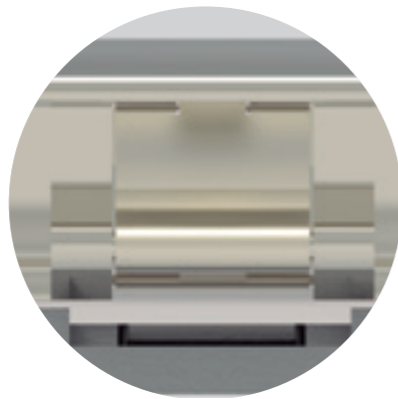
Internal radian

The new radial system allows the keeper to rotate on its own axis. When the rotation is performed inside the mechanism of the box, the installation of the strike becomes easier, less time consuming and the mechanism is more aesthetically pleasing.



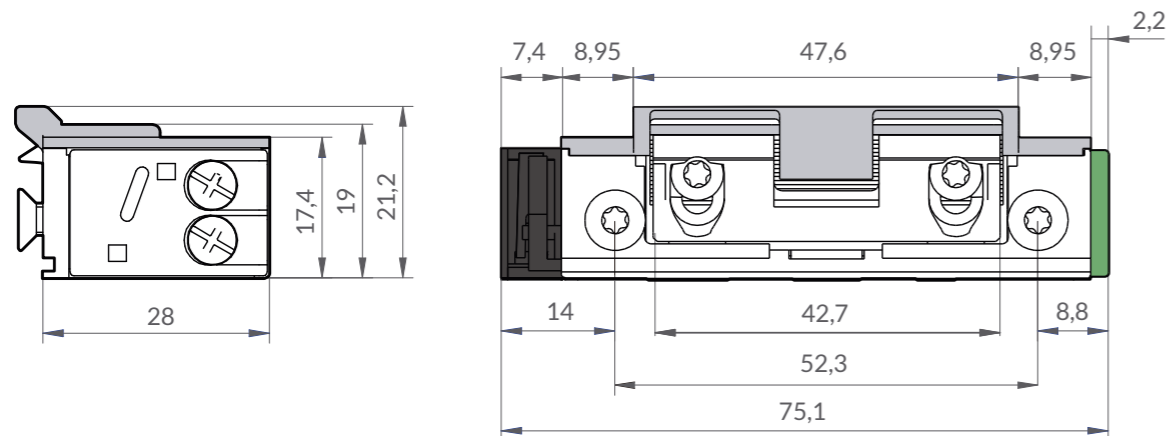
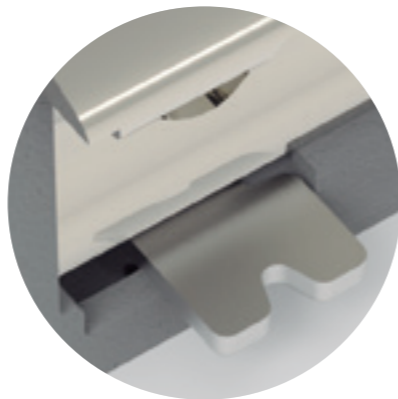
Hold-open system

Designers and engineers at O&C took the challenge to create a hold-open system that would be durable and also able to adapt to all kinds of door latches. The new hold open system is more reliable, simple and effective.



Unlocking lever

Our passion for every little detail made us enhance the traditional mechanical unlocking system of an electric strike. Now it's much more precise and durable.



Models

5 5F 5W 5U 5UF 5UW 5E 5EF 5EW

Functions

0 1 2 3 4 6 8

Fail-secure | Fail-secure with mechanical unlocking | Fail-secure hold-open | Fail-secure hold-open with mechanical unlocking | Fail-safe | Fail-secure with monitoring | Fail-safe with monitoring

Coils

	B	T (Timer)	X	Y	Z
Electrical information	6 -14V AC/DC	12 V DC	9-24V AC/DC	22-28V AC/DC	6-28V AC/DC
Continuous duty AC	<1 min	-	<1 min	<1 min	ED 100%
Continuous duty DC	<1 min	<1 min	12V ED 100%	24V ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	Yes	Yes	Yes	Yes	Yes
Rated resistance	8,5 Ω	42 Ω	43 Ω	200 Ω	8,5 Ω
Current consumption AC (start)	0,50 A . 6V 1 A12V 1,16 A 14V	-	0,15 A ... 9V 0,20 A12V 0,39 A .. 24V	0,08 A . 22V 0,08 A....24V 0,10 A ... 28V	0,22 A ...6V 0,36 A....12V 0,31 A 24V 0,29 A 28V
Current consumption AC (maintenance)	-	-	-	-	0,18 A6V 0,03 A....12V 0,02 A 24V 0,01 A 28V
Current consumption DC (start)	-	0,60 A . 12V	-	-	0,26 A ...6V 0,38 A....12V 0,34 A 24V 0,34 A 28V
Current consumption DC (maintenance)	0,71 A ... 6V 1,41 A 12V 1,65 A 14V	0,30 A . 12V	0,21 A ... 9V 0,28 A .. 12V 0,56 A .. 24V	0,11 A 22V 0,12 A ... 24V 0,14 A ... 28V	0,20 A ...6V 0,04 A....12V 0,02 A 24V 0,01 A 28V
Maximum side-load on AC	12V - 120 N	-	24V - 200N	28V - 200 N	12-28V - 500 N
Maximum side-load on DC (stabilized)	12V - 10 N	10 N	12V - 50 N	24V - 50 N	12-28V - 500 N

Keepers

	1	2	0	1	2
Keeper's depth	6 mm	6 mm	8 mm	6 mm	6 mm
Keeper's adjustability	2 mm	2 mm	-	2 mm	2 mm

Cover

	0	1	1
Types of covers	Standard cover	Cover with latch guide	Cover with latch guide



OPENERS & CLOSERS - FEBRUARY 2022

SERIES 8

SMALL AND INCREDIBLE



Double connection

This model incorporates double connection on both sides of the strike while maintaining 100% symmetry.



Models Series 8

An unique strike that can be symmetric in all of its functions and offers the advantage of being able to be connected to either side.

This range of super reinforced strikes are among the preferred for fire doors as they offer the highest possible fire resistance.

Certified to hold and insulate a fire for 120 minutes with a resistance of 12.000 N.

It can include two microswitches to detect both the status of the door and the mechanism without affecting its symmetry.

The secret is inside!

Fire
Ei 120
12.000N

Electronic

10-30V AC/DC 100%

Side load:
600N en 10-30V AC/DC



8EF



Electrical current

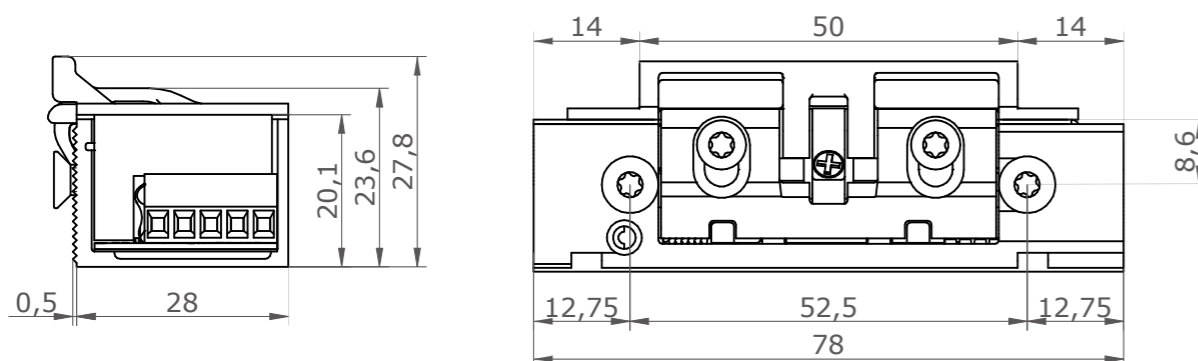
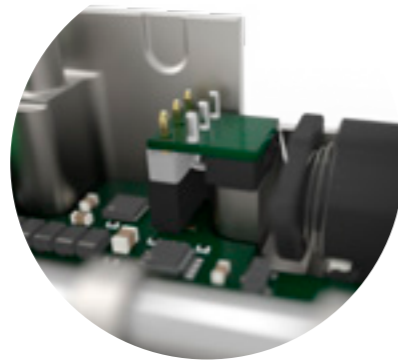
A smart placement of the electronic components at the base of the electric strike allows to connect the power supply on both sides without affecting the symmetry.

Internal micro

We are the only ones to place the microswitches inside so as not to affect the symmetry of the electronic strike.

Monitoring and hold-open

The only mechanism on the market that can be adapted to 3 mm of latch displacement by means of a threadable supplement without affecting its functionality.



Models

8EF



Functions

0	1	2	3	4	6	7	8	M	N
Fail-secure	Fail-secure with mechanical unlocking	Fail-secure hold-open	Fail-secure hold-open with mechanical unlocking	Fail-safe	Fail-secure with monitoring	Fail-secure with double monitoring	Fail-safe with monitoring	Fail-secure hold-open with monitoring	Fail-secure hold-open with mechanical

Coils



Electrical information	10-30V AC/DC
Continuous duty AC	ED 100%
Continuous duty DC	ED 100%
Transient Voltage Suppressor (TVS)	Yes
Rated resistance	7,8 Ω
Current consumption AC (start)	0,44 A ...10V 0,53 A...12V 0,30 A ... 24V 0,26 A ... 30V
Current consumption AC (maintenance)	0,13 A ...10V 0,10 A...12V 0,07 A ... 24V 0,05 A ... 30V
Current consumption DC (start)	0,47 A ...10V 0,52 A...12V 0,33 A ... 24V 0,24 A ... 30V
Current consumption DC (maintenance)	0,12 A ...10V 0,09 A...12V 0,04 A ... 24V 0,03 A ... 30V
Maximum side-load on AC	10-30V - 600 N
Maximum side-load on DC (stabilized)	10-30V - 600 N



Keepers

	0	1	2
Keeper's depth	9 mm	6,5 mm	6,5 mm
Keeper's adjustability	-	3 mm	3 mm

Cover

	0	1
Types of covers	Standard cover	Cover with latch guide



SERIES 9 ARMOURED



Curved design

The mechanism box is curved for easy access to the multipoint locks.

The separation between the strike and the first bolt is only 5 mm.



Models Series 9

A strike designed to be integrated in multipoint lock doors and provide easy automatic access.

A resistant and asymmetrical mechanism with a curved box end so it can fit multipoint locks.

These models are used with Italian security locks and the latch's dimensions have been reduced for better adaptability.

Fail-secure/
Fail-safe

4.000N

Basic

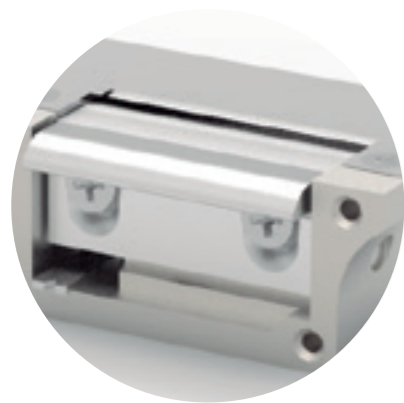


9L/9R



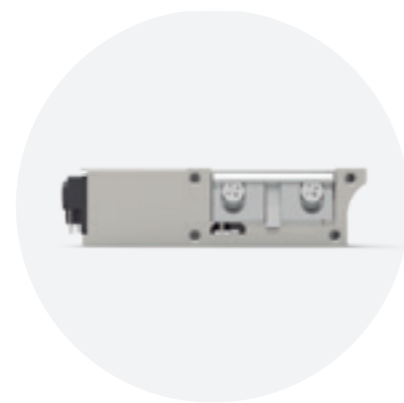
Small keeper

The latch's size has been reduced to make it more adaptable and to gain more resistance.



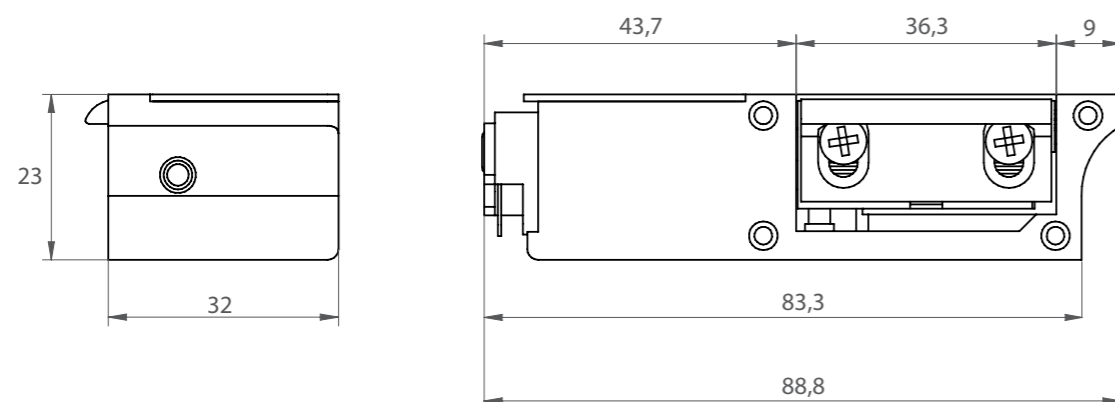
Hold-open system

The hold open system has been incorporated in the strikes exterior to offer new functionalities.



Multipoint

The end of the box is curved so the separation between the lock and the first bolt is only 5 mm.



Models

9L/9R

Functions

0	1	2	3	4	A	B
Fail-secure	Fail-secure with mechanical unlocking	Fail-secure hold-open	Fail-secure hold-open with mechanical unlocking	Fail-safe	Fail-secure internal hold-open with mechanical unlocking	Fail-secure internal hold-open

Coils

	L	M	N
Electrical information	8-14 V AC/DC	12V DC	24V DC
Continuous duty AC	< 1 min	-	-
Continuous duty DC	< 1 min	ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	-	Yes	Yes
Rated resistance	20 Ω	70 Ω	240 Ω
Current consumption AC (start)	0,28 A .. 8V 0,42 A ...12V 0,49 A .. 14V	-	-
Current consumption AC (maintenance)	-	-	-
Current consumption DC (start)	-	-	-
Current consumption DC (maintenance)	0,40 A .. 8V 0,60 A .. 12V 0,70 A .. 14V	0,17 A ... 12V	0,10 A ... 24V
Maximum side-load on AC	12V - 120 N	-	-
Maximum side-load on DC (stabilized)	12V - 10 N	12V - 10 N	24V - 10 N



External Radial

Keepers

Keeper's depth	9,3 mm
Keeper's adjustability	4 mm

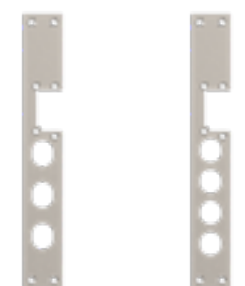


Cover

Types of covers	Standard cover
-----------------	----------------

Faceplates

	L60X	L70X
Special faceplates for 3 and 4 bolt multipoint locks	Reversible 247x35x3	Reversible 247x35x3





Faceplates for the door frame



What is a faceplate?

Faceplates allow the electric or electronic strike to be attached to the door frame.

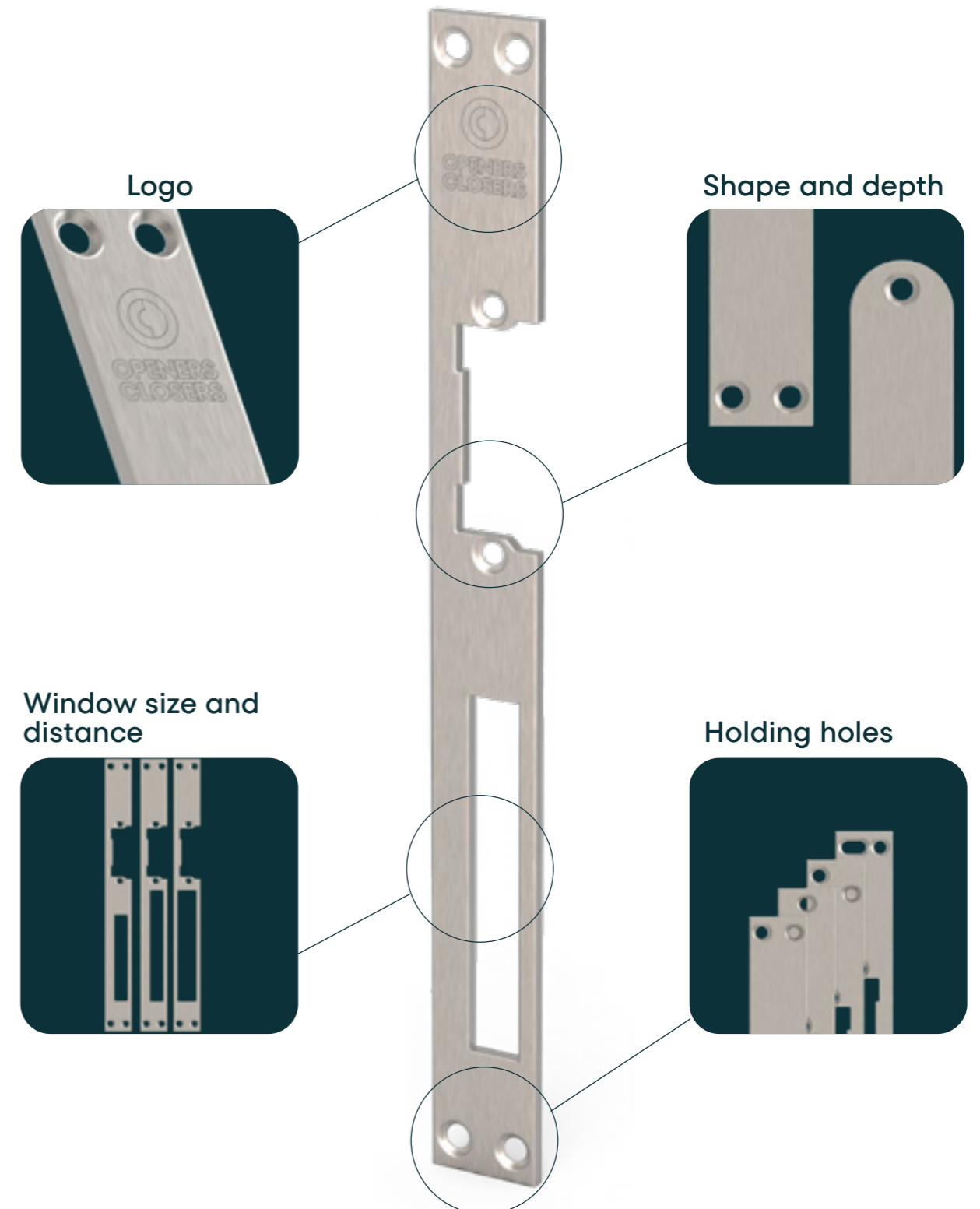
To protect electric or electronic strikes and allow a smooth sliding of the latch.

Some models are manufactured to prevent the electromechanical locks, which are installed on the door leaf, from spoiling the frame while opening and closing it.

The faceplates can vary not only in their shape and depth, but also adapt its window to round, square or any other shape of bolt.

The holding holes can be manufactured with all types of shapes, and are usually countersunk to prevent the screws from standing out.

We'll help you choose the one that suits your needs!





Types of faceplates

We can distinguish between two length, short and long faceplates, there are also special shapes such as angled or "U" shaped.

Using laser cutting we can create any shape needed and add your logo.

If we don't have it, we'll make it for you!

Short

Designed for doors that do not require bolt locking.

Fire door faceplates are also available



Long

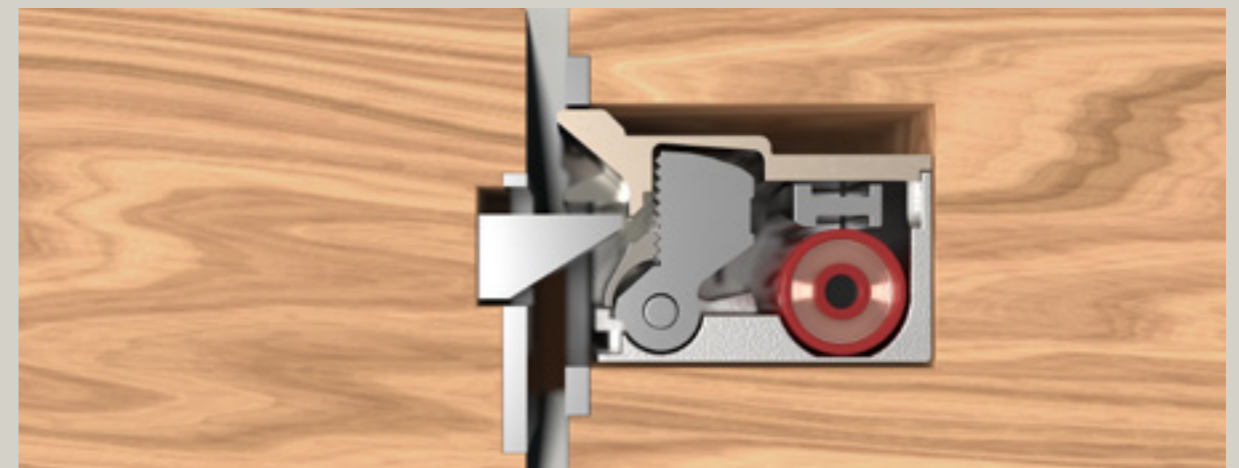
Designed for doors that require bolt locking.

The shapes are adapted to electromechanical locks.



IMPORTANT

To avoid having to damage the door frame during the installation of an electric or electronic strike, we recommend choosing a cover with a latch guide.



Standar
depth
3 mm

110 mm

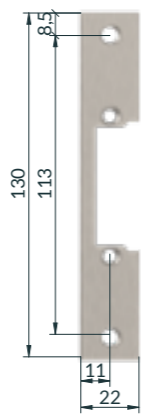
130 mm

160 mm

22 mm

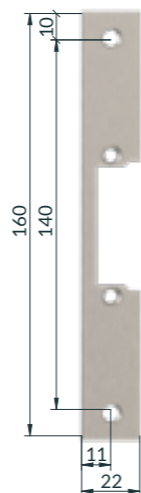


Rev.
S03X



Rev.
S04X

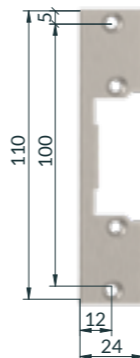
Rev.
S05X



Rev.
S06X

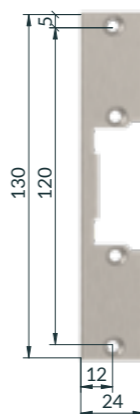
Rev.
S07X

24 mm



Rev.
S08X

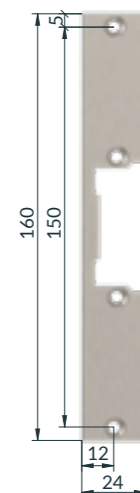
130 mm



Rev.
S09X

Rev.
S10X

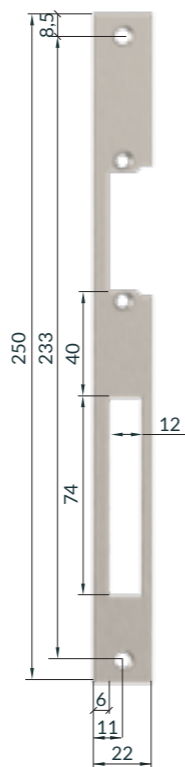
160 mm



Rev.
S11X

Rev.
S12X

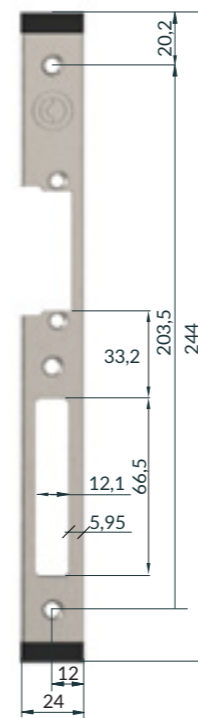
250 mm



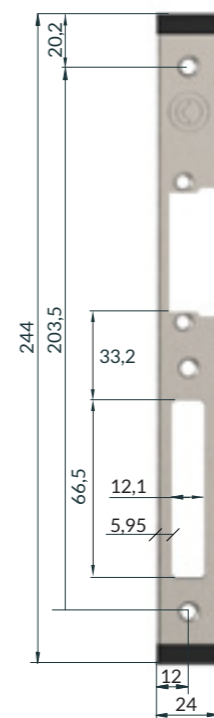
Rev.
L29X

Rev.
L30X

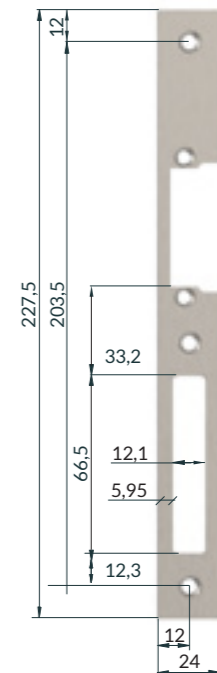
227,5 and 244 mm



DIN R
L22X Thick
6 mm



DIN L
L23X Thick
6 mm



Rev.
L26X

Rev.
L27X

110 mm

130 mm

160 mm

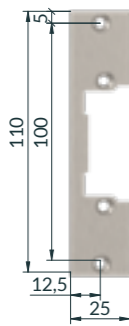
110 mm

130 mm

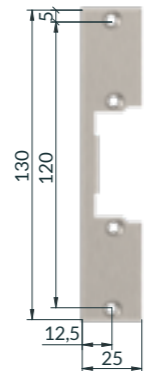
160 mm

25 mm OPEN

25 mm CLOSED Series 5

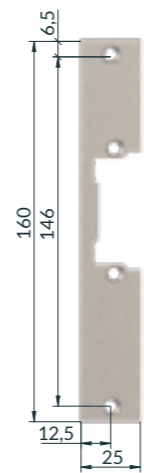


Rev. S13X



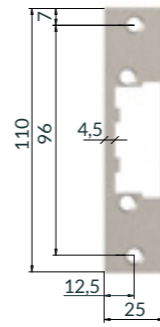
Rev. S14X

Rev. S15X



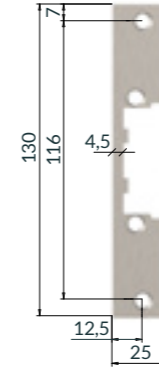
Rev. S16X

Rev. S17X



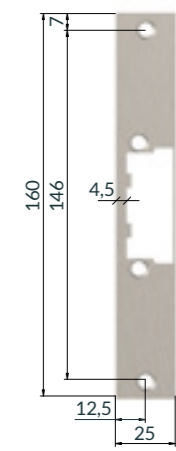
Rev. S18X

Rev. S19X



Rev. S20X

Rev. S21X

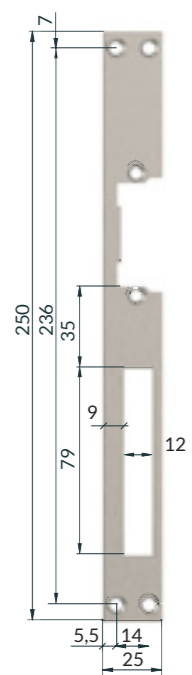


Rev. S22X

Rev. S23X

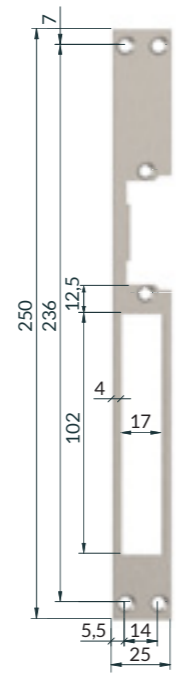
250 mm

250 mm



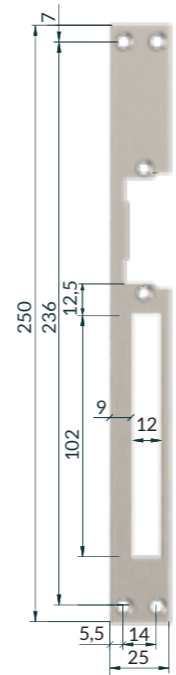
Rev. L03X

Rev. L06X



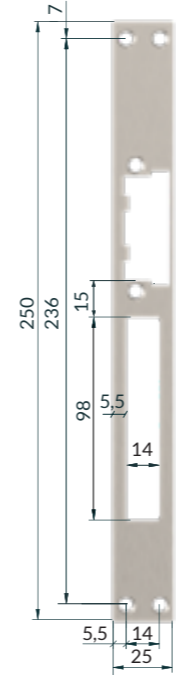
Rev. L04X

Rev. L08X



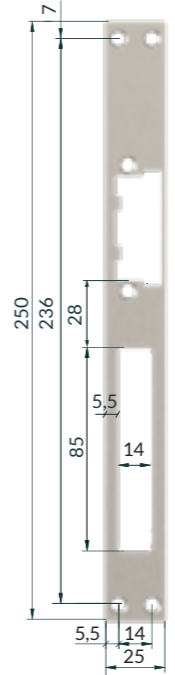
Rev. L05X

Rev. L10X



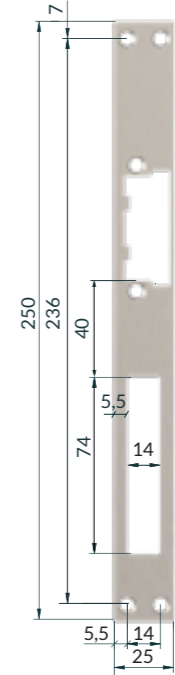
Rev. F20X

Rev. F21X



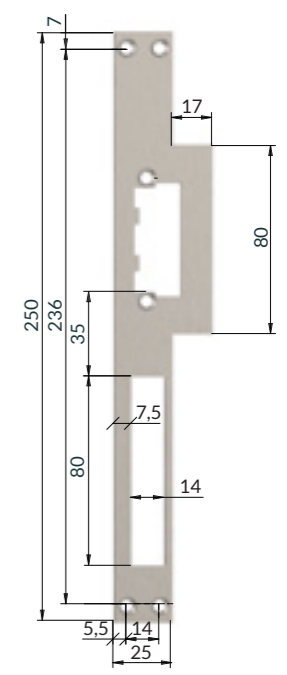
Rev. F22X

Rev. F23X



Rev. F24X

Rev. F25X

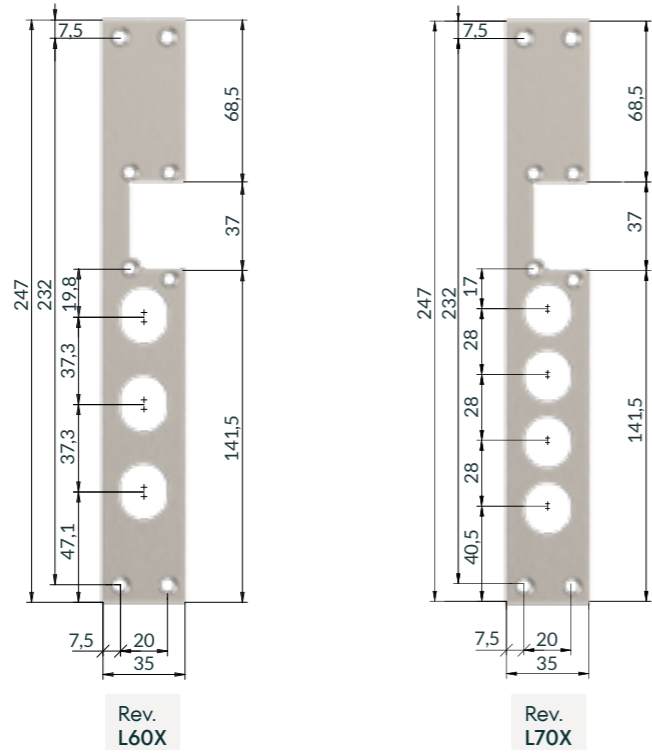


Rev. L38X

Rev. L39X

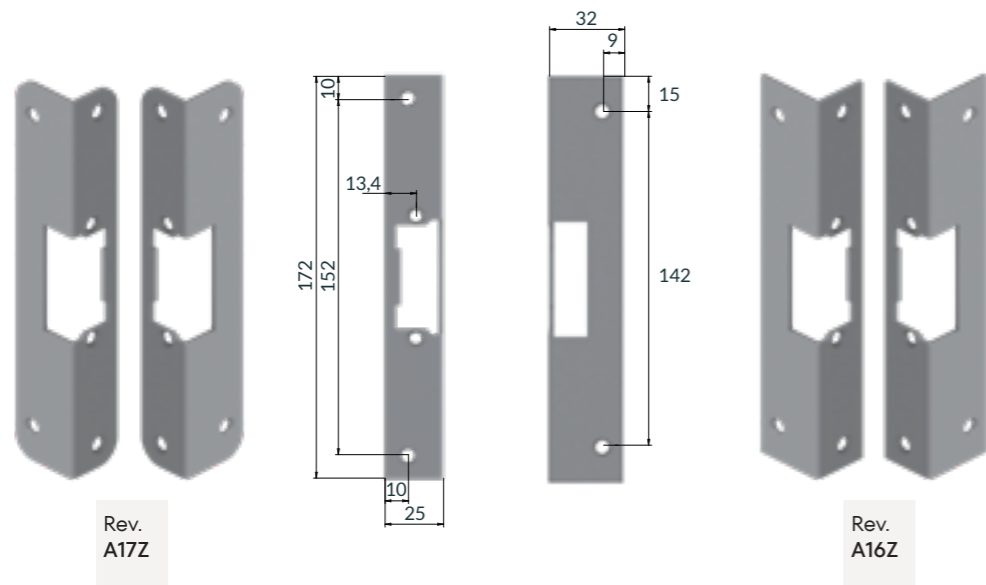
Special Series 9

247 mm



Angled

172 mm

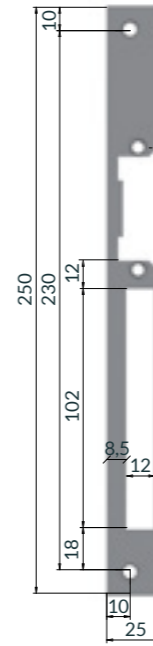


250 mm

DIN R A12Z



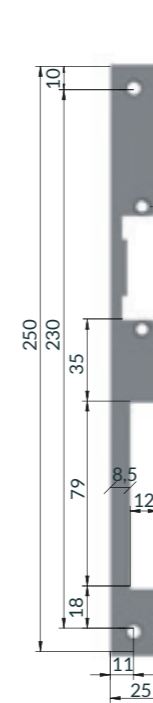
DIN L A13Z



DIN R A08Z



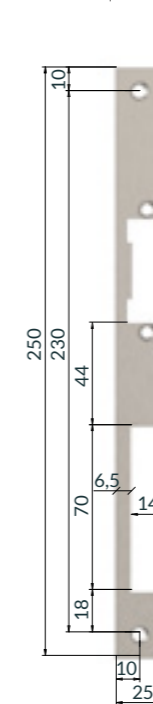
DIN L A09Z



DIN R A14Z



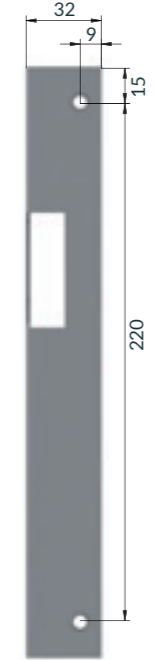
DIN L A15Z



DIN R A49X



DIN L A50X



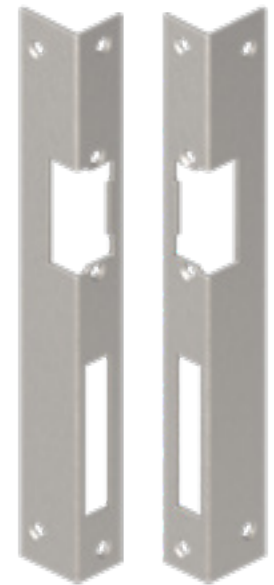
DIN R A10Z



DIN L A11Z



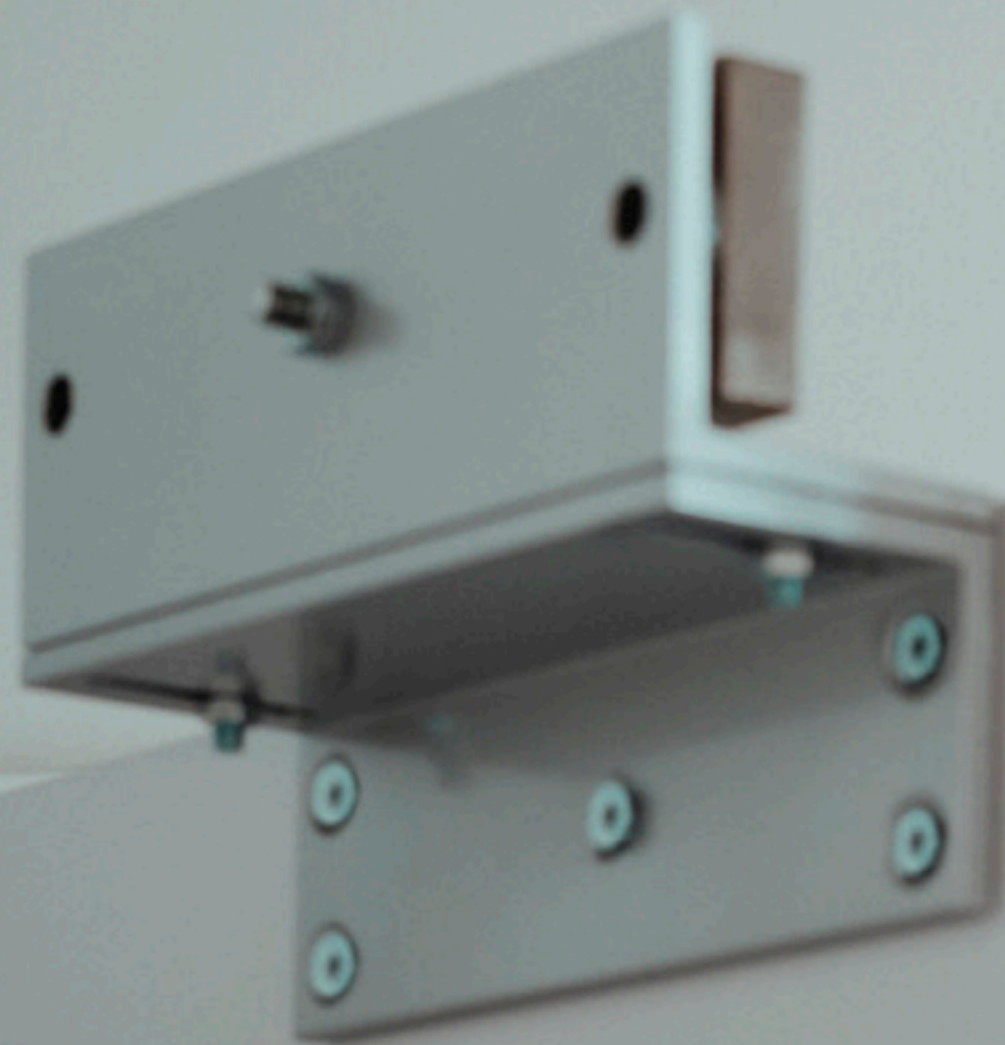
DIN R A51X



DIN L A52X



Electromagnetic locks



What is an electromagnetic lock?

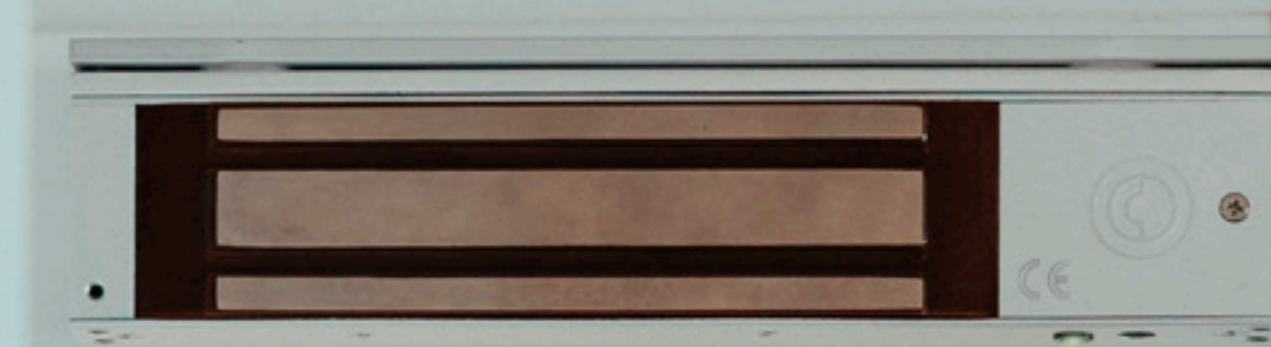
An electromagnetic lock is an electromagnet installed in the door frame and a counter plate fixed to the door leaf. Once activated, the electromagnet holds firmly the counter plate and the door remains closed.

These devices are typically installed in entrances or fire doors to keep safe passage even in case of a power outage. Moreover, in order for them to lock the door they must be connected to the power grid.

Installation is easy. It's important to know the direction of the door opening in order to choose the right mounting brackets.

Each door's typology is equipped with some accessories to hold and line up the electromagnet and the counter plate perfectly.

Electromagnetic locks can casually be called maglocks or electromagnets. They are affordable, low maintenance and durable products.



Components of an electromagnetic lock

An electromagnetic lock is made up of two main elements, an electromagnet and its counter plate. The electromagnet contains a powerful coil which, when receives energy, creates an electromagnetic field that holds the counter plate with high power.

Coil

Its power generates an electromagnetic field that locks the counter plate and keeps the door closed. Once the power is turned off, it unlocks instantly.

Electronic components

For an optimal performance, we added a PCB with cutting edge electronics ensuring an instant response without magnetic remanence and sensors for better management of the access control system.

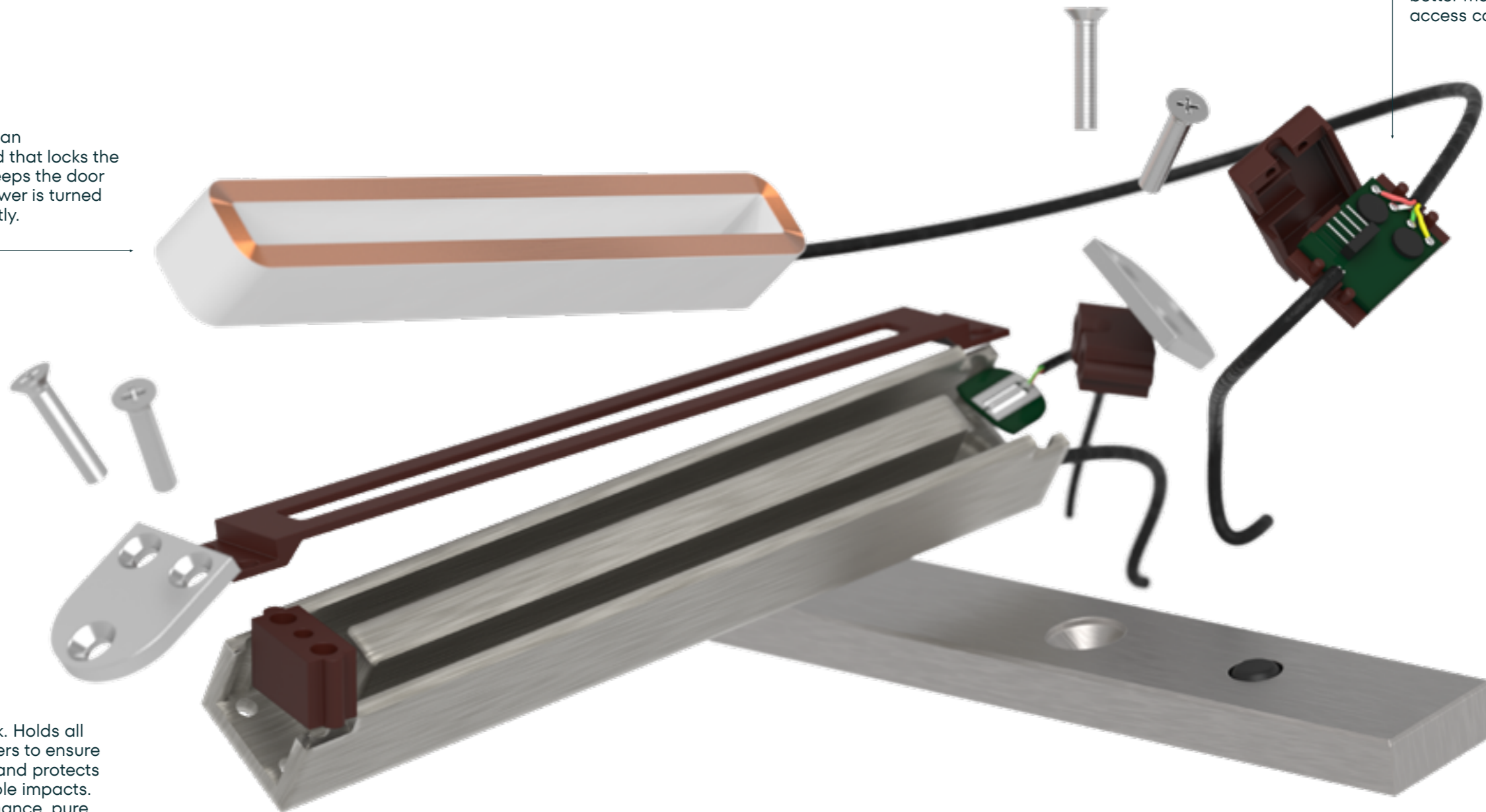
Body

The structure of the electromagnetic lock. Holds all the elements together to ensure a correct operation and protects them from undesirable impacts. For a proper performance, pure iron (99,5%) is used which is low in carbon, sulphur and phosphorus.

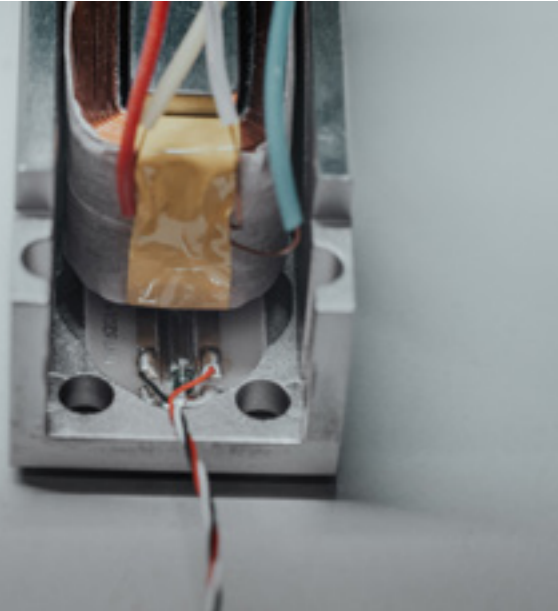
Because it has almost no impurities, it provides an excellent performance with magnetism.

Counterplate

Made of ferromagnetic material, it must be correctly aligned with the electromagnet to achieve the maximum holding force. It is certainly a key factor for the correct functioning of the electromagnetic lock. In the event of residual magnetism it also includes a small ejector that helps unlock the electromagnet.



An electromagnetic locks' 3 main characteristics



Monitoring systems

There is a monitoring system which allows to know the electromagnet's status (locked or unlocked) and transfers this information to an access control ensuring mayor safety.

To know the door's status (open or closed), a series CM magnetic contact must be added.

Time delay systems

In some situations it is essential for the electromagnet to be activated with a time delay.

One of the most common cases are sliding doors, that allow the electromagnetic lock to be activated just as the door is aligned with the counter plate.

It is also used with coded keypads or electronic readers that are separated from the access door, since the electromagnet must be timed to keep the door open long enough for the user to pass through the gate.

LED display systems

To see the status of the electromagnet (locked or unlocked) quickly, a two colour LED is incorporated. This way you can visually check whether the electromagnet is performing correctly or it should be repositioned.



What types of electromagnets exist?

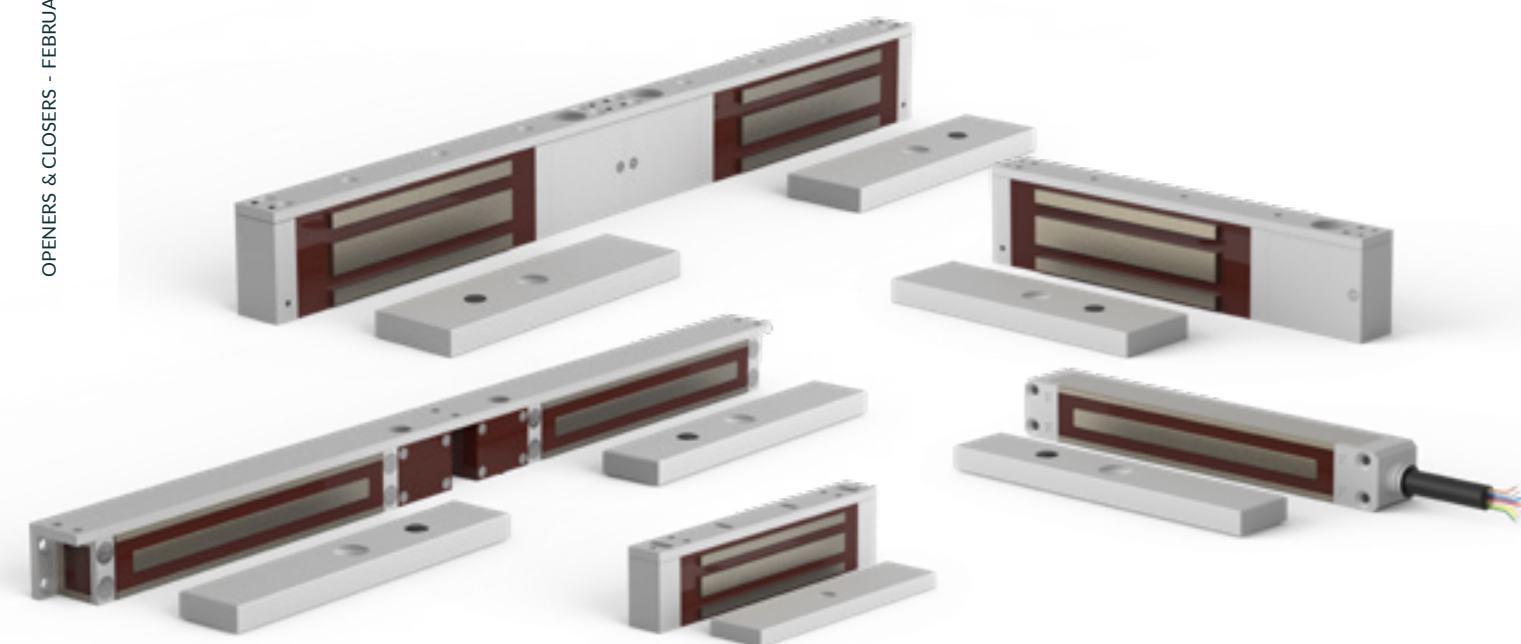
There are 3 main categories that cover most of the applications. Each one of them has its own characteristics and can be adapted to a wide range of uses.

Electromagnetic locks

They are the most widespread in the market and offer the greatest variety of options. The quality of electromagnetic locks lies in their material, magnetic remanence, connectivity and optional sensors, but above all, in their low operating consumption.

There are electromagnets with a holding force that varies from 500 N to more than 5.000 N depending on their size, whether they're used for office drawers or heavy doors. Most of them are designed to be surface mounted but there're also embedding models that are more discreet.

For special installations weatherproof and fireproof models are available.



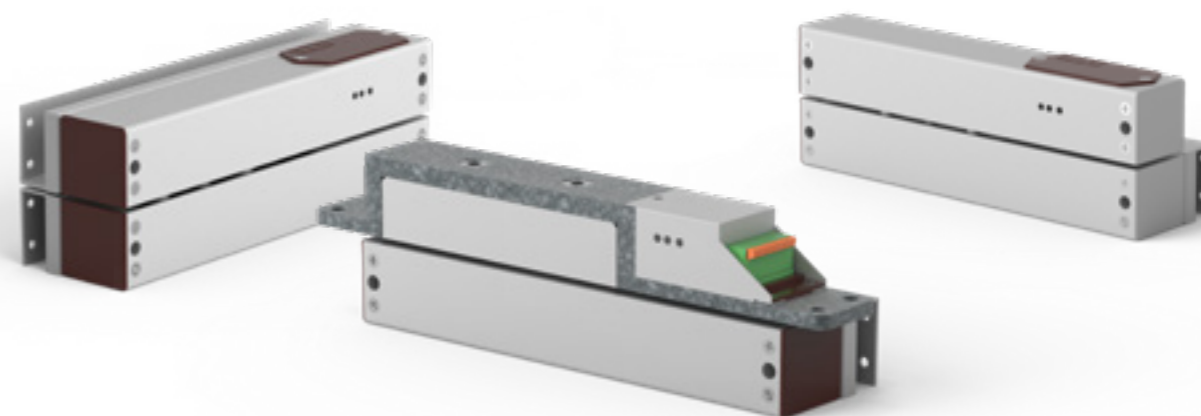
Shearlocks

They are a variation of electromagnetic lock with additional pins that increase the closing force (maximum pressure) up to 15.000 N. When the sensor detects the correct alignment of the door, the shear lock is instantly activated to block it.

Its shear-like operation is unlike standard electromagnetic locks and in a lot of cases it's used for better aesthetics as it can be installed in metal, timber, or glass frames.

They can also be used as an access control system due to all the solutions that can be incorporated to monitor the situation at all times.

We have models available for surface mounted installations, embedded installations or a combination of the two.



Magnetic door holders

Electromagnets for door retention are a fast and economic solution to segment different areas of a building in case of fire or emergency.

The purpose of this magnetic lock is to hold the door open until a signal to release the electromagnet is received and allow the door to close. This signal can be made manually by pressing the button on the door holder itself or through a central alarm system.

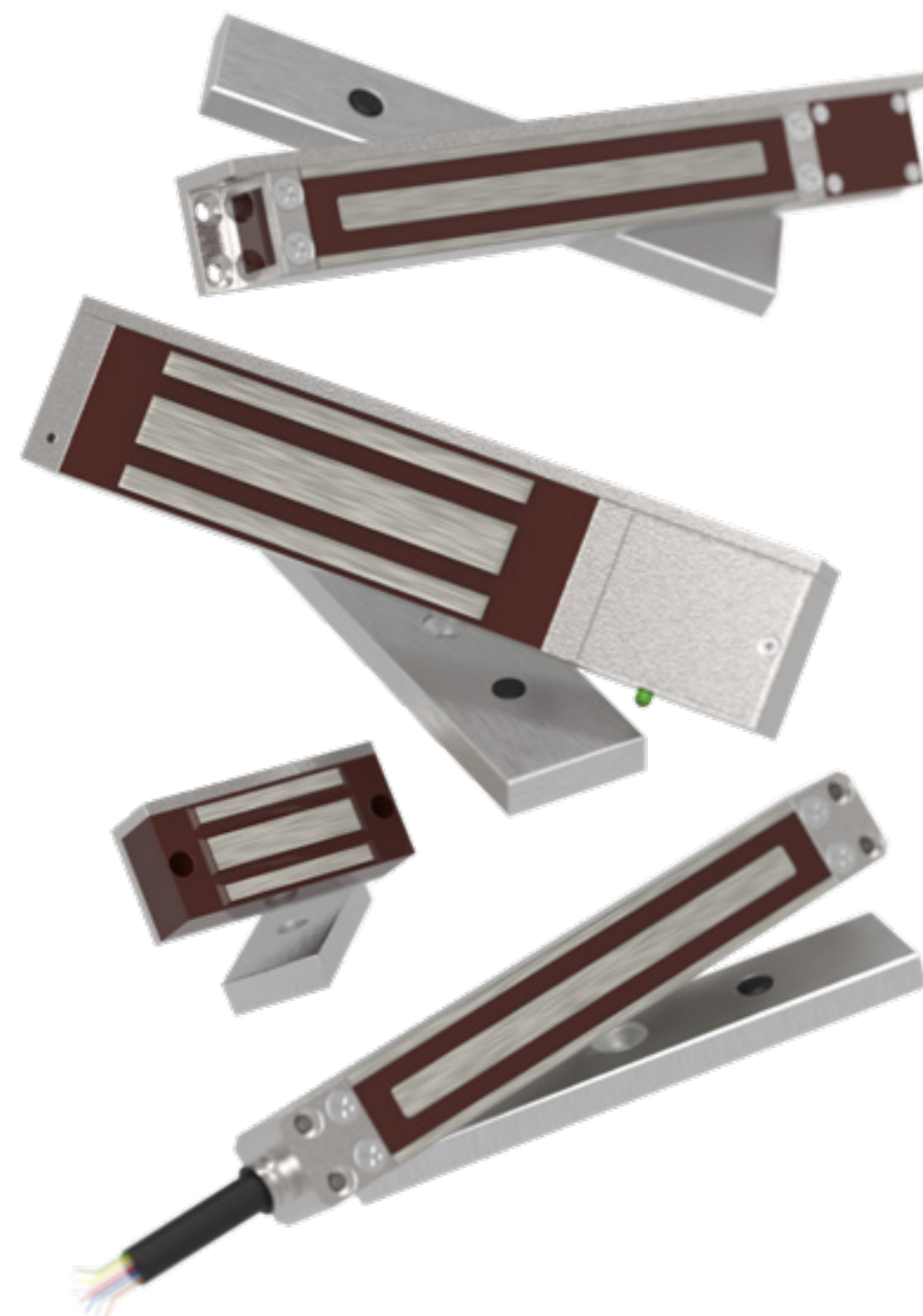
They require a CPR fire certificate to be installed.





SERIES M

ELECTROMAGNETIC LOCKS



Total attraction

The solenoid generates a high-power electromagnetic field to lock the door.

Holding forces vary from 500 N to more than 5.000 N

Series M models

In OPENERS & CLOSERS characteristic brown, the Series M has anti-vandalism protection.

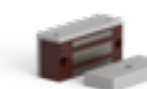
Our narrow european models have a more aesthetically pleasing installation and can be used with the new "E" complement.

Ecomax models are characterized by the lowest power consumption in the market with only 3W.

ME
Narrow profile 30mm
Surface mounted Embedded

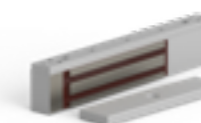
MEX
ECOMAX
Surface mounted 

50 daN
130 lbf
Holding force



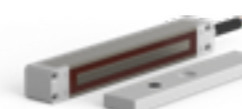
MEX50S
37x80x25

150 daN
330 lbf
Holding force

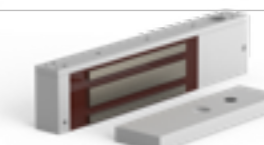


MEX150S
35x165,8x21 without attribute
40x223,8x22

280 daN
600 lbf
Holding force

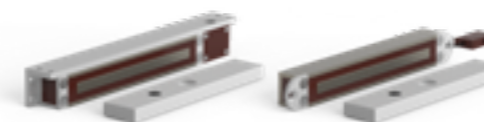


ME280S  IP65
30x228x31



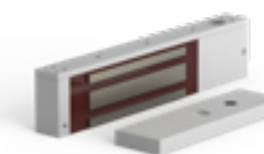
MEX280S
47x208x27,5 without attribute
47x241x27,5

300 daN
700 lbf
Holding force



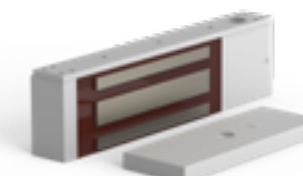
ME300S **ME300E**
35x265x31 30x202x26

350 daN
800 lbf
Holding force



MEX350S
47x238x24 without attribute
47x271x27,5

500 daN
1.200 lbf
Holding force



MEX500S
65x231x37 without attribute
65x264x37



ME model

The narrow european model is the most exclusive and slim solution on the market with a width of only 30 mm.

A strong and conductive ferromagnetic lock is achieved through a machined steel block that has been treated with a special bath.

The high quality of the materials makes it possible to detect even the slightest tampering, it detects obstacles as narrow as a sheet of paper while keeping a reliable operation.



MEX Model

Electromagnetic locks usually operate between 5 and 6 W of power, but Ecomax models stand out for offering the same holding force with only 3 W of power.

They are energy efficient electromagnets that help you to save on installation costs and reduce consumption in buildings.

Environmentally friendly electromagnetic locks that incorporate as well an automatic 12- 24V DC voltage changeover for faster and easier installation.

Models, Holding force and Functions

MEX	50 daN	150 daN	280 daN	350 daN	500 daN
Surface mounted installation	MEX50S	MEX150S MEX152S (x2)	MEX280S MEX282S (x2)	MEX350S MEX352S (x2)	MEX500S MEX502S (x2)

ME

	280 daN	300 daN
Surface mounted	ME280S	ME300S ME302S (x2)
Embedded installation		ME300E

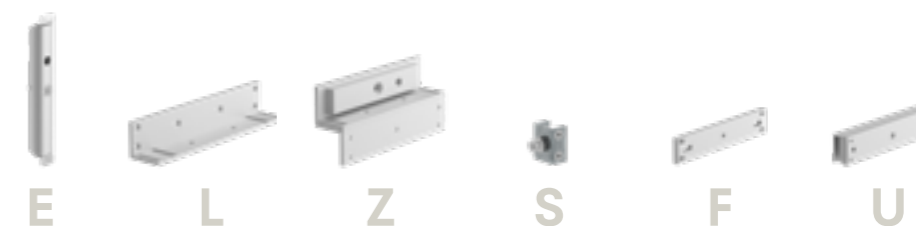
Coils

	E	V	W
Electrical information	12V DC	12-24V DC	12/24V DC
Continuous duty DC	ED 100%	ED 100%	ED 100%
Transient Voltage Suppressor (TVS)	-	Yes	Yes No (MEX50)
Rated resistance	45 Ω	45 Ω	24/96 Ω 100/400 Ω (MEX50)
Current consumption AC (start)	-	-	-
Current consumption AC (maintenance)	0,27 A .. 12V	0,27 A .. 12V 0,18 A ... 24V	0,12 A ... 12V (MEX50) 0,06 A . 24V (MEX50) 0,5 A 12V 0,25 A .. 24V

Attribute

	0	1	2	3	4
Electromagnet attribute	Without attribute	Door's state	Door's state LED	Door's state LED Time delay	Door's state Time delay

Complement



Types of installation

We can distinguish between surface mounted and embedded installations. But different options require additional accessories depending on the door type.



Holding force of 200 daN

"E" INSTALLATION - New OPENERS & CLOSERS

The new invisible installation offers to architects and engineers a great solution for greater aesthetics and security. Both components are embedded in the inside of the frame and the door leaf.

Important: For this type of installation it is necessary to install a magnetic contact to detect correct door alignment. You can find them on the Series CM page.



"L" INSTALLATION

Designed for outward opening doors.

The electromagnet is located under the lintel and the counterplate is installed on the door leaf.

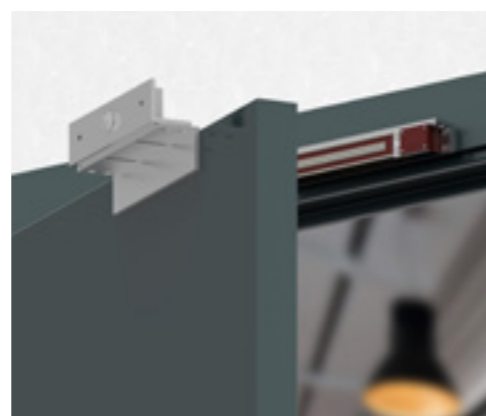


"Z" INSTALLATION

Designed for inward opening doors.

The electromagnet is located above the door frame, just opposite the hinges.

The counterplate is installed on the door leaf with an adjustable support.



"S" INSTALLATION

Designed for sliding doors.

The electromagnet is integrated inside the frame and the counterplate is fixed to the profile on the door leaf.



"F" INSTALLATION

Designed for fire doors or to add adjustability thickness.

The support avoids going through the door to keep the system from losing its certification.



"U" INSTALLATION

Designed for glass doors.

The electromagnet is located under the lintel and the counterplate is installed in the glass sheet without the need of drilling it.





SERIES DH 🔥

MAGNETIC DOOR HOLDERS



They protect you

Door holders are activated only in an emergency situation to automatically isolate an area and to prevent the spread of fire.

Series DH models

Door holders are a fire control measure of vital importance.

They are used as fixed installations in fire doors and keep these doors open until there is a fire alarm.

Doors are closed by automatic or manual activation to prevent fire and smoke from spreading to the entire building.

Our door holders are reviewed by the Applus+ certification company in accordance with current building regulations and validated in accordance with European standards EN1155 and EN14637.

The new modular design makes installation easier and it adapts to any distance from the door.

DHI
60 daN
Holding force

DHU
60 daN
Holding force

DHF
60 daN
Holding force

XS
Extra small



DHUXS
80x80x8

S
Small



DHIS
50x50x25



DHUS
89x80x26

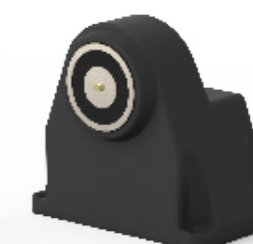
M
Medium



DHIM
60x60x28



DHUM
80x80x46



DHFM
120x120x80

L
Large



DHUL
80x80x66



Installation position

It is recommended that the installation of door holders for swinging doors is not more than 150 mm away from the upper or lower closing edge of the door.

However, it is important to take into account the certifications of the door manufacturer.

To close the door its disconnection torque at 90° must be between 40 Nm and 120 Nm.

Recommended area of installation



Models

DHI DHU DHF

Dimensions

	XS	S	M	L
	Extra small	Small	Medium	Large

Coils

	F	R	W	Q
Electrical information	24V DC	48V DC	12/24V DC	24/48V DC
Continuous duty DC	ED 100%	ED 100%	ED 100%	ED 100%
Transient Voltage Suppressor	Yes	Yes	Yes	Yes
Nominal resistance	240 Ω	996 Ω	60/240 Ω	245/980 Ω
Power consumption DC (start)	-	-	-	-
Power consumption DC (maintenance)	0,08 A . 24V	0,05 A .. 48V	0,17 A ... 12V 0,08 A . 24V	0,08 A . 24V 0,05 A .. 48V

Counterplate

	C1	C2	C3	C4	C5
Height and width of the counterplate	55 mm	60 mm	80 mm	80 mm	80 mm
Depth of the counterplate	7 mm	15 mm	23 mm	50 mm	90 mm

Complement

	E1	F1
Height of the complement	70 mm	190 mm
Width of the complement	70 mm	80 mm
Depth of the complement	41,5 mm	80 mm

Supplement

	1
Height of the supplement	150 mm
Width of the supplement	104 mm
Depth of the supplement	104 mm

Colors

	K	W	X
Door holder colors	Black	White	Inoxidable

Some examples of installation

Door holders are a vital element in case of fire therefore periodic maintenance should be performed to verify its correct operation.



Our articulated counterplate has a 104° swivel range.



Our floor module has a 180° swivel range.

Release button

All OPENERS & CLOSERS models include a push button for manual door release that allows the door to close without the need of a fire or emergency alarm.

Unlike other push buttons, at OPENERS & CLOSERS we guarantee a lifetime of 25.000 cycles to keep you always safe in case of fire.

The push button must be located in the centre or as far out as possible so that there is easy access for electrical dismantling

3 connection openings

For surface mounted installation three 20,5 mm openings were created to install the conduit pipes correctly.

This way the installation is more protected and looks more pleasing.

Electronic component

A renewed PCBA has been designed to include electronic surge protection and reduce the risk of inoperability.

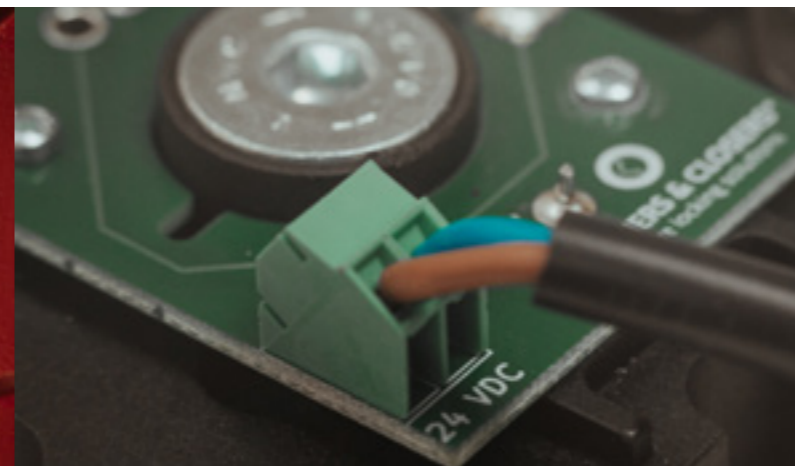
The terminal strip has been improved diagonally for easier connection.

Models with the Dual solenoid incorporate a switch for manual power changeover.

Super fast installation

The new design has been conceived to facilitate and improve the installation of the door holder by simply connecting it into the power supply and tightening 4 screws.

¡Installing door holders has never been easier!



United forces

The electromagnetic shear locks combine mechanical and magnetic forces.

Retention force is far higher, up to 15.000 N.

SERIES SH SHEARLOCK





Series SH models

The electromagnetic Shearlocks offer an optimal and safe solution to any swing or hinged door.

Shearlocks incorporate metal pins that increase the locking strength of the door.

We have added sensors to improve the adjustability with the door.

The closing force (maximum force) is superior to conventional electromagnetic locks and can be connected to heat and smoke detectors, keypads and remote controls as well as to other access control systems.

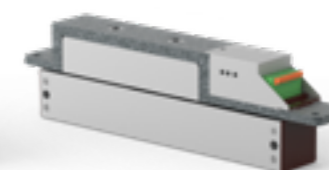
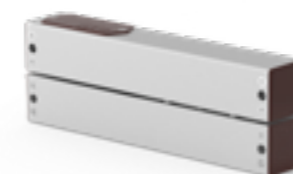
SHU

Surface mounted in frame
1.500 daN
Holding force

Embedded installation in frame
1.500 daN
Holding force

Glas installation in frame
1.500 daN
Holding force

Surface mounted in door leaf



SHUSS
38x38x220
38x38x220

SHUES
34x35x266
38x38x220

Embedded installation in door leaf



SHUEE
34x35x266
34x35x266

Glas installation in door leaf



SHUSU
38x38x220
38x46,5x220

SHUEU
34x35x266
38x46,5x220

SHUUU
38x46,5x220
38x46,5x220

Models and holding forces

SHU

Functions

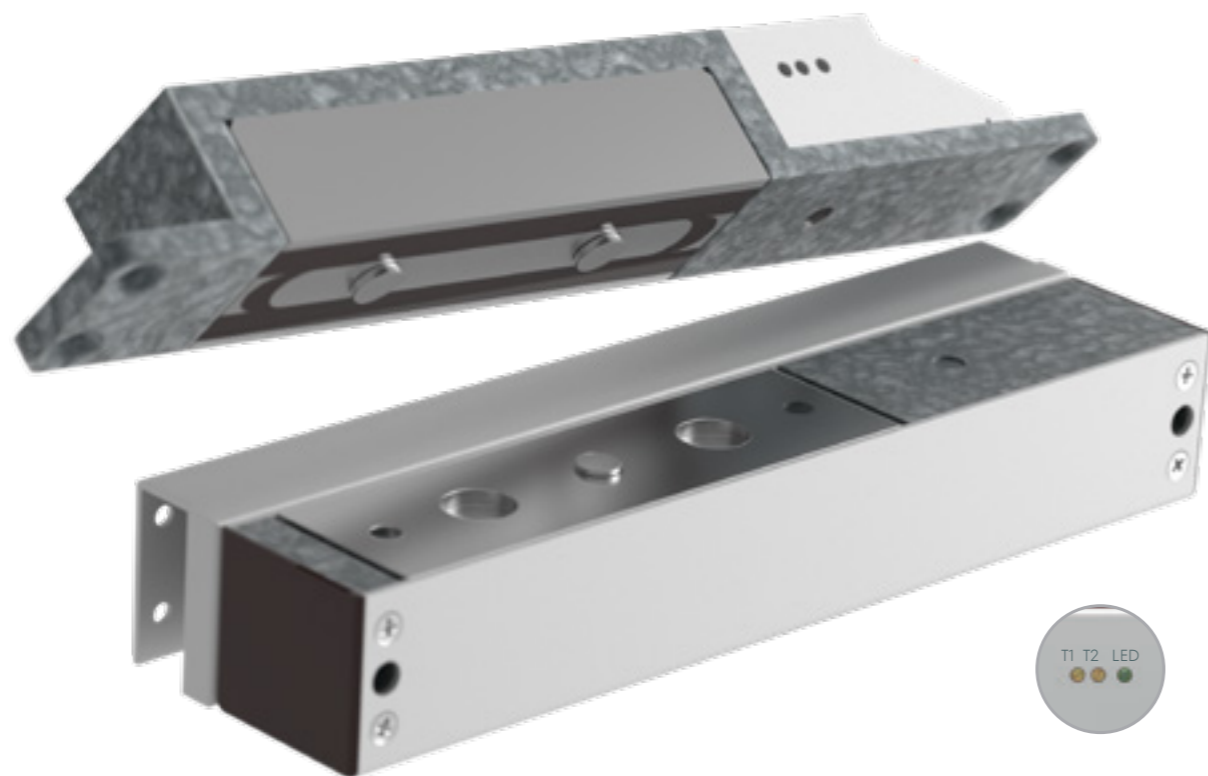
	SS	SU	ES	EE	EU	UU
Door frame	Surface mounted	Surface mounted	Embedded	Embedded	Embedded	Glass
Door leaf	Surface mounted	Cristal	Surface mounted	Embedded	Glass	Glass

Coils

	V
Electrical information	12-24V DC
Continuous duty DC	ED 100%
Transient Voltage Suppressor (TVS)	Yes
Nominal resistance	6 Ω
Power consumption DC (start)	2 A 12V 1,35 A ... 24V
Power consumption DC (maintenance)	0,5 A 12V 0,2 A 24V

Attribute

	3
Shearlock functions	Door's state LED Time delay



T1: Locking delay setting
T2: Unlocking delay setting

Open door

Indication of the opening of the Shearlock for access.

It is possible to delay the opening of the door and to maintain the whole system opened.

Incidence

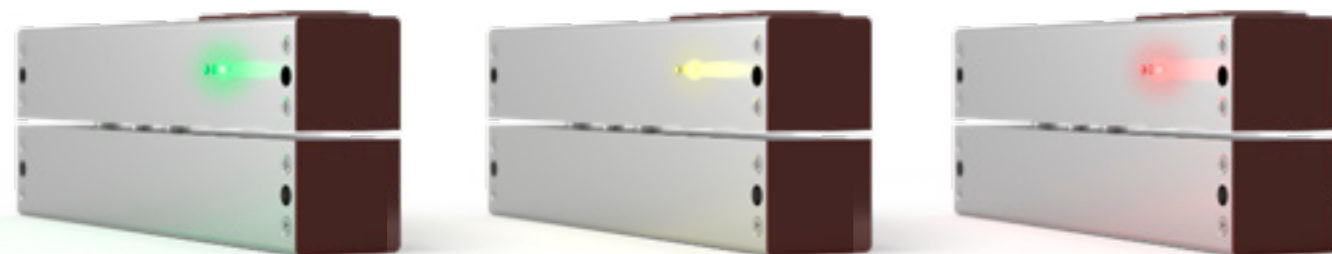
An amber LED indicates the existence of any anomalies.

The alignment will have to be revised and the product must be checked for system malfunction.

Closed door

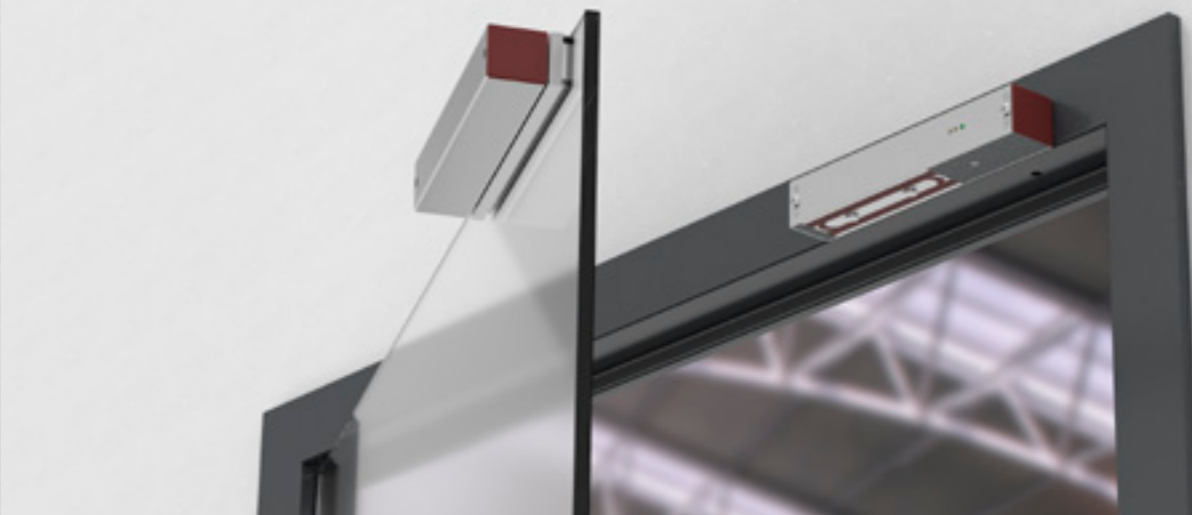
A magnetic sensor detects Shearlock alignment and orders its blocking.

In the case of incorrect locking it will perform up to 5 attempts to close before activating the intermittent acoustic signal.



Some examples of installation

Compact design, can be installed in virtually any space thanks to its modular system that allows it to be embedded and surface mounted to doors and frames.





Electromechanical locks

What is an electromechanical lock?

Electromechanical locks are security devices that are installed in the leaf of the door while electric strikes are installed in the frame.

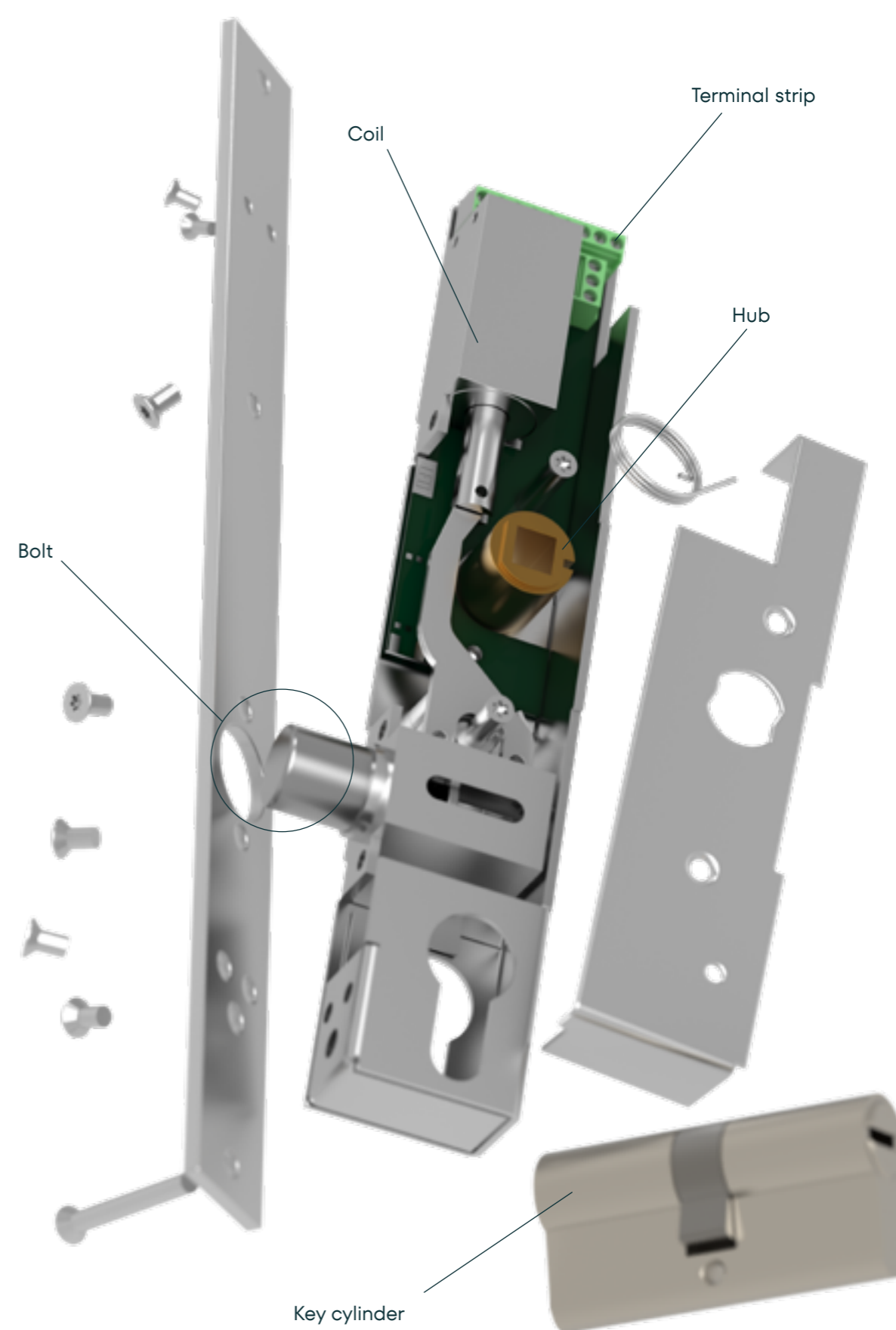
Locks can be used in a lot of fields and adapted to any type of door whether it's made of wood or steel. The performance characteristics can vary depending on the quality of the materials and they can be used in fireproof systems or for emergency doors.

To transfer the electricity from the door frame to the lock, accessories like electric contacts or door loops are used for better aesthetics.

They offer a very good, long lasting and low maintenance performance even when there is a very high use frequency.



Components of an electromechanical lock

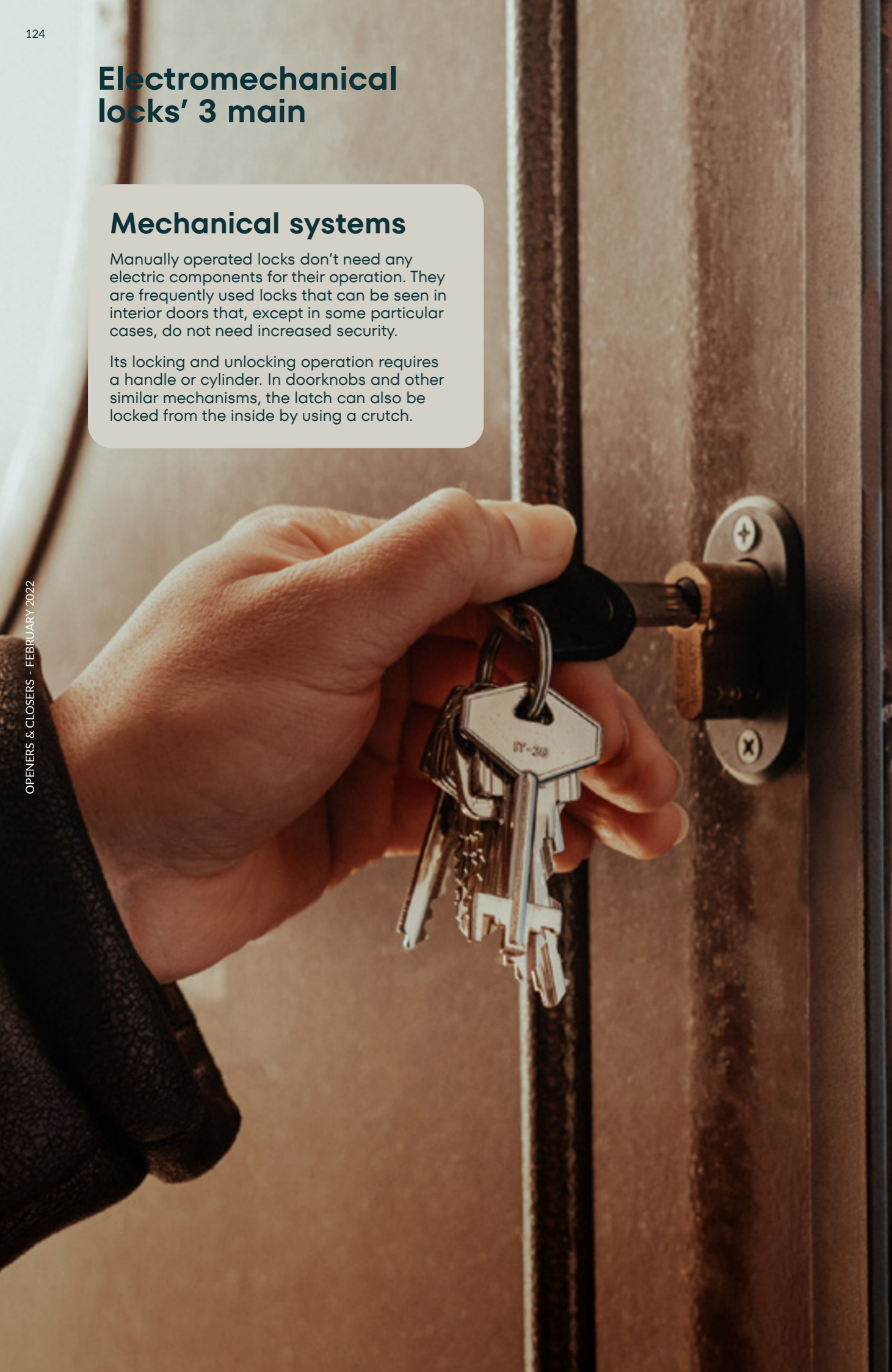


Electromechanical locks' 3 main

Mechanical systems

Manually operated locks don't need any electric components for their operation. They are frequently used locks that can be seen in interior doors that, except in some particular cases, do not need increased security.

Its locking and unlocking operation requires a handle or cylinder. In doorknobs and other similar mechanisms, the latch can also be locked from the inside by using a crutch.

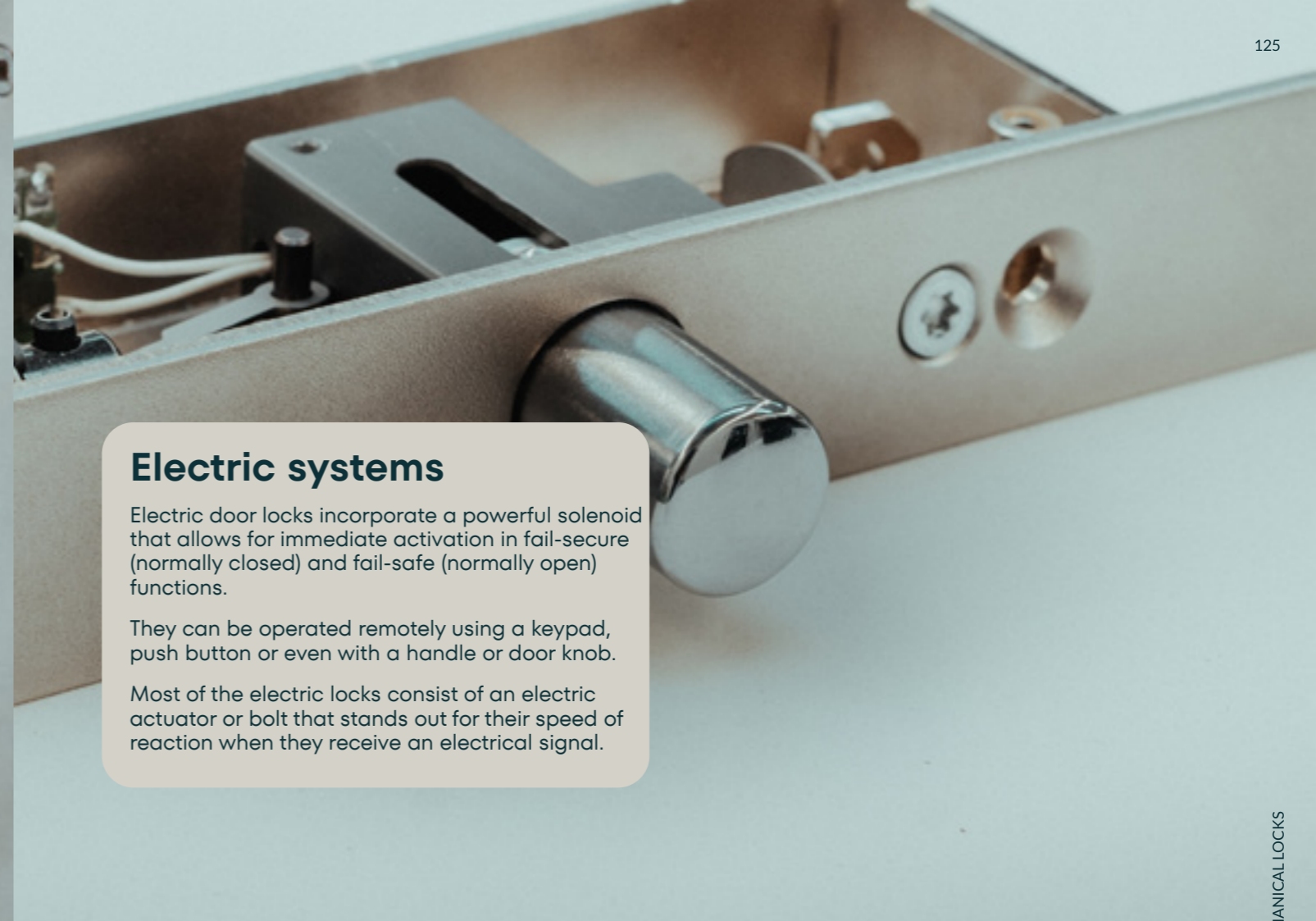


Electric systems

Electric door locks incorporate a powerful solenoid that allows for immediate activation in fail-secure (normally closed) and fail-safe (normally open) functions.

They can be operated remotely using a keypad, push button or even with a handle or door knob.

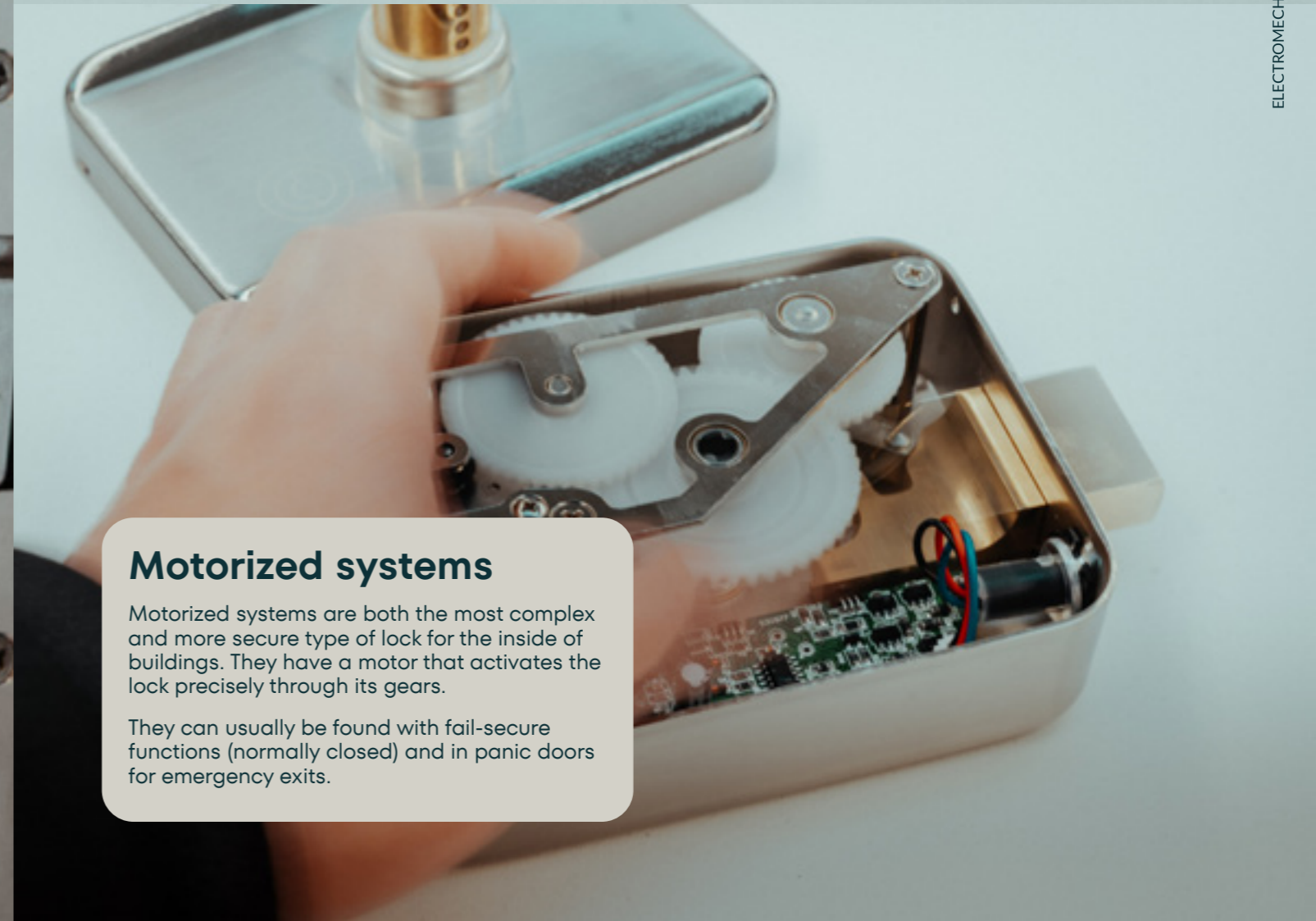
Most of the electric locks consist of an electric actuator or bolt that stands out for their speed of reaction when they receive an electrical signal.



Motorized systems

Motorized systems are both the most complex and more secure type of lock for the inside of buildings. They have a motor that activates the lock precisely through its gears.

They can usually be found with fail-secure functions (normally closed) and in panic doors for emergency exits.



What types of electromechanical locks exist?

There are two main groups of electromechanical locks whether they are electric or motorized.

Surface mounted locks

A fast and easy way to increment door's security. Mechanical, electric and motorized locks can all be surface mounted.

These locks can be adapted to all kinds of door types and are installed in the interior side of the door to avoid any unwanted manipulation from the outside.

Surface mounted locks are usually found with both one or multiple locking points.



Embedding lock

This is the most commonly found type of lock in the market which is installed inside the door leaf. You can find mechanical, electric and motorized locks that can be adapted to the doors' direction just by turning the latch.

They're mostly installed in wood or steel doors depending on its profile and they have a backset of 20 to 65 mm

Its installation is more discreet and does not affect the visual aesthetic of the door. They cover a large part of possible applications and, unlike surface mounted locks, these can be installed outdoors.



Electric actuator or bolt locks

They are electric bolts that have a cylindrical bolt instead of a latch and a square deadbolt.

There are different types of bolts, but for security reasons anti cut bolts are the most recommended due to their strength and the fact that they are rotating and non retractable.

Motorized locks

Motorized locks are the highest quality locks and one of their main characteristics is that the locking action is made by gears that are actuated by a motor inside the lock.



SERIES BO

ELECTRIC BOLT LOCK



Electronic control

BO locks are embedded locks without handles that include an electronic circuit to offer a higher versatility.

They have an easier integration in access systems.



Series BO models

Housed in a black case, they offer a wide functioning range from 12-14VDC and automatic current detection.

They have been conceived to offer a higher versatility and better management of interlocking door systems.

They can outsource door and bolt status signals to an external access control system and also have two signal inputs.

The connection is made by means of two terminal strips integrated in the bolt lock and all Series BO models offer a configurable delayed opening using a timer of 0, 2,5, 5 and 8 seconds.



	Installation	Without handle	Door state	Lock state
Fail-secure (Normally Closed)	Embedded	BO400	Yes	Yes
Fail-safe (Normally Open)	Embedded	BO500	Yes	Yes



SERIES OC

BASIC LOCK



Simple yet effective

Its easy operation offers many options of use in doors that don't require a handle or keyhole.

The sturdiness of the cage allows a greater protection of the bolt.



OC Series Models

Their simple and minimalist design makes them very affordable.

There is a full range of installations available: surface mount, embedded and glass mount.

All models in the Series OC have a configurable time delay of 0, 3, 6 or 9 seconds in its opening.

Wiring is done using internal cables and the working voltage is 12 V DC with a startup energy consumption of 0,8 A and a maintenance energy consumption of 0,13 A.



ELECTROMECHANICAL LOCKS - SERIES OC

	Installation	Without handle	Door state	Lock state
Fail-secure (Normally Closed)	Embedded	OC860	Yes	Visual with LED
Fail-safe (Normally Open)	Embedded	OC870	Yes	Visual with LED
	Surface mounted	OC880	Yes	Visual with LED
	Glass	OC890	Yes	Visual with LED



SERIES PGX

MICRO BOLTS



Small spaces

Micro bolts are the perfect locks for daily use in small spaces like office furniture.

Protect your valuables discreetly.



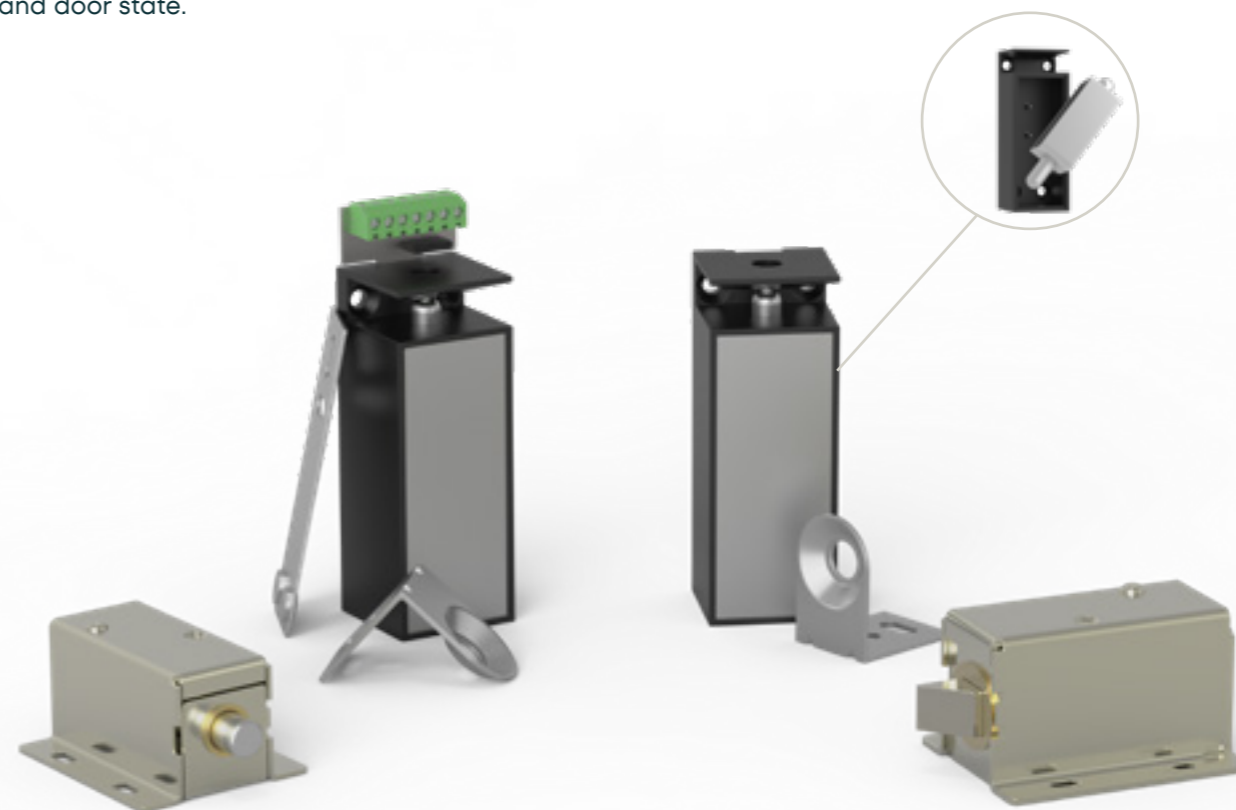
Series PGX models

Series PGX micro bolts are your best allies for wardrobes, drawers, glass cabinets or lockers.

They protect small spaces and also work with hinged and sliding doors.

PGX01 and PGX02 models can be configured so they work as fail-safe (normally closed) or fail-secure (normally open). PGX02 also offers a double monitoring system that detects both the bolt and door state.

Model PGX03 offers a bevelled bolt that can be reoriented 360° to adapt to the DIN Left and DIN Right doors.



PGX04
12V DC
26x42,5x57

PGX02
12/24V DC
96,8x30x27,8

PGX01
12/24V DC
81,5x30x27,8

PGX03
12V DC
30x42,5x64



Sliding doors

Swing doors

Sliding drawers



SERIES CE

SURFACE MOUNTED LOCKS



Visual security

Security that you can see because it's mounted in the door's interior side.

Locks that make their manipulation more difficult.

Series CE models

Series CE models include either motorized or electric surface mounted locks. Both types of locks allow manual activation by a push button or a key.

Surface mounted locks are installed in the interior of steel or wood doors, however, it's common to see them on automatic gates and swinging garage doors facilitating automated access.

Motorized models include a magnetic sensor to detect the correct alignment of the door. In the event that the door remains open or unlocked an acoustic alarm is activated.

All Series CE models are fully reversible.



	Model	Voltage	Dimensions	System Activation
Electric lock	CE104/CE105	12-24V DC	100x129,5x41	Push button/switch
	CE106	12-24V DC	100x129,5x41	Visual with LED
	CE109	12-24V DC	100x129,5x41	Key
Motorized locks	CE110	8-12V AC/DC	107,5x140,5x36	Key
	CE111	8-12V AC/DC	107,5x140,5x36	Push button
	CE112	8-12V AC/DC	107,5x140,5x36	Key and push button



Actuators

What is an actuator?

Actuators are devices that allow you to control the door. They are a security measure of different locking systems that can be installed in a door.

Mechanical actuators

Actuators in which the activation is executed by mechanical elements.

Antipanic bars, key cylinders, handles and other elements that require direct activation are part of this category.

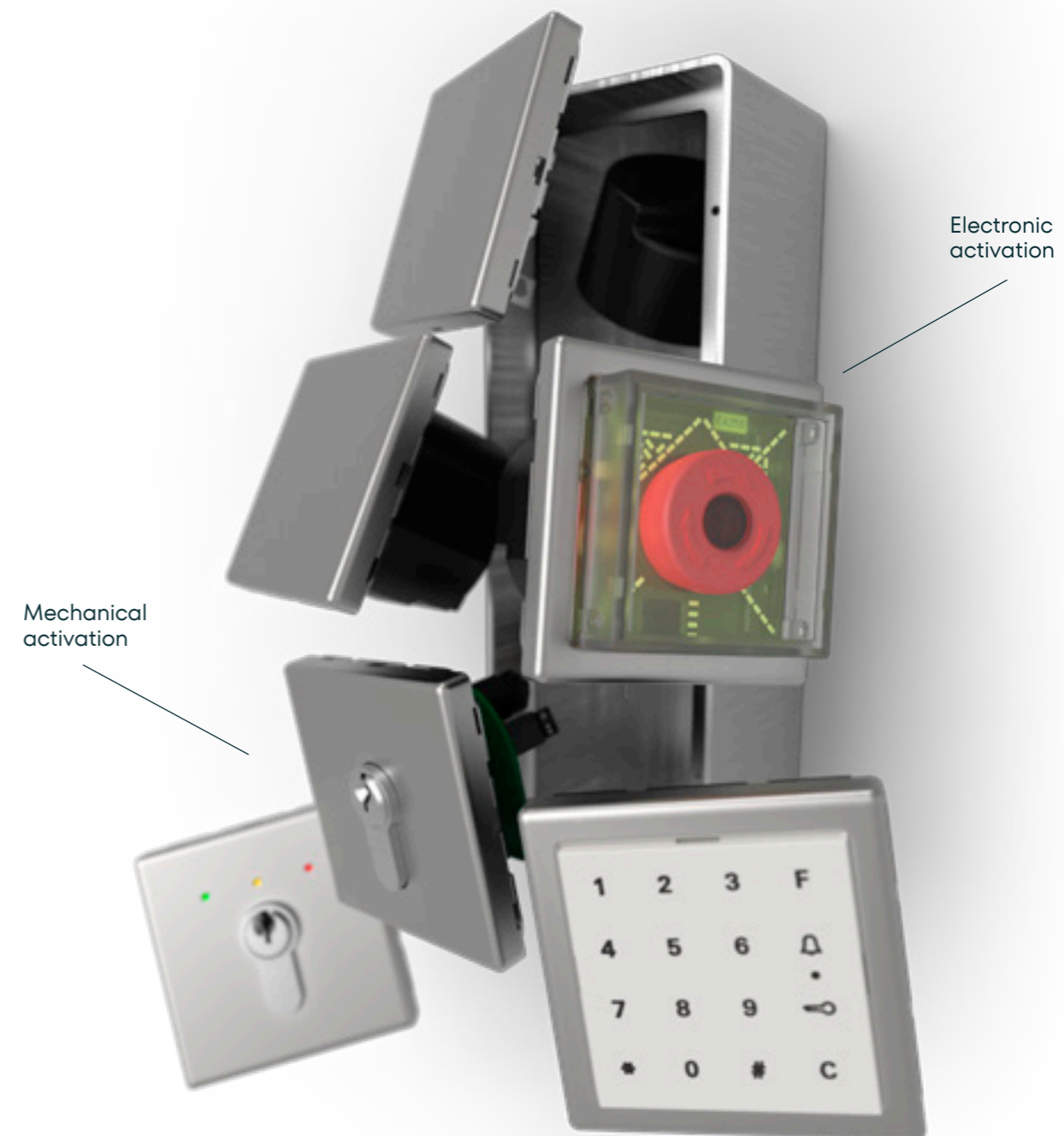
Electronic actuators

Actuators in which the activation system is executed by electronic elements.

Keypads, touchless push buttons, remotes, intercoms and other elements that require an indirect activation belong to this category.



Main elements of an actuator





SERIES AC

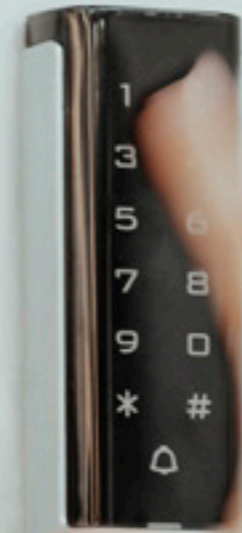
TOUCHSCREEN KEYPAD



Secret code

Up to 2.000 users can have a code of their own to open the door.

They also work with contactless cards and tags



Series AC models

Series AC touch screen keypads are an independent and multifunction unit.

They're suitable for both interior and exterior use even in harsh environmental conditions thanks to its IP68 certificate for water and dust.

They're forged from a very resistant galvanized zinc alloy which offers a high degree of security.

As its work speed is just 20 ms and it operates with 12-24V DC, it is so energy efficient that it only consumes 0,03A.

It's smooth design with backlighting numbers makes its use and cleaning much easier.

AC

Waterproof
IP68

Surface
mounted



AC200 
135x48x22



Card



Tag



Adjustable timer

Both the time delay for opening the door and the duration of the alarm can be adjusted up to 99 seconds.

Weigand 26 bit

It's a protocol used to link the opener with other access systems.

It can be connected to an external reader or to a controller.

Light signal

An LED indicator shows the door's locking status

Sensor distance

Cards and tags can be read from 3 to 6 cm from the sensor.

Anti vandalism sensor

An LDR sensor prevents it from undesired manipulations.

In case of opening, an acoustic alarm warns of an attempt of tampering.

Acoustic sistem

Alarm sound is adjustable for up to 3 minutes.





SERIES TP
 TOUCHLESS
 PUSH BUTTONS



Hocus - Pocus

Magically opens the door thanks to the proximity sensors.

Allows easy replacement of manual pushbuttons.

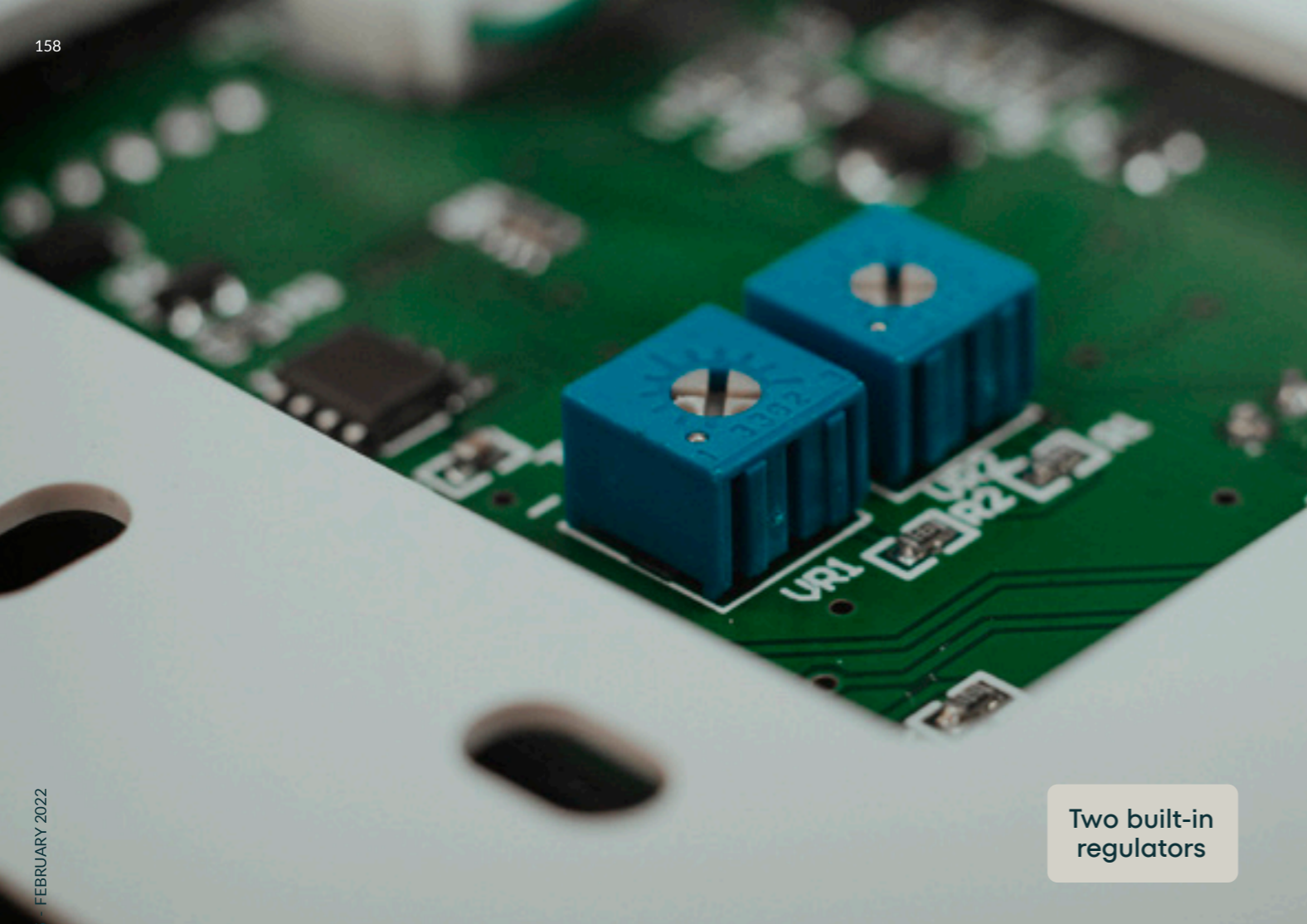


Series TP models

Series TP touchless push buttons are a perfect solution for zero contact systems.

A hygienic alternative to traditional push buttons as, thanks to its infrared system, is activated without physical contact.

	White	TP Black	Waterproof IP68
Square	 TP1W 86x86x14	 TP1K 86x86x14	 TP3X  72x72x15
Narrow	 TP2W 115x40x14	 TP2K 115x40x14	 TP4X  80x30x15



Two built-in regulators

Time regulator

Response time can be chosen from 0 to 30 seconds.



Easy installation

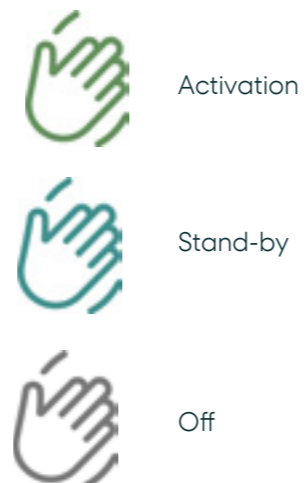
To make replacements easy, Series TP touchless push buttons fit the measurements of classical push buttons.

Distance regulator

The distance of detection can be calibrated from 5 to 20 cm.

Light signalling

Its multicolor LED shows the push button's state of activation.



Smooth design for easy disinfection



Proximity sensors



SERIES TL

INDICATOR LIGHTS



You'll be dazzled

A clear and sharp light indicates the door status.

The shape of the LED allows an easy visualization even at a 180° angle.



Series TL models

Indicator lights combine strength, functionality and aesthetics to ensure a proper visual and acoustic management of access control systems.

All models can have an embedded and surface mounted installation, and let the light beam expand homogeneously without damaging the eye.

Designed and built on a stainless steel base, they function from 10 V to 24 V AC/DC.

The best way to control access in style.

TL

10-24V AC/DC

Basic



TL1
129,5x40x22

Basic with push button



TL2
129,5x40x22

Basic with acoustic alarm

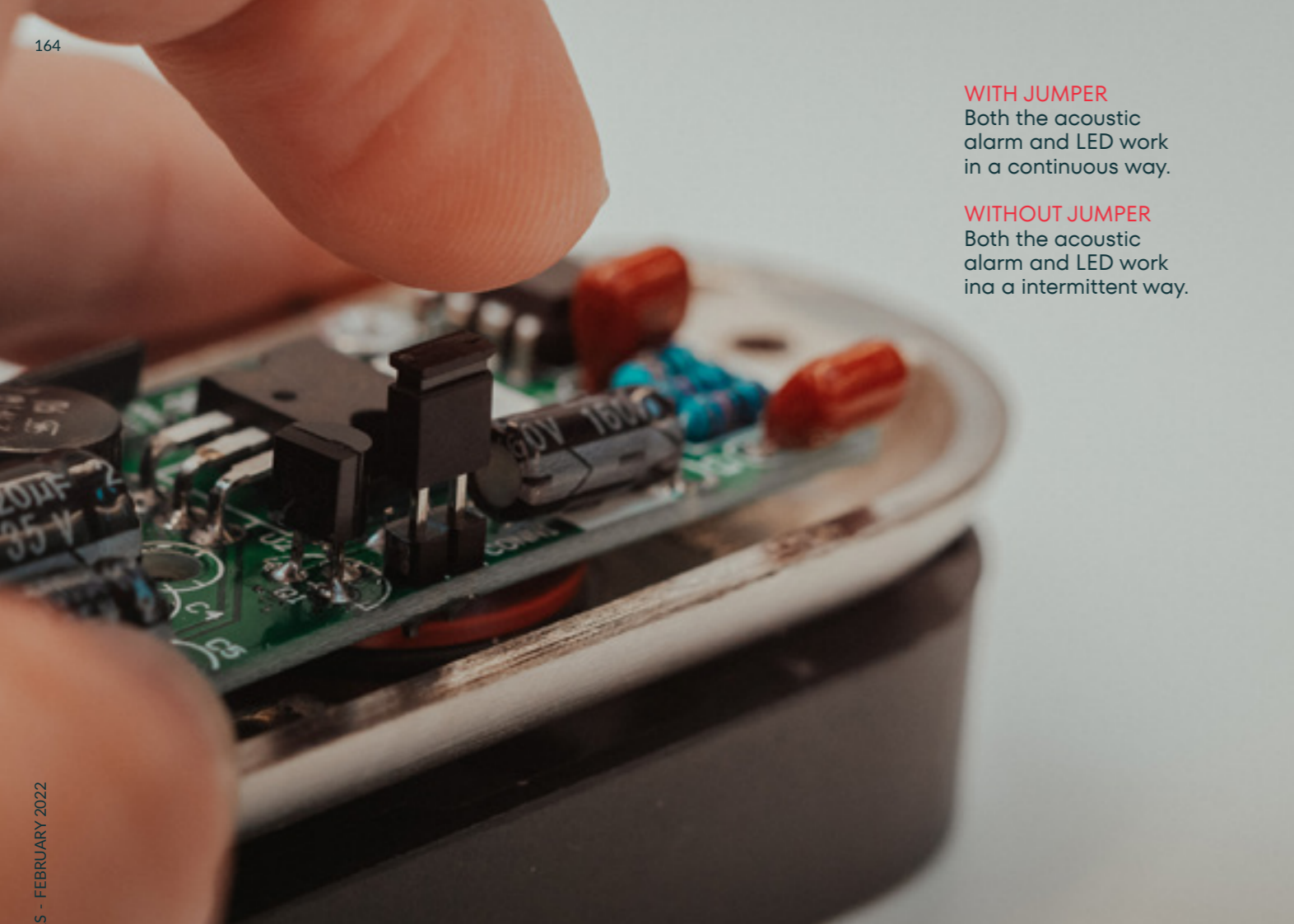


TL3
129,5x40x22

Basic with push button and acoustic alarm



TL4
129,5x40x22

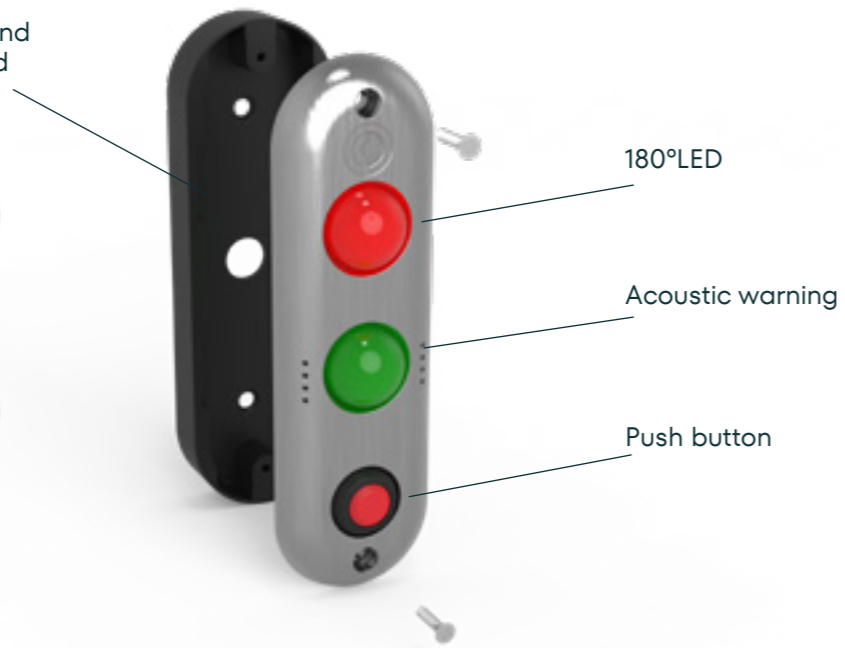


WITH JUMPER
Both the acoustic alarm and LED work in a continuous way.

WITHOUT JUMPER
Both the acoustic alarm and LED work in a intermittent way.



Protecting case for embedded and surface mounted installations.



180°LED

Acoustic warning

Push button

Visualisation

The curvature allows to see the state of the door from a long distance



Colors

The indicator colors can be customized to fit our customers needs.





SERIES PB

ALARM AND FIRE DETECTION



A touch of color

Their vivid colors help to activate and unlock the emergency system quicker.

Security one touch away.



Series PB models

Our exit, fire detection and extinction buttons are the quickest and safest way to act in case of emergency.

Made of ABS plastic components, they are highly resistant.

Designed and built according to EN54-11 with a supply voltage of up to 30V AC.

PB

98x98x48

Evacuation system



PB2

Fire detection system

EN54-11



PB3
Two contacts



PB3L
LED



PB3W
Waterproof

Automatic extinction



PB4
Stop button



PB5
Trigger button



Evacuation systems

Evacuation button

Manual evacuation buttons are activated to open access control systems in case of general failure. They can be reset with a key.

Fire detection system

Fire button

In case of fire the alarm button can be activated to inform the fire panel about the emergency.

Waterproof and LED indicator versions are available.

Automatic extinction systems

Manual buttons for automatic extinctions are designed to activate or stop manually the fire extinction systems that use fire extinguishing fluids, inert gases and CO2.

Stop button

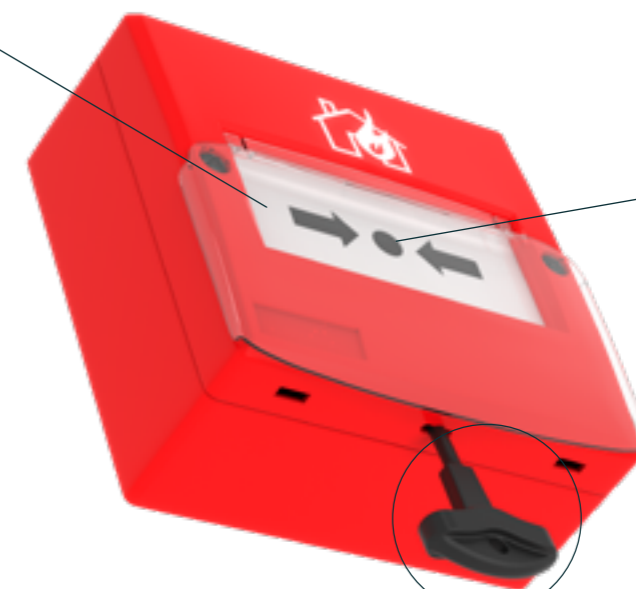
This button prevails over the trigger button. Its purpose is to stop or abort the automatic extinction.

Trigger button

When this button is activated, a signal is sent to the panel to activate the extinction system. According to the European norm this process can only last 60 seconds.



Protective cover



High power LED

Reset Key

In accordance with the norm, it has a testing system to trigger the device without acting upon the activation window element.



Accessories



Door accessories

O&C has a wide line of accessories to complete your access control system.

You can add magnetic contacts, door loops, electric contacts, and power supplies



Power Supplies and Transformers

Electric contacts

Door loops

Electric contacts



SERIES CM

MAGNETIC CONTACTS



Series CM models

Series CM contacts are a monitoring system for doors, windows and other mobile elements such as rolling shutters. It's an instant alarm that works with a reed and a permanent magnet which interrupts the electric signal if the magnetic field is modified.

For a correct choice of magnetic contacts two types of surfaces must be considered, ferromagnetic (Fe) surfaces like iron or steel and non ferromagnetic (NFe) surfaces like plastic and aluminium.



Magnetic protection to avoid any unwanted disabling of the alarm using an external magnet.

The magnetic contact sends an electric signal to the central system.



24 h magnetic protection is an anti-sabotage system that works even with a disabled alarm.

The magnetic contact sends an electric signal to the central system.

Certificates

Magnetic contacts are certified by IMQ according to European norm EN50131-2-6, adding for the Belgian market additional tests with the T031: 2014 standard.



There are 4 security grades with 4 different classes. We have magnetic contacts up to Grade 4 as the maximum security level for exterior and interior installation. In Openers & Closers you can find the following grades and classes.

**GRADE
2**

For medium risk level situation, anti-sabotage system for intruders with medium knowledge.

**GRADE
3**

For medium risk level situation, anti-sabotage system for intruders with high knowledge.

**GRADE
4**

For high risk level situation, anti-sabotage system even for intruders with specific knowledge about the system.

**CLASS
II**

Ambient operation class for industrial and general interior environments.
Temperature oscillation between -10°C and 40°C with a relative humidity of 75% without condensation.

**CLASS
IV**

Ambient operation class for fully exposed outdoor environments.
Temperature oscillation between -25°C and 60°C with a relative humidity of 75% without condensation.



Embedding CM models

Grade 2 3

Class IV



2 IV CMI002 NFe
29,5x7,5 Ø



2 IV CMI122 NFe + Fe
3 IV CMI122PM NFe + Fe
3 IV CMI122PM24 NFe + Fe
29x20 Ø



2 IV CMI016 NFe
3 IV CMI016PM NFe
3 IV CMI016PM24 NFe
29,5x7,5 Ø



2 IV CMI130 NFe + Fe
18x20 Ø



2 IV CMI020 NFe
17x10 Ø



2 IV CMIV001 NFe
29x10 Ø



2 IV CMI030 NFe
18x7,5 Ø



2 IV CMIV020 NFe
17x10 Ø



2 IV CMI101 NFe
34x10 Ø



2 IV CMLI002 NFe
13x6,2 Ø
Miniaturized



2 IV CMI102 NFe + Fe
32,5x20 Ø

Surface mounted CM models

Grade 2 3 4

Class II IV



2 IV CMB003G NFe + Fe
Reed 85x38x16
Magnet 50x26x25
Roller shutter



3 IV CMC1501 NFe + Fe
3 IV CMC1501SH NFe + Fe
120x37x26
High security



2 IV CMB020 NFe + Fe
3 IV CMB020PM NFe + Fe
3 IV CMB020PM24 NFe + Fe
Reed 130x42x15
Magnet 98x30x25
Roller shutter



2 IV CME002 NFe
32x8x13



2 IV CME045 NFe
3 II CME045PM NFe
56x16x5



2 IV CMC006 NFe + Fe
58x15x20



CMF001VM
103x86x15
Shutters



2 IV CMC046 NFe + Fe
3 IV CMC046PM NFe + Fe
3 IV CMC046PM24 NFe + Fe
74x18x18



4 II CMG01 NFe + Fe
3 CMGAUSS01 NFe + Fe
100x27x18
High security



2 II CMC047 NFe + Fe
3 II CMC047PM NFe + Fe
3 II CMC047PM24 NFe + Fe
74x18x18
High security



2 IV CMLC002 NFe
25x6x6
Miniaturized



SERIES FX

DOOR LOOPS



Series FX models

Their main function is to get a constant electric current to the electromechanic lock that's installed on the door's leaf.

Some models have corner protectors that both help introduce the cables and also protect them.



FXE323
Embedded
323x23,8x17
Ø 9



FXE543
Embedded
543x23,8x17
Ø 9



FX290
Embedded
290x24x17,5
Ø 10,5



FX510
Embedded
510x24x17,5
Ø 10,5



FX300
FX300G FX300B
Surface mounted
434x39x22
Ø 10



FX500
FX500G FX500B
Surface mounted
634x39x22
Ø 10

Invisible security

Door loops are a secure method to connect the electric connections between the door's frame and leaf.

They can be used in plastic, metal and wood doors.





SERIES DDC

ELECTRIC CONTACTS



Series DDC models

Their function is to take the electric current to the door's leaf only when it's closed.

DDC1 models include two nickel coated brass contacts while DDC2 models have a silver coating for better conductivity.

The interior of our electric contacts has been redesigned for an easier connection installation.

Interrupted current flow

For situations where the electromechanical lock only requires a single electrical pulse for its activation.

Minimum intensity current is 1,5 A.

Compatible with fail-secure locks.

Constant current flow

For situations where the electromechanic lock might require a constant current flow for its activation.

Minimum intensity current is 0,5 A.

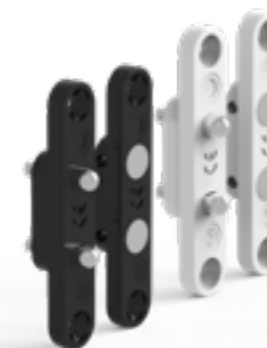
Compatible with fail-secure and fail-safe locks.



DDC

Fail-secure functionality
24V AC/DC <1min

Two contacts



DDC1K/DDC1W
70x13x11

Fail-secure and fail-safe functionality
24V AC/DC <1min



DDC2K/DDC2W
86x20x22

Three contacts



DDC3K/DDC3W
86x20x22

Four contacts



DDC4K/DDC4W
86x20x22



SERIES PS

POWER SUPPLIES AND TRANSFORMERS



Series PS models

Their main function is to supply electric power to different elements of the door.

In the case of an AC strike installation a transformer that lowers the voltage will be needed, usually 12 V or 24 V AC.

For DC locks a power supply that turns AC current into DC current will be needed, usually 12 V or 24 V DC.

Power supplies

They're used to convert alternating current to direct current to feed all kinds of locks and strikes.

They can be connected to batteries and a cabinet to keep them in is available.

Transformers

Transformers can increase or reduce the voltage of an alternating current so it can feed the different electronic elements properly.

They are designed to be used with standard DIN rails.

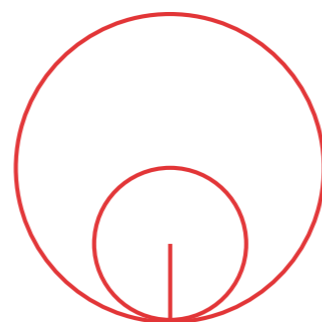
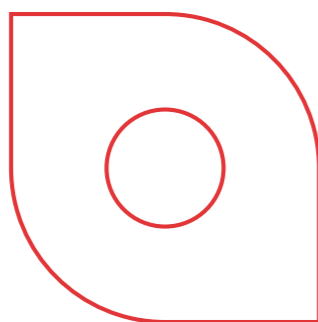
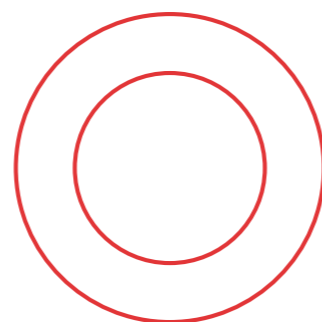
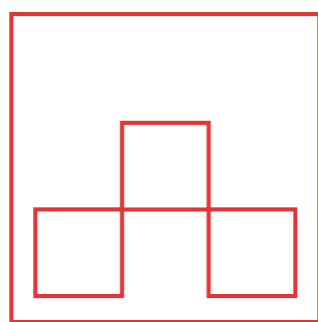
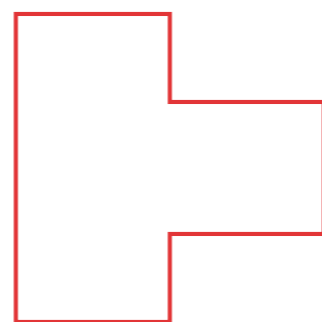
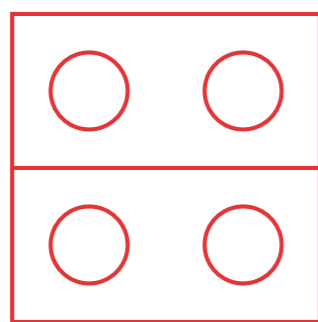


	Power	Voltage	Connection for an auxiliary battery	
Power supplies	PS1012	10 W	12V	Yes
	PS1024	10 W	24V	Yes
	PS2012	20 W	12V	Yes
	PS2024	20 W	24V	Yes
	PS4012	40 W	12V	Yes PS4012B
	PS4024	40 W	24V	Yes PS4024B
	PS6012	60 W	12V	Yes PS6012B
	PS6024	60 W	24V	Yes PS6024B
	PS10012	100 W	12V	Yes PS10012B
	PS10024	100 W	24V	Yes PS10024B
Transformers	PS1210T	10 VA	230/12V	-
	PS1219T	19 VA	230/12V	-
	PS1263T	63 VA	230/12-24V	-

Door

locking

solutions



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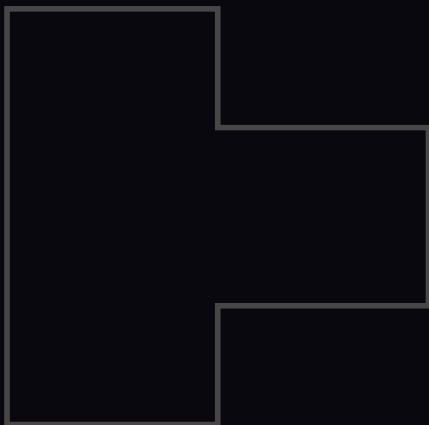
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