

# 225 Solutions





























# DOOR LOCK RELEASE

GENERAL CATALOGUE



#### WARRANTY

All Fermax products have a 24 months warranty.

Fermax obligation under this warranty, however, is expressly limited (at Fermax option) to replacing, repairing, or issuing credit for any product returned to FERMAX within 24 months from date of shipment by FERMAX.

This warranty does not cover problems arising due to causes with the equipment (for example deficiencies in installation or incorrect wiring), nor breakdowns caused by incorrect manipulation or blows.

#### DELIVERY

- 15 days after order confirmation and reception of payment.
- Allow 30 days for special orders.
- Every endeavour will be made by the Company to adhere to the delivery dates quoted, but such dates are only estimate and are not guaranteed neither shall they be a term of condition between the Buyer and the Company.
- The Buyer shall be responsible for arranging insurance on goods collected by their own carriers.
- Delay in delivery shall by no means entitle the Buyer to cancel the order or thereby render the Seller liable to the Buyer for any loss or expense arising from the delay unless otherwise agreed in writing.
- Ex works.

FERMAX reserves the right to modify these sales conditions. The characteristics and aesthetics of the products may be modified. The graphic representations are for informative use only.

# **INDEX**

INTRODUCTION	
1. WHAT IS AN ELECTRIC LOCK RELEASE?	2
2. LOCK RELEASE PARTS	3
LOCK RELEASE SELECTION	
1. CHOOSING THE BEST OPTION	6
2. QUICK GUIDE	7
DESCRIPTION	
1. COMPOSITION	8
2. GLOSSARY OF TERMS	9
3. REFERENCE TABLE	10
LOCK RELEASE TYPES	15
FLUSH	16
SURFACE	29
ACCESSORIES	43
SHIELDS AND CASES. RETAINERS. CONTACT POWER SUPPLIES.	
CABLE CONDUITS. RELAYS.	
ACCESS CONTROL	51
RF, KEYPAD AND PROXIMITY.	
ASSEMBLY INSTRUCTIONS	55
INSTALLATION/WIRING DIAGRAMS	59
INGTALLATION WINING DIAGNAMO	39
REFERENCE INDEX	69

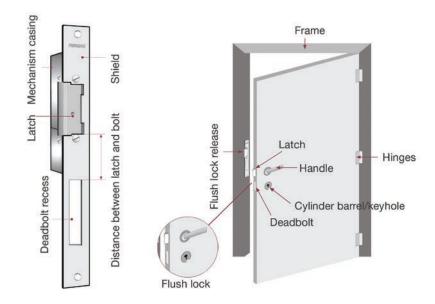


# 1. What is an electric door lock release?

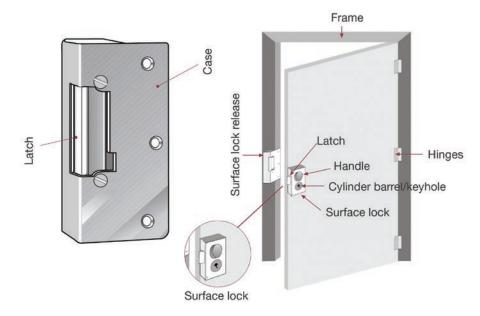
Flush Surface

The electric door lock release is a device installed in the door frame to control opening remotely.

#### **FLUSH LOCK**



#### SURFACE LOCK

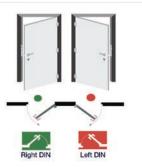


#### **DIN STANDARD**

DIN STANDARD sets the direction the door opens and designates the type of lock release installed. (See technical drawing).

Look at the door from the side where the hinges are visible:

- . If the hinges are on the left of the observer, it is a left DIN.
- . If the hinges are on the right of the observer, it is a right DIN.





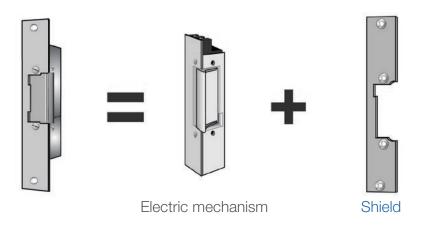
# 2. Lock release parts

2.1 Mechanisms

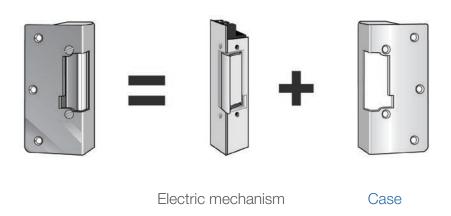
2.2 Shields and Cases

A lock release consists of an electric mechanism and a shield or case depending on whether it is flush or surface mounted.

#### **FLUSH LOCK**



#### **SURFACE LOCK**



#### **ELECTRIC MECHANISM**

Part receiving power feed to open or close the door. Several models are available, depending on the OPERATING MODE.

#### SHIELD OR CASE

Metal part that converts a lock release mechanism into flush-fit (MECHANISM+SHIELD) or surface-mounted (MECHANISM+CASE).



#### 2.1. Mechanisms

#### **OPERATING MODES**



#### Normal Operation - N

Allows door opening while the lock release is powered.

N 12 Vac activationN-412 12 Vdc activationN-424 24 Vdc activation



#### Automatic Operation - A or Aa

Enables door opening with a short electric pulse.

The lock release is automatically blocked when the door closes again.

A 12 Vac activation
A-412 12 Vdc activation
A-424 24 Vdc activation



#### Inverted operation - N-500

Allows door opening while power to the lock release is off.

N-512 12 Vdc activation N-524 24 Vdc activation

#### **ADDITIONAL FEATURES**



#### Unlocking lever - D

The lock release with D in its description indicates the addition of a manual release lever which inhibits its function, allowing free access.

ND Normal operation with release.
AD Automatic operation with release.



#### Adjustable latch bolt - MAX

If the lock description contains MAX, it indicates that the latch is adjustable, allowing a perfect fit between latch and bolt in the lock, with a 4mm margin.

To order the MAX version lock release, please add an 8 to the end of the reference of the compatible lock.

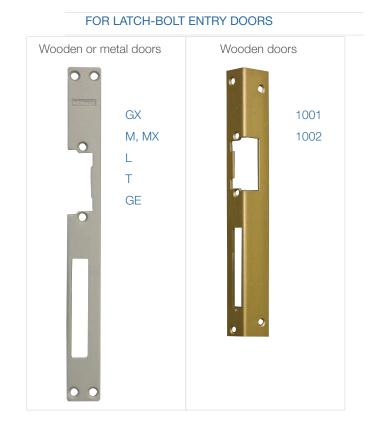


#### 2.2 Shields and Cases

#### **SHIELDS**

Used to make up lock releases that are built into the door frame.

# Wooden or metal doors S, SX P, PX P22 B22 B22 See dimensions on page 44 and 45



#### **CASES**

Used to make up locks to be surface mounted. There are two types of support:

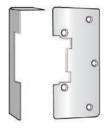
#### VISIBLE ATTACHMENT ON FRAME



#### One-piece models.

2001 Chrome CASE 2006 Grey CASE

#### HIDDEN FRAME ATTACHMENT



Two-piece models.

2003 Grey CASE



#### One-piece models.

2005 Chrome CASE 2007 Grey CASE



### 1. Choosing the best option for your purpose

#### 1. SECURITY LEVEL REQUIRED. Depends on the lock resistance.

STANDARD. Lock releases are resistant to impacts of up to 260 Kg (2600N). Used to cover the basic security needs of any outdoor or indoor enclosure.

REINFORCED. Support impacts up to 800 kg (8000N). For heavily transited accesses or heavy iron or wrought iron doors.

#### 2. DOOR LOCK TYPES FLUSH or SURFACE. FLUSH or SURFACE.

#### 3. DOOR MATERIAL WHERE LOCK IS INSTALLED.

Material used in door: aluminium, iron, wood, wrought iron, PVC or glass.

The most commonly used frames are aluminium and wood, followed by iron.

- In wooden frames, angled locks are used. For flush mounting, use Shields: 1001, 1002 and 53.
- In aluminium and PVC frames with narrow fronts, use SERIES 410. Smaller size makes it ideal for replacement since it fits any gap and its radial latch means it turns on its own opening radius.
- In heavy iron or wrought iron doors with a lot of traffic, we recommend SERIES 500, which includes a latch bolt made entirely of steel, enabling it to withstand pressures up to 800 Kg.
- For doors located outside (fences, gates, etc.) we recommend the 620 SERIES (IP65) which keeps out moisture and dust
- For fireproof doors the fire-resistant SERIES 520 is recommended.
- For glass doors (mainly used in commercial applications) there are surface-mounted double leaf (C SERIES) or flush mounted single leaf (CII SERIES) doors with latches adapted to this type of doors.
- If the door has a deadbolt (lock release with deadbolt lock, we will indicate that these are locking doors) the best option is
  to install a door release with a latch/bolt recess in European DIN format, increasing the security level of
  the door when it is locked.

#### 4. IF SIGNALLING IS REQUIRED

There are lock releases with C, NO and NC contact relays (Normally Open and Normally Closed NC) to identify whether the door is open or closed, by means of a micro switch in the latch.

They allow a variety of applications for security, access control and alarm installations. This function is used, among others, in security locks (the second door or gate will not open until the first is shut). (See 3000 SERIES).

#### 5. POWER SUPPLY

Depending on the type of power supply, there are:

DC CURRENT. Characterized by being quiet. Inverted operation electric locks (N-500) are this type.

AC POWER SUPPLY. Noisy compared with DC locks. They generally have a higher consumption and work better indoors subject to some type of pressure: wind, bolt friction, etc.

#### 6. TYPES OF OPERATIONS REQUIRED

NORMAL operation. Power supply to open. AC or DC power feed.

AUTOMATIC operation. One energy pulse keeps it open until the door opens and closes again mechanically. AC or DC power supply.

INVERTED operation. Power on to close. DC current.

For example: If the lock release is to be connected to a fire alarm system, it must run in inverted operation mode (N-500 operation), i.e. keeping the door open in the event of power failure and remaining closed during the time it is powered up. Under other circumstances, a lock that works as normal is needed, in N operation (Vac), or N-400 operation (Vdc), so that when the power is on, it releases the door. This performance is achieved in both AC (Vac) and DC (Vdc) systems. (For more information, see the "Operating types" section on page 4).



### 2. Quick guide

#### FLUSH LOCK RELEASE



UNIVERSAL Symmetrical Medium body 12Vac or 12Vdc Allows MAX

page 16

# UNIVERSAL

UNIVERSAL Non-symmetrical Large body 12Vac or 24Vdc Allows MAX

page 17



REPLACEMENT Symmetrical. Small body. 12Vac or 12Vdc. European profile: 16mm MAX as standard page 18



ACCESS CONTROL
With door sensor
Non-symmetrical
Large body
12Vac/12Vdc/24Vdc

page 19



REINFORCED 800KG Symmetrical Medium body 12Vac or 12Vdc

page 20



Non-symmetrical Large body 12Vac

page 21



FIREPROOF Fire resistant Symmetrical Medium body 12Vac or 12Vdc page 22

# 460 SERIES



AMERICA Protected bolt Symmetrical Body 75mm 12Vac o 12Vdc page 23

#### 470 SERIES



AMERICA Protected bolt Symmetrical Body 85 mm 12Vac o 12Vdc page 24

### 9000 SERIES



AMERICA
Protected bolt
Non-Symmetrical
Body 102 mm
12Vac o 12Vdc
page 25

## 850 SERIES



CERRADURA AUTOM.
Automatic operation
12Vac o 12Vdc

page 26

#### CII SERIES



CRYSTAL
1 leaf
Non-Symmetrical
Body 105 mm
12Vac o 12Vdc
page 27

#### ELECTROMAG.



ELECTROMAGNETIC Body 233 mm 12Vdc o 24Vdc Resistance 300kg

page 28

#### SURFACE LOCK RELEASE

#### 2001 SERIES



UNIVERSAL Visible support Non-symmetrical 12Vac Allows MAX page 29

#### 2005 SERIES



UNIVERSAL Hidden support Non-symmetrical 12Vac Allows MAX page 30

#### 2003 SERIES



UNIVERSAL Hidden support Non-symmetrical 12Vac Allows MAX page 31

#### **NGB SERIES**



INGERSOLL For INGERSOLL SC71 type locks 12Vac o 12Vdc

page 32

#### 6000 SERIES



WITH LATCH/BOLT Hidden support. Deadbolt lock Non-symmetrical 12Vac o 12Vdc page 33

#### 480 SERIES



H LOCK Horizontal locks 12Vac o 12Vdc

page 34





V LOCK Vertical locks 12Vac o 12Vdc

page 35

#### P SERIES



ANTIPANIC
Doors with panic
bars.
Body 140mm
12Vac / 12Vdc
24Vdc

page 36

#### 930 SERIES



ELECTRIC Cylinder 50mm. Body 116mm 12Vac / 12 Vdc

page 37

#### 960 SERIES



ELECTRIC. REPLACEMENT Adjustable cylinder from 50mm to 70mm Body 140,5mm 12Vac / 12Vdc page 38

#### 8000 SERIES



WITH CHAIN
Doors with handle
Body 122mm
12Vac

page 39

#### C SERIES



CRYSTAL 2 leaves, one fixed 12Vac

page 40

#### ELECTROMAG.



Body 220mm 12Vdc or 24Vdc Resistence 300kg

page 41

# ELECTROMAG.



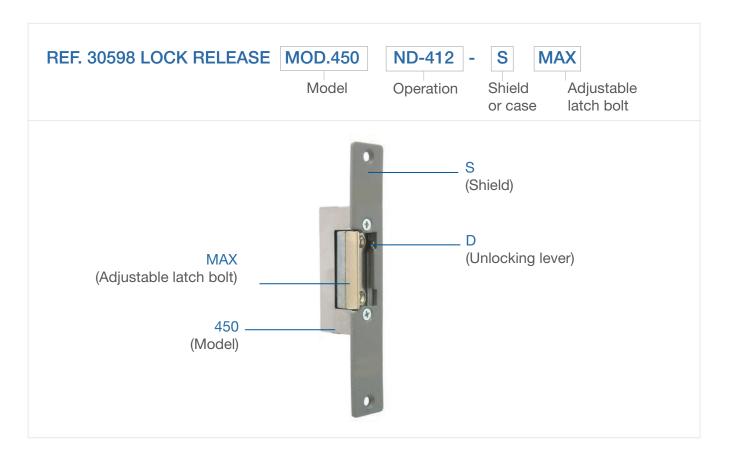
ELECTROMAGNETIC Body 248mm 12Vdc or 24Vdc Resistence 500kg

page 41



# 1. Composition

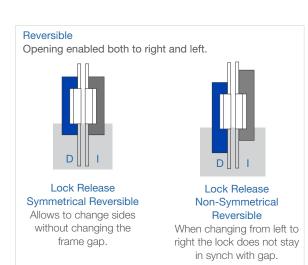
Each series consists of different references or models depending on the electrical or operating features required. The terminology used in each trade reference follows the same composition.



	EXAMPLE	FEATURES
MODEL	450, 410, 480, etc.	Identifies the lock or mechanism size and characteristics. If no model is specified, understood as Universal Model (non-symmetrical).
OPERATION	N, ND, A, AD, Aa, AaD N-400, N-500, MAX	Lock release mechanism operation is identified by a letter or letter-number.
SHIELD AND CASE	S, P, G, GE, L, 1001, 1002, 53, F-2006 F-2007, F-2003.	Shield or case type is identified by a number or letter.
MAX mention Adjustable latch	MAX	Identifies lock release with adjustable latch/bolt. To order it, please add an 8 to the end of the trade Ref. of the compatible door lock release.



# 2. Glossary of terms







Radial latch: The radial system has a built-in bolt that rotates on a displaced axis, limiting the bolts movement perimeter. Lock release installation is easier and looks better as no lateral cuts are made to the door frame.

N	Normal Operation: 12Vac.
N-412	Normal Operation: 12Vdc.
N-424	Normal Operation: 24Vdc.
А	Automatic Operation: 12Vac.
Aa	Invisible Automatic Operation: 12Vac. The automatic pin is suppressed to allow an easier fit to the mechanical lock.
	A very short electrical pulse is recommended.
A-412	Automatic Operation: 12Vdc.
N-512	Inverted Operation: 12Vdc.
N-524	Inverted Operation: 24Vdc.
D	With unlocking tab.
MAX	With adjustable latch.

#### SHIELD TYPE

S, SX*	Short shield: 25 x 160.
P, PX*	Short shield: 25 x 130.
P22	Short shield: 22 x 130.
B22	Short shield: 22 x 110.
G, GX*	Long shield with 36 mm standard distance between latch and bolt.
M,MX*	Long shield with 16 mm distance between latch and bolt and 17 x 91 deadbolt lock.
L	Long shield with 16 mm distance between latch and bolt and 13 x 91 deadbolt lock.
T	Long shield with 16 mm distance between latch and bolt and 85 mm high deadbolt lock.
GE	Long shield with very short distance (12 mm) between latch and bolt and 60 mm high deadbolt lock
53	Angular short shield: 25 x 160.
1001	Angular long shield with deadbolt lock (left DIN 1001).
1002	Angular long shield with deadbolt lock (right DIN 1002).

<sup>\*</sup> Stainless steel shield.

#### **CASE TYPE**

2001	One-piece case in polished chrome. Visible attachment on frame.
2006	One-piece case in matt grey. Visible attachment on frame.
2003	Two-piece case in anodized aluminium. Hidden frame attachment.
2005	One-piece case in polished chrome. Hidden frame attachment.
2007	One-piece case in matt grey. Hidden frame attachment.



450 SERIES	Current	Type	Short shield S	Large shield M
		N	3071	2836
	40.17	ND	2834	2832
	12 Vac	А	3069	2822
		AD	2820	2818
		Aa	2815	
		AaD	2821	
	12 Vdc	N-412	3070	2824
- 11	12 VUC	ND-412	3059	2830
		A-412	3057	2814
DE		AD-412	3058	2816
		Aa-412	2817	
		AaD-412	2819	
		N-512	2828	2826

<sup>\*</sup> To order the MAX version lock release with adjustable latch bolt, please add 8 to the end of the reference.

UNIVERSAL SERIES	Current	Type	Short shield S	Large shield G
_		N	2911	2924
	12 Vac	ND	2912	2925
	12 Vac	А	2909	2926
		AD	2910	2927
	12 Vdc	N-412	2958	3039
		A-412	3038	
71 -		AD-412	3093	
		N-512	2967	
U	24 Vdc	N-424	2962	
		A-424	2908	
		AD-424	2907	
		N-524	2968	

 $<sup>^{\</sup>star}$  To order the MAX version lock release with adjustable latch bolt, please add 8 to the end of the reference.

		-	•	
410 SERIES	Current	Туре	Short shield P22	Large shield L22
		N	3040	2802
	10.1/00	ND	3041	2803
	12 Vac	А	3048	2804
		AD	3068	2805
	12 Vdc	N-412	2889	2809
		ND-412	2806	2810
11		A-412	2890	2811
μ		AD-412	2807	2812
		N-512	2808	2813
3000 SERIES	Current	Type	Short shield S	
	12 Vac	N	2953	
	10 Vdo	N-412	29580	
	12 Vdc	N-512	29670	
	24 Vdc	N-424	29620	
	24 VUC	N-524	29680	



500 SERIES	Current	Туре	Short shield SX	Large shield MX
7.	12 Vac	N	2880	2884
		ND	2881	2885
		А	2882	2886
		AD	2883	2887
	12 Vdc	N-412	2888	3109
		ND-412	3105	2796
		A-412	3106	2797
		AD-412	3107	2798
UI.		N-512	3108	2799

620 SERIES	Current	Туре	Short shield SX	Large shield GX
	12 Vac	N	2874	2876
		Aa	2875	2877

520 SERIES	Current	Туре	Short shield PX
	12 Vac	N	2870
		А	2871
	12 Vdc	N-412	2872
1		N-512	2873

AMERICA SERIE	S Current	Туре	460	470	9000
	12 Vac	N	2956	3027	2969
	12 vac	Aa			2971
	12 Vdc	N-412	3061	3028	3063
	12 Vuc	N-512	3062	3029	
400 470 00	000				
460 470 90	UU				

850 SERIES	Current	Distance* (mm)	850 Series
11.		25	3102
	12 Vac	30	3104
	12 Vdc	35	3103
		50	3101
J.	* mm distance be	tween cylinder cen	tre and front.



CRY	YSTAL SERIES	Current	Туре	Single leaf CII-SX	Double leaf C
•	. 10	12 Vac	N	3095	2996
3.0		12 vac	ND		2997
	- 9		А	3094	2961
5			AD		2998
-		10.1/-1-	N-412	3096	
0		12 Vdc	N-512	3098	
CII	С				

ELECTROMAGNETIC	Current	Туре	300 kg	500 kg
	12 Vdc	FLUSH	3050	
	24 Vdc	SURFACE	3052	3051
3050				
		ì		
G 4				
3051	3052			

2000 SERIES Current		Туре	Visible attachment on frame		Hidden frame attachment		chment	
0 0	0 0211120	Current	Туре	2001	2006	2005	2007	2003
		12 Vac	N	2923	3000	2948	2952	2940
		12 140	А	2917	3002	2950	2954	2942
0 0								
2001-2006	2005-2007 2003							

NGB SERIES	Current	Туре	INGERSOLL SC71
8 9	12 Vac	N	2989
	12 Vdc	N-412	3074
		N-512	3075



6000 SERIES	Current	Туре	Locking door
		N	3004
	12 Vac	А	3005
		AD	3006
	40.1/1	N-412	3072
	12 Vdc	N-512	3073
	12 Vac	A AD N-412	3005 3006 3072

480 SERIES - 490 SERIES	Current	Туре	Locking door 480 SERIES (H)	Locking door 490 SERIES (V)
	12 Vac	N	3030	3034
	12 140	Aa	3031	3035
	12 Vdc	N-412	3032	3036
H V		N-512	3033	3037

PANIC SERIES	Current	Туре	Р
	12 Vac	N	3064
	10 Vd-	N-412	3065
	12 Vdc	N-512	3066
	24 Vdc	N-424	3067

ELECTRIC LOCKS	Current	Туре	930	960
	10.1/22/	DOUBLE KEY	3007	2878
	12 Vac/ 12Vdc	DOUBLE KEY + PUSHBUTTON	2991	2879
930		DOUBLE KEY - NO PUSHBUTTON FUNCTION	3042	
960				

8000 SERIES	Current	Туре	With chain
	12 Vac	N	2984
a last			





# **LOCK RELEASE TYPES**



FLUSH-MOUNTED SURFACE





# Universal 450 Series. Symmetrical

**UNIVERSAL** 

#### **TECHNICAL FEATURES**

- Body 75 mm.
- Front panel 21 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.

LOCK RELEASE TYPES / FLUSH-MOUNTED

- Includes S-type shield for access doors or M-type shield for locking doors. Other compatible shields: short (P, P22, B22, 53) and long (T, L, L22, 1001 and 1002).
- · Allows MAX version: All models can be ordered with adjustable bolt by adding 8 to the end of the reference.

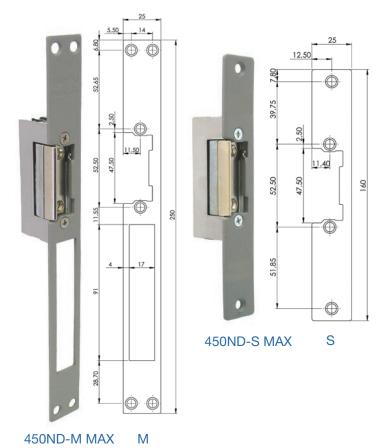
Flush-mounted in wooden or metal frames. Small size allows change of hand without having to enlarge the space where the lock release is inserted.

#### **SPECIFICATIONS**

#### Consumption:

N, A, Aa 12Vac: 980mA N-412 12Vdc: 400mA 12Vdc: 200mA N-512

Temperature: -40 to 120°C Resistance (Kg): 230 Tested cycles: 200.000



# 52,5

450ND-MAX

#### **REFERENCES**

#### 12 Vac

#### For access doors (S shield)

3071 UNIVERSAL LOCK RELEASE MOD.450N-S 2834 UNIVERSAL LOCK RELEASE MOD.450ND-S UNIVERSAL LOCK RELEASE MOD.450A-S 3069 2820 UNIVERSAL LOCK RELEASE MOD.450AD-S UNIVERSAL LOCK RELEASE MOD.450Aa-S 2815 2821 UNIVERSAL LOCK RELEASE MOD.450AaD-S

#### For security doors (M shield)

2836 UNIVERSAL LOCK RELEASE MOD.450N-M UNIVERSAL LOCK RELEASE MOD.450ND-M UNIVERSAL LOCK RELEASE MOD.450A-M 2822 2818 UNIVERSAL LOCK RELEASE MOD.450AD-M

#### 12 Vdc -

#### For access doors (S shield)

3070 UNIVERSAL LOCK RELEASE MOD.450N-412-S UNIVERSAL LOCK RELEASE MOD.450ND-412-S 3059 UNIVERSAL LOCK RELEASE MOD.450A-412-S 3057 UNIVERSAL LOCK RELEASE MOD.450AD-412-S 3058 UNIVERSAL LOCK RELEASE MOD.450Aa-412-S 2817 UNIVERSAL LOCK RELEASE MOD.450AaD-412-S 2828 UNIVERSAL LOCK RELEASE MOD.450N-512-S

#### For locking doors (M shield)

UNIVERSAL LOCK RELEASE MOD.450N-412-M UNIVERSAL LOCK RELEASE MOD.450ND-412-M 2814 UNIVERSAL LOCK RELEASE MOD.450A-412-M 2816 UNIVERSAL LOCK RELEASE MOD.450AD-412-M UNIVERSAL LOCK RELEASE MOD.450N-512-M



#### UNIVERSAL

# Universal Series. Non-Symmetrical

#### CARACTERÍSTICAS TÉCNICAS

- Body 104 mm.
- In MAX version, the body is 90 mm.
- Front panel 20 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical.
- Includes S-type shield for access doors and G-type shield for locking doors. Other compatible shields: P, M, L, 1001, 1002, 53.
- Allows MAX version: All models can be ordered with adjustable bolt by adding 8 to the end of the reference.

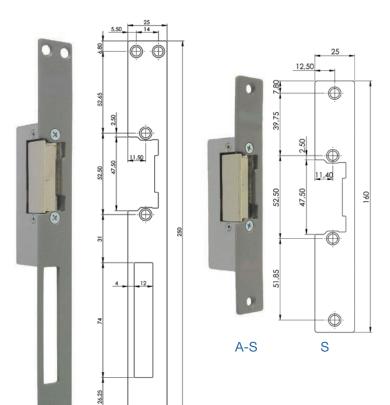
Flush mounting in wooden or metal frames. Characteristic robust design and low power consumption.

#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 200mA N-512 12Vdc: 150mA N-424 24Vdc: 120mA

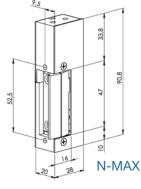
Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000



# 24 46 104 55

·

G



#### **REFERENCES**

#### 12 Vac\_

For access doors (S shield)

2911 UNIVERSAL LOCK RELEASE N-S

2912 UNIVERSAL LOCK RELEASE ND-S

2909 UNIVERSAL LOCK RELEASE A-S

2910 UNIVERSAL LOCK RELEASE AD-S

#### For security doors (G shield)

2924 UNIVERSAL LOCK RELEASE N-G

2925 UNIVERSAL LOCK RELEASE ND-G

2926 UNIVERSAL LOCK RELEASE A-G

2927 UNIVERSAL LOCK RELEASE AD-G

#### 12 Vdc\_

#### For access doors (S shield)

2958 UNIVERSAL LOCK RELEASE N-412-S

3038 UNIVERSAL LOCK RELEASE A-412-S

3093 UNIVERSAL LOCK RELEASE AD-412-S

2967 UNIVERSAL LOCK RELEASE N-512-S

#### For security doors (G shield)

3039 UNIVERSAL LOCK RELEASE N-412-G

#### 24 Vdc

#### For access doors (S shield)

2962 UNIVERSAL LOCK RELEASE N-424-S

2908 UNIVERSAL LOCK RELEASE A-424-S

2907 UNIVERSAL LOCK RELEASE AD-424-S

2968 UNIVERSAL LOCK RELEASE N-524-S

See glossary of terms page 9

A-G

# Replacement 410 Series. European Profile

#### **TECHNICAL FEATURES**

- Body 67 mm.
- Front panel 16,5mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- · Radial latch.
- Includes P22-type shield for access doors and L22-type shield for locking doors.
   Other compatible shields: B22, M, T, GE.
- Adjustable latch bolt. MAX Version as standard

Recommended for replacement.

The smallest door lock release on the market (front width 16,5 mm). Installed in smaller aluminium or PVC frames.

Includes radial latch allowing the bolt to rotate on its axis without having to make a lateral cut in the door frame, which is not possible in traditional latch-bolt locks.

The standard version offers MAX adjustable latch, allowing the adjustment between the latch and the bolt in the installation process.

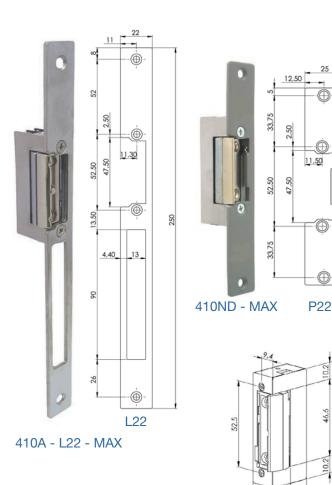
410N - MAX

#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 400mA N-512 12Vdc: 200mA

Temperature: -40 to 120°C Resistance (Kg): 300 Tested cycles: 200.000



#### **REFERENCES**

#### 12 Vac

8

For access doors (P22 shield)

3040 LOCK RELEASE MOD.410N-P22-MAX 3041 LOCK RELEASE MOD.410ND-P22-MAX

3048 LOCK RELEASE MOD.410A-P22-MAX

3068 LOCK RELEASE MOD.410AD-P22-MAX

#### For locking doors (L22 shield)

2802 LOCK RELEASE MOD.410N-L22-MAX2803 LOCK RELEASE MOD.410ND-L22-MAX

2804 LOCK RELEASE MOD.410A-L22-MAX

2805 LOCK RELEASE MOD.410AD-L22-MAX

#### 12 Vdc

#### For access doors (P22 shield)

2889 LOCK RELEASE MOD.410N-412-P22-MAX

2806 LOCK RELEASE MOD.410ND-412-P22-MAX 2890 LOCK RELEASE MOD.410A-412-P22-MAX

2807 LOCK RELEASE MOD.410AD-412-P22-MAX

2808 LOCK RELEASE MOD.410N-512-P22-MAX

#### For locking doors (L22 shield)

2809 LOCK RELEASE MOD.410N-412-L22-MAX

2810 LOCK RELEASE MOD.410ND-412-L22-MAX

2811 LOCK RELEASE MOD.410A-412-L22-MAX

2812 LOCK RELEASE MOD.410AD-412-L22-MAX

2813 LOCK RELEASE MOD.410N-512-L22-MAX

See glossary of terms page 9



#### **ACCESS CONTROL**

# 3000 Series. With door sensor

#### **TECHNICAL FEATURES**

- Body 104 mm.
- Front panel 20 mm.
- Reversible (Right DIN and Left DIN).
- Non-symmetrical.
- Includes S type shield for access doors.
   Other compatible shields: P, 53, G, M, L, 1001, 1002, 53.
- Includes microswitch (C, NO, NC). For signals and other applications.

This version allows a range of applications due to its highly reliable C/No/Nc microswitch with gold contacts. Maximum contact intensity is 2A-230Vac. Indicates if the door is open or closed. Indispensable in security and alarm installations in banks, laboratories, jewellery stores and all premises that require door opening with automatic locking of another and vice versa.

See sample installation in INSTALLATION DIAGRAMS page 61.

#### 3000N-S S 113 mm. 113 mm. 113 mm. 114 mm. 115 mm. 117 mm. 117 mm. 117 mm. 118 mm. 119 mm. 117 mm. 118 mm. 119 mm.

3000N

#### **SPECIFICATIONS**

#### Consumption:

N 12Vac: 980mA N-412, N-512 12Vdc: 150mA N-424, N-524 24Vdc: 120mA

Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000

#### **REFERENCES**

2953	LOCK RELEASE MOD.3000N-S
29580	LOCK RELEASE MOD.3000N-412-S
29670	LOCK RELEASE MOD.3000N-512-S
29620	LOCK RELEASE MOD.3000N-424-S
29680	LOCK RELEASE MOD.3000N-524-S

See glossary of terms page 9

#### REINFORZED

# 500 Series Reinforced (800 Kg)

#### **TECHNICAL FEATURES**

As 450 series but with reinforced steel latch.

- Body 75 mm.
- Front panel 21 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- With steel bolt impact resistant up to 800 kg.
- Includes SX-type shield for access doors and MX shield for locking doors. Other compatible shields: P, P22, B22, 53, T, L, L22, 1001, 1002.

Recommended for heavy doors in frequent use. Doors in wrought iron, iron or steel with heavy traffic in access. Includes a wire conduit for easy installation with a simple splice connector.

#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 400mA

Temperature: -40 to 120°C Resistance (Kg): 800 Tested cycles: 200.000

# 500A-MX MX

# 52.5 800N

#### **REFERENCES**

#### 12 Vac \_

#### For access doors (SX shield)

2880 LOCK RELEASE MOD.500N-SX

2881 LOCK RELEASE MOD.500ND-SX

2882 LOCK RELEASE MOD.500A-SX

2883 LOCK RELEASE MOD.500AD-SX

#### For locking doors (MX shield)

2884 LOCK RELEASE MOD.500N-MX

2885 LOCK RELEASE MOD.500ND-MX

2886 LOCK RELEASE MOD.500A-MX

2887 LOCK RELEASE MOD.500AD-MX

#### 12 Vdc \_

#### For access doors (SX shield)

2888 LOCK RELEASE MOD.500N-412-SX

3105 LOCK RELEASE MOD.500ND-412-SX

3106 LOCK RELEASE MOD.500A-412-SX

3107 LOCK RELEASE MOD.500AD-412-SX

3108 LOCK RELEASE MOD.500N-512-SX

#### For locking doors (MX shield)

3109 LOCK RELEASE MOD.500N-412-MX

2796 LOCK RELEASE MOD.500ND-412-MX

2797 LOCK RELEASE MOD.500A-412-MX

2798 LOCK RELEASE MOD.500AD-412-MX

2799 LOCK RELEASE MOD.500N-512-MX

# Serie 620 Watertight (IP65)

#### **TECHNICAL FEATURES**

- Body de 100 mm.
- Frontal de 21,5 mm.
- Reversible (DIN Derecha o DIN Izquierda).
- Non symmetrical.
- Includes stainless steel SX-type shield for access doors and GX shield for locking doors. Other compatible shields: 53, 1001, 1002.

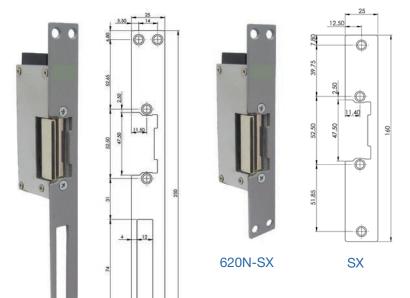
Recommended for doors in outdoor locations (enclosures, gates, front line beach properties, etc.). It has fewer holes and incorporates internal and external seals to prevent water and dust getting in, prolonging the lock's working life.

#### **SPECIFICATIONS**

#### Consumption:

N, Aa 12Vac: 980mA N-412 12Vdc: 1,3A

Temperature: -40 to 120°C Resistance (Kg): 400 Tested cycles: 200.000



#### REFERENCES

12 Vac

For access doors (SX shield)

2874 LOCK RELEASE MOD.620N-SX2875 LOCK RELEASE MOD.620Aa-SX

For locking doors (GX shield)

2876 LOCK RELEASE MOD.620N-GX 2877 LOCK RELEASE MOD.620Aa-GX

620N

GX

See glossary of terms page 9

620N-GX

# 520 Series Fireproof

#### **TECHNICAL FEATURES**

- Body 75,4 mm.
- Front panel 21 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- Radial latch.
- Includes PX-type stainless steel casing for access doors. For locking door, with latch recess, MX-type shield recommended.

Recommended for Fire Doors or firewalls.

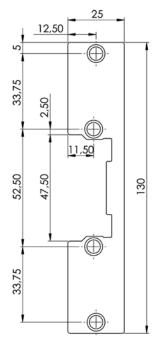
#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 1,3A

Temperature: -40 to 120°C Resistance (Kg): 800 Tested cycles: 200.000





520A-PX

PX

#### **REFERENCES**

#### 12 Vac \_

For access doors (PX shield)

2870 LOCK RELEASE MOD.520N-PX

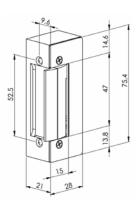
2871 LOCK RELEASE MOD.520A-PX

#### 12 Vdc

For access doors (PX shield)

2872 LOCK RELEASE MOD.520N-412-PX

2873 LOCK RELEASE MOD.520N-512-PX



520N

# 460 Series

#### **TECHNICAL FEATURES**

- Body 75,3 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.

The deeper latch and shield make it particularly suitable for metal frames. Also suitable for American or British locks.

#### **SPECIFICATIONS**

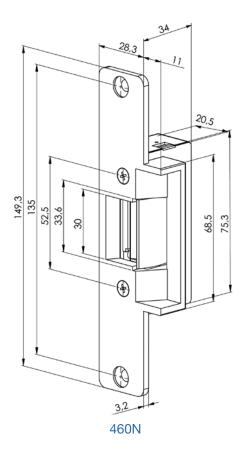
#### Consumption:

N 12Vac: 980mA N-412 12Vdc: 400mA N-512 12Vdc: 200mA

Temperature: -40 to 120°C Resistance (Kg): 210 Tested cycles: 200.000



460N



#### **REFERENCES**

2956 LOCK RELEASE MOD.460N BISEL3061 LOCK RELEASE MOD.460N-4123062 LOCK RELEASE MOD.460N-512

# 470 Series

#### **TECHNICAL FEATURES**

- Body 85 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.

As 460 series but with an even deeper and longer latch. Designed to protect and conceal the latch recess.

#### **SPECIFICATIONS**

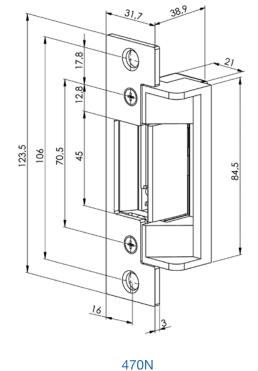
#### Consumption:

N 12Vac: 980mA N-412 12Vdc: 400mA N-512 12Vdc: 200mA

Temperature: -40 to 120°C Resistance (Kg): 230 Tested cycles: 200.000



470N



#### **REFERENCES**

3027 LOCK RELEASE MOD.470N
 3028 LOCK RELEASE MOD.470N-412
 3029 LOCK RELEASE MOD.470N-512



## **AMERICA**

# 9000 Series

#### **TECHNICAL FEATURES**

- Body 102 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical.

Recommended for flush mounting in metal frames, for its flanged shield and reinforced latch.

# 140 145 51 44,5 52 52

9000N

#### **SPECIFICATIONS**

#### Consumption:

N, Aa 12Vac: 980mA N-412 12Vdc: 400mA

Temperature: -40 to 120°C Tested cycles: 200.000

#### **REFERENCES**

2969 LOCK RELEASE MOD.9000N GREY2971 LOCK RELEASE MOD.9000Aa GREY3063 LOCK RELEASE MOD.9000N-412 GREY

See glossary of terms page 9

9000N

## 850 Series Automatic lock

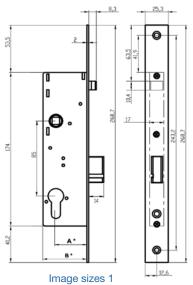
#### **TECHNICAL FEATURES**

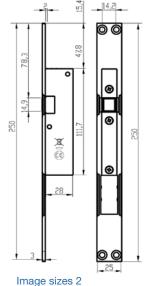
- The automatic lock consists of 2 parts:
  - Mechanical part (on the door leaf)
  - Electrical part (located in the frame)
- Mechanical body 174 mm and front panel 17 mm.
- Electric body 112 mm and front panel 14,20 mm.
- Reversible (Right DIN or Left DIN).
- Includes stainless steel shield.
- There are several models depending on the distance between the centre of the cylinder and front panel A\*.

The bolt is passed automatically with no need for keys. Opening, also automatic, can be performed remotely.

# 1 mag

1





#### **SPECIFICATIONS**

Consumption:

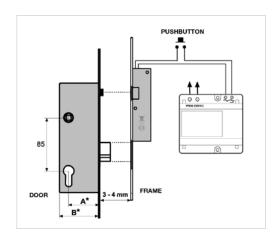
12Vac: 990mA 12Vdc: 1350mA Tension: 12V

Temperature: -10°C to 50°C

#### TYPES AND DIMENSIONS

TYPES	<b>A</b> *	B*
Mod.850/25	25	39
Mod.850/30	30	44
Mod.850/35	35	49
Mod.850/50	50	64

\*A: Distance in mm between centre of cylinder and front part.



#### **REFERENCES**

3102 AUTOMATIC LOCK MOD.850/25 A

3104 AUTOMATIC LOCK MOD.850/30 A

3103 AUTOMATIC LOCK MOD.850/35 A

3101 AUTOMATIC LOCK MOD.850/50 A

2869 MECHANISM MOD.850 A

Included in all automatic locks for replacement.

See glossary of terms page 9



#### **CRYSTAL**

# CII Crystal Series. Single leaf

#### **TECHNICAL FEATURES**

- For single leaf glass doors up to 12 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical
- For double leaf doors, 2 lock releases must be fitted in the upper part of the frame, one for each leaf.
- Includes a safety device to prevent lock release blocking if the door is open.
- Cannot be used for swing doors.

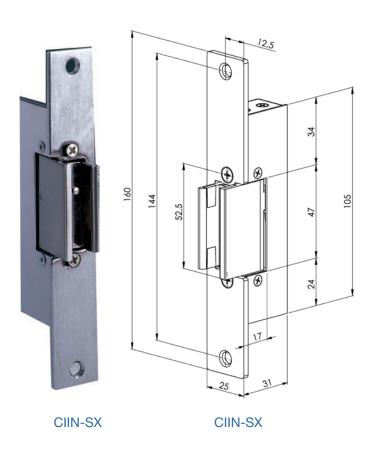
Recommended for glass doors equipped with upper or lateral frame, in metallic or wooden profile.

#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 200mA N-512 12Vdc: 150mA

Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000



#### **REFERENCES**

3095 CRYSTAL LOCK RELEASE MOD.CIIN-SX
3094 CRYSTAL LOCK RELEASE MOD.CIIA-SX
3096 CRYSTAL LOCK RELEASE MOD.CIIN-412-SX
3098 CRYSTAL LOCK RELEASE MOD.CIIN-512-SX



Glass door with wood profile

See glossary of terms page 9

#### FERMAX

#### **ELECTROMAGNETIC**

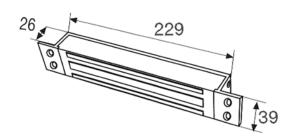
# **Electromagnetic Series**

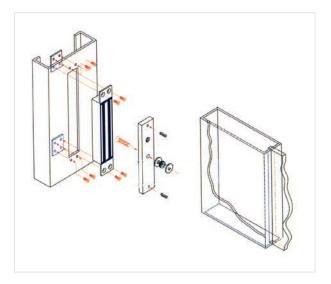
#### **TECHNICAL FEATURES:**

- Allows to close a door without a traditional lock. Also used to keep doors open for security purposes.
- Inverted operation. The electromagnetic lock releases the door when the power is off.
- Consists of an electromagnet fitted in the frame of the door or access and a metal plate installed in the moving part of the door.
- When the electromagnet is powered up, closing is secured by magnetic pull
  of the magnet on the plate. When the magnet is not powered, the door is
  released.
- Suitable for installations where we want to hide the electromagnet and for sliding doors.
- Includes assembly kit and installation instructions.
- Runs on 12 Vdc or 24 Vdc power supply.
   See installation instructions supplied with the equipment.









#### **SPECIFICATIONS**

Consumption: 12Vdc: 500mA 24Vdc: 250mA

Resistance (kg): 300

#### REFERENCES

3050 ELECTROMAGNETIC LOCK RELEASE FLUSH-MOUNTED 300Kg

Holding force 3000N. For two-way doors.

# 2001-2006 Series. Visible attachment

#### **TECHNICAL FEATURES:**

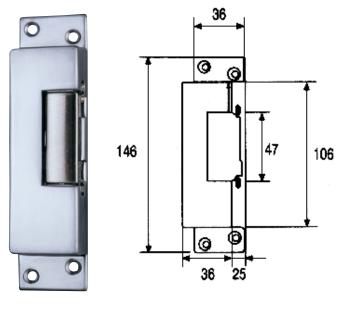
- Includes Universal mechanism.
- One-piece case 146 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical.
- Visible attachment on frame.
- For locks without latch/bolt.
- Allows MAX version: All models can be ordered with adjustable latch/bolt by adding 8 to the end of the reference.

#### **SPECIFICATIONS**

Consumption:

N, A 12Vac: 980mA

Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000



#### REFERENCES

#### 2001 SERIES Chrome

2923 LOCK RELEASE N-2001 CHROME2917 LOCK RELEASE A-2001 CHROME

#### 2006 SERIES Grey

3000 LOCK RELEASE N-2006 GREY3002 LOCK RELEASE A-2006 GREY

# 2005 - 2007 Series. Hidden attachment

#### **TECHNICAL FEATURES**

- Includes Universal mechanism.
- One-piece case 106 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical
- Attachment concealed on frame.
- For locks without latch/bolt.
- Allows MAX version: All models can be ordered with adjustable latch/bolt by adding 8 to the end of the reference.

#### **SPECIFICATIONS**

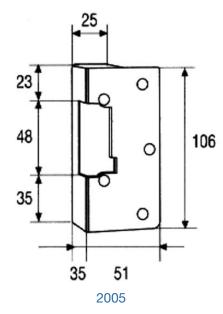
Consumption:

N, A 12Vac: 980mA

Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000



N-2005



#### **REFERENCES**

#### 2005 SERIES Chrome

2948 LOCK RELEASE N-2005 CHROME 2950 LOCK RELEASE A-2005 CHROME

#### 2007 SERIES Grey

2952 LOCK RELEASE N-2007 GREY 2954 LOCK RELEASE A-2007 GREY

See glossary of terms page 9

# 2003 Series. Hidden attachment

#### **TECHNICAL FEATURES**

- Includes Universal mechanism.
- Two-piece case 103 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical.
- Attachment concealed on frame.
- For locks without latch/bolt.
- Allows MAX version: All models can be ordered with adjustable latch/ bolt by adding 8 to the end of the reference.

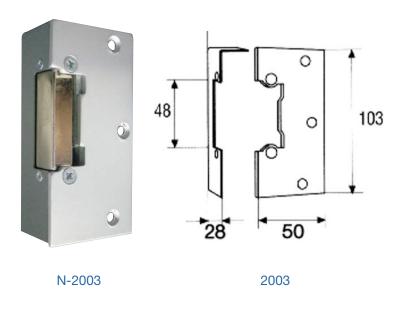
Equipped with angular cover and clamping tab. Allows surface and flush mounting, adding a strike plate/shield to the set.

#### **SPECIFICATIONS**

Consumption:

N, A 12Vac: 980mA

Temperature: -40 hasta 120°C Resistance (Kg): 260 Tested cycles: 200.000



#### **REFERENCES**

2940 LOCK RELEASE N-2003 AL. ANOD.2942 LOCK RELEASE A-2003 AL. ANOD.

# **NGB Series**

#### **TECHNICAL FEATURES**

- For INGERSOLL SC71 type locks.
- One-piece case 107 mm.
- Reversible (Right DIN or Left DIN).
- Non-symmetrical.
- Attachment concealed on frame.

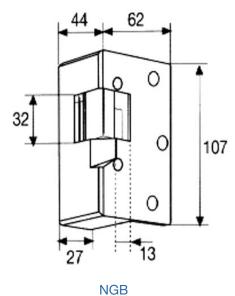
#### **SPECIFICATIONS**

#### Consumption:

NGB 12Vac: 980mA NGB-412 12Vdc: 150mA NGB-512 12Vdc: 150mA



NGB



#### **REFERENCES**

2989 LOCK RELEASE MOD.NGB3074 LOCK RELEASE MOD.NGB-4123075 LOCK RELEASE MOD.NGB-512



INGERSOLL LOCK



## WITH DEADBOLT RECESS

# 6000 Series

#### **TECHNICAL FEATURES**

- For locks with latch/bolt.
- Reversible (Left DIN, Right DIN).
- Symmetrical.
- Attachment concealed on frame.

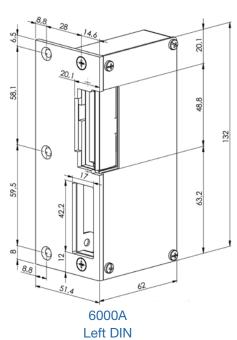
#### **SPECIFICATIONS**

#### Consumption:

N, A 12Vac: 980mA N-412 12Vdc: 200mA N-512 12Vdc: 150mA



6000A Left DIN



#### **REFERENCES**

3004 LOCK RELEASE MOD.6000N
 3005 LOCK RELEASE MOD.6000A
 3006 LOCK RELEASE MOD.6000AD
 3072 LOCK RELEASE MOD.6000N-412
 3073 LOCK RELEASE MOD.6000N-512



6000A Right DIN

See glossary of terms page 9

# 480 Series. Horizontal

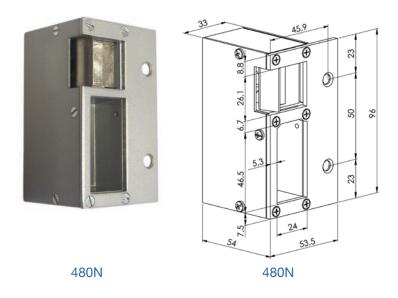
#### **TECHNICAL FEATURES**

- For horizontal bolt locks with latch width up to 20mm.
- Body 96 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- Weather-resistant.
- Attachment concealed on frame.

#### **SPECIFICATIONS**

#### Consumption:

N, Aa 12Vac: 980mA N-412 12Vdc: 200mA N-512 12Vdc: 150mA



#### **REFERENCES**

3030 LOCK RELEASE MOD.480N 3031 LOCK RELEASE MOD.480Aa 3032 LOCK RELEASE MOD.480N-412 3033 LOCK RELEASE MOD.480N-512



HORIZONTAL LOCK

### 490 Series. Vertical

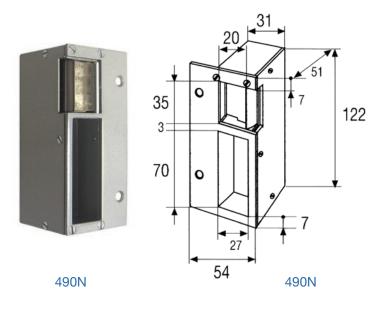
#### **TECHNICAL FEATURES**

- For vertical locks with latch/bolt with latch width up to 20.
- Body 122 mm.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- Weather-resistant.
- Attachment concealed on frame.

### **SPECIFICATIONS**

#### Consumption:

N, Aa 12Vac: 980mA N-412 12Vdc: 200mA N-512 12Vdc: 150mA



#### **REFERENCES**

3034 LOCK RELEASE MOD.490N
 3035 LOCK RELEASE MOD.490Aa
 3036 LOCK RELEASE MOD.490N-412
 3037 LOCK RELEASE MOD.490N-512



**VERTICAL LOCK** 

### P Series. Panic

#### **TECHNICAL FEATURES:**

- For doors with panic bar.
- Reversible (Right DIN or Left DIN).
- Symmetrical.
- Concave latch adaptable to panic bar lock deadbolt.

Supplied in black as standard issue, along with 8 accessories 2,5 mm thick. This model is installed in virtually all brands of panic bar lockset.

#### **SPECIFICATIONS**

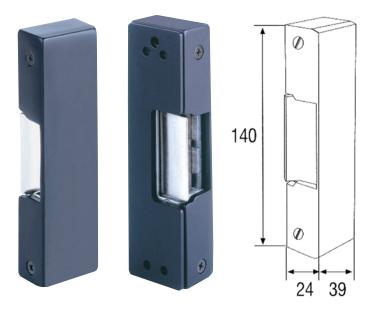
#### Consumption:

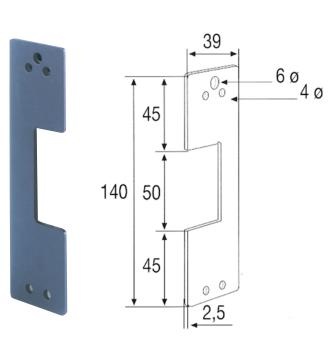
 N
 12Vac:
 980mA

 N-412
 12Vdc:
 150mA

 N-512
 12Vdc:
 150mA

 N-424
 24Vdc.
 120mA





#### **REFERENCES**

3064 LOCK RELEASE MOD.PN
3065 LOCK RELEASE MOD.PN-412
3066 LOCK RELEASE MOD.PN-512
3067 LOCK RELEASE MOD.PN-424



Panic bars

See glossary of terms page 9

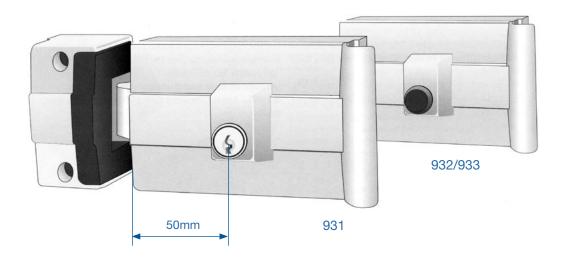


### **ELECTRIC RIM LOCK**

### 930 Series. Standard

#### **TECHNICAL FEATURES:**

- Reversible (Right DIN or Left DIN).
- The panic type latch is a piece with no apparent contact, as it is built into the mechanism and provides greater resistance to opening.
- Allows to change the door from left to right hand simply by turning the lock round.
- Supplied with assembly kit.



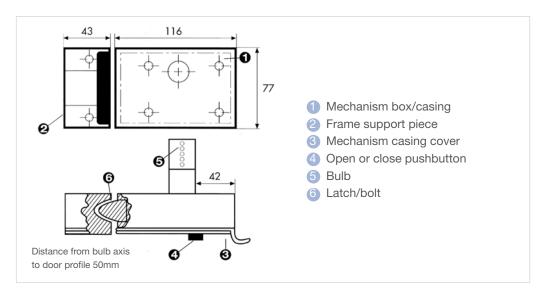
#### **SPECIFICATIONS**

Consumption:

12Vac: 850mA 12Vdc: 1,2A



#### **ELECTRIC LOCK BREAKDOWN**



#### **REFERENCES**

3007 ELECTRIC RIM LOCK MOD.931-DOUBLE KEY

2991 ELECTRIC RIM LOCK MOD.932-W/KEY-PUSHBUTTON

3042 ELECTRIC RIM LOCK MOD.933-W/KEY-NO PUSHB. FUNCTION Requires remote opening, as the button has no function.



### **ELECTRIC RIM LOCK**

### 960 Series. Replacement

#### **TECHNICAL FEATURES**

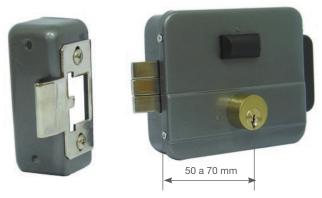
- Reversible outdoor electric lock with 50 mm cylinder.
- Key opening outside and pushbutton inside.
- Reversible (Right DIN or Left DIN).
- Symmetrical.

Its size and standard attachment points allow insertion into the majority of electric locks. The cylinder is adjustable from 50 to 70 mm.

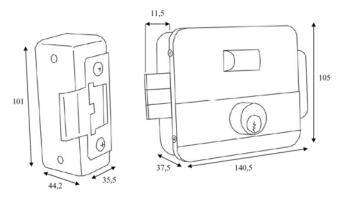
#### **SPECIFICATIONS**

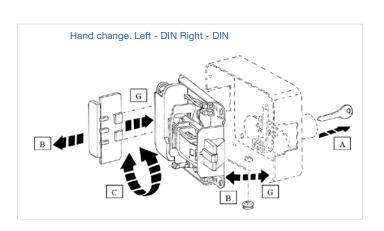
Consumption:

12Vac: 850mA 12Vdc: 1,7A 15W / 18W



View of interior door part.





#### **REFERENCES**

2878 ELECTRIC RIM LOCK MOD.961-DOUBLE KEY

2879 ELECTRIC RIM LOCK MOD.962-DOUBLE KEY + PUSHBUTTON

(The exit button can be disabled through the indoor key, allowing the user to exit using a key or electric opening).

See glossary of terms page 9

### 8000 Series. With chain

#### **TECHNICAL FEATURES:**

- Surface lock, with chain.
- Reversible (Right DIN or Left DIN).
- For surface locks with handle.

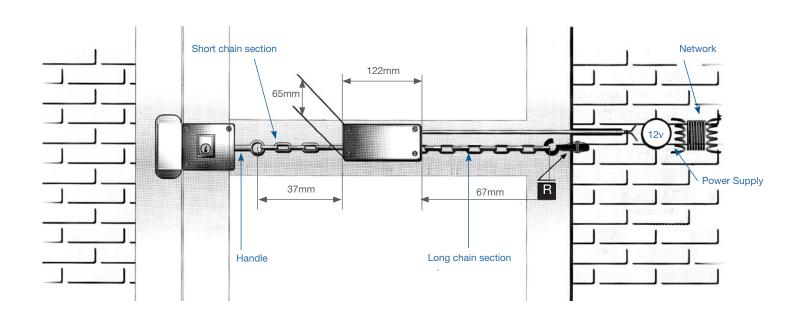
#### **SPECIFICATIONS**

Consumption: 12Vac: 980mA



#### **REFERENCES**

2984 LOCK RELEASE MOD.8000N WITH CHAIN



#### **ASSEMBLY INSTRUCTIONS**

Remove the cover and attach the shortest chain section to the lock handle. Tighten this section of chain to the limit, WITHOUT DISPLACING THE HANDLE, and fit the lock release firmly onto the door using the three attachment points on the inside. Now, part R (trigger force regulator), located at the end of the long chain, can be screwed onto the door frame. It may be necessary to remove a chain link. It can also be tightened simply by moving the threaded stud of the R part by turning the nuts fitted to it. Once the lock release is fitted, we can go ahead and wire up the electrical connection, check that it is working properly and finally replace the cover.

### Crystal Series C. Double leaf

#### **TECHNICAL FEATURES:**

- For double leaf glass doors up to 12 mm.
- Surface lock release.
- Reversible (Right DIN or Left DIN).
- There is a hole on the inside to fit a handle to open the door manually and a pushbutton for electric opening.
- Simple assembly. To be secured using strong silicon glue and screws that lightly rub the glass. Not supplied with the lock release.

### **SPECIFICATIONS**

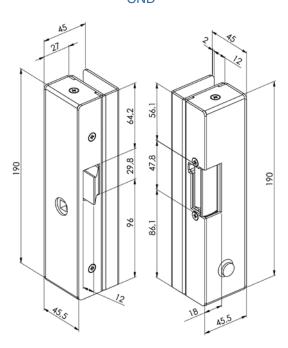
Consumption:

N, A 12Vac: 980mA

Temperature: -40 to 120°C Resistance (Kg): 260 Tested cycles: 200.000



### CND



#### **REFERENCES**

2996 CRYSTAL LOCK RELEASE MOD.CN CHROME
2997 CRYSTAL LOCK RELEASE MOD.CND CHROME
2961 CRYSTAL LOCK RELEASE MOD.CA CHROME
2998 CRYSTAL LOCK RELEASE MOD.CAD CHROME

40 See glossary of terms page 9



### **ELECTROMAGNETIC**

### **Electromagnetic Series**

#### **TECHNICAL FEATURES**

- Allows to close a door without a traditional lock. Also useful to keep doors open for security purposes.
- Electromagnetic lock releases the door when it is no longer powered.
- Includes assembly kit and installation instructions.
- Runs on 12 Vdc or 24 Vdc power supply.

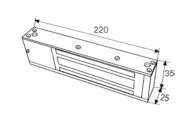
See installation instructions.

#### **SPECIFICATIONS**

Consumption:

12Vdc: 500mA 24Vdc: 250mA





### **REFERENCES**

3052 SURFACE

ELECTROMAGNETIC

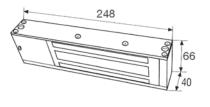
LOCK 300Kg.

Holding force: 300N

Bracket optional Ref.3078.

3078 BRACKET L-3 FOR REF.3052





3051 SURFACE
ELECTROMAGNETIC
LOCK 500Kg.

Provides higher level security with 500 kg of pulling force.

Recommended for high security entry points and outdoor accesses.

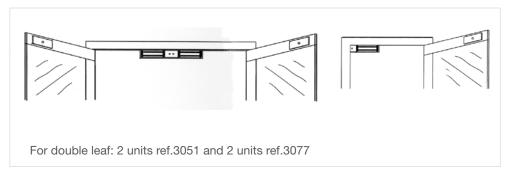
Holding force: 5000N. Bracket optional Ref.3077.

3077 BRACKET L-2 FOR REF.3051



3077





See glossary of terms page 9 41





### **ACCESSORIES**

FERMAX SHIELDS CASES RETAINERS

POWER SUPPLIES CONTACTS WIRE CONDUITS RELAYS

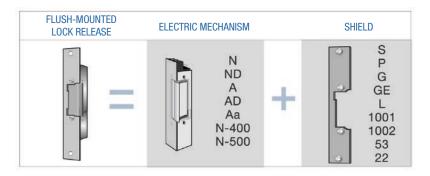




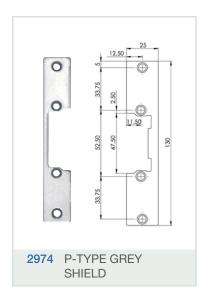


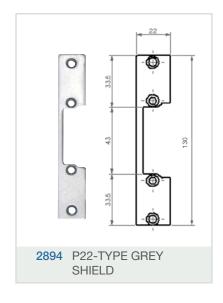
### Shields. Flush-mounted lock release

Metallic trim coupled with an electrical mechanism forms a flush mounted lock release for access doors or latch/deadbolt entry doors. Choice of shield depends on the profile or material used in the door (aluminium, iron or wood).

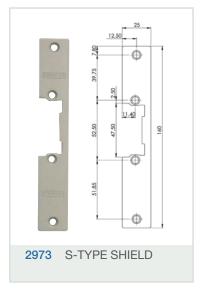


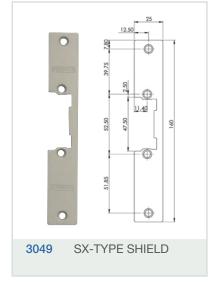
### 1. FOR ACCESS DOORS

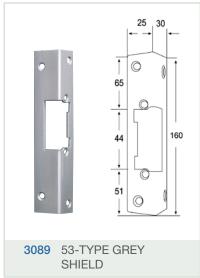




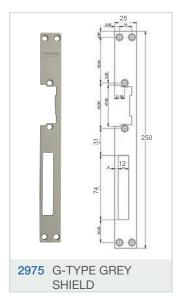


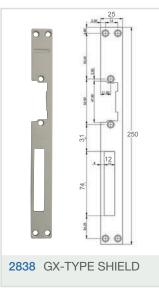


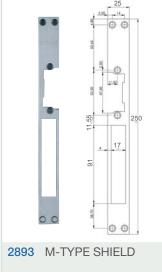


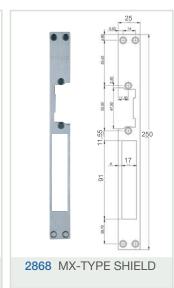


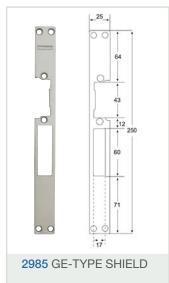
### 2. FOR LATCH-DEADBOLT LOCK DOORS

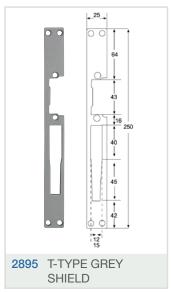


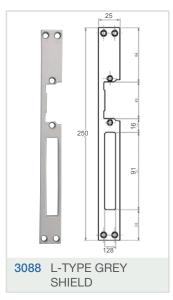


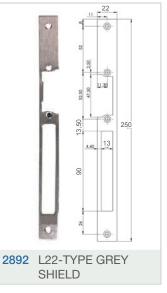


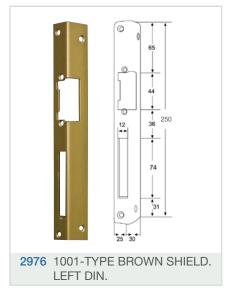


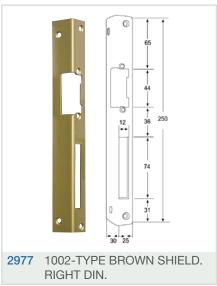










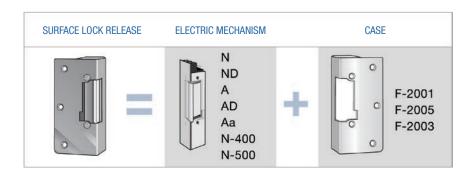




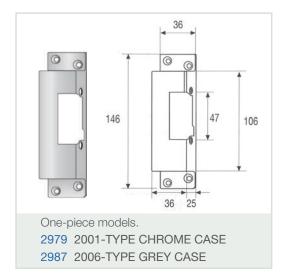
### Cases. Surface lock release

**CASES** 

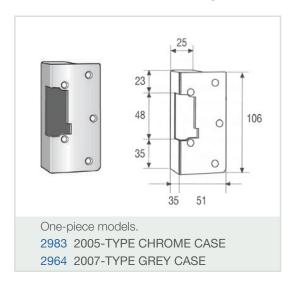
Metallic trim along with an electrical mechanism makes up a surface-mounted lock release.

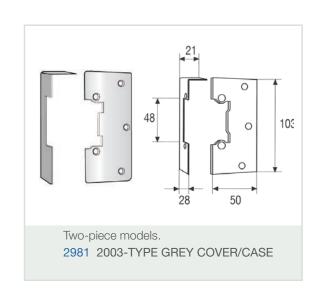


### 1. VISIBLE ATTACHMENT ON FRAME



### 2. HIDDEN FRAME ATTACHMENT







### **Power Supplies**







2070	BATTERY 12V/2,2A ACID LEAD
2337	BATTERY 12V/7A ACID LEAD
3264	ELECTRIC LOCK COMMANDER. Vac

### **Door retainers**

Door retaining magnets, designed for fire doors, are supplied with the backing plate kit both fixed and moving. They are inverted operation at 24 Vdc with a holding force of 50 Kg.







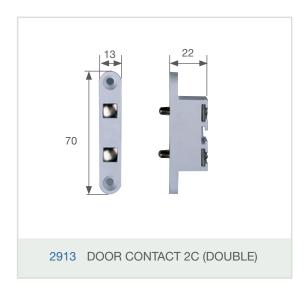




### **Contacts**

The spring contacts are flush mounted in the frame and door respectively, leaving no visible wires, providing a reliable connection.

When the door is closed, the pistons that push against the other half keep up the electrical continuity desired. Approximate cut-off power: 1.5 Amp.





The 4C contacts with microswitch are installed in a long shield lock release (with latch/deadbolt). When locked with a key, the pin pushes the lever which then signals the microswitch. Recommended for installations where it is necessary to check if all the doors of a building are locked or to activate any electrical device (service fan, etc..)







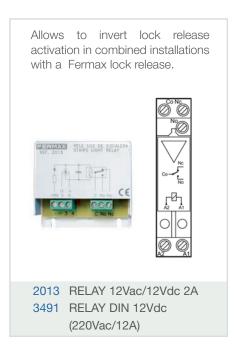
### Cable conduits

Unlike spring contacts, they allow flow of current, even with the door open.





### Relays

















NTROL FERMAX

RADIOFREQUENCY CITYLINE MEMOKEY CITYLINE PROXIMITY



























### Radiofrequency. 433 MHz

### STORE SYSTEM

Trinary dip-switch configuration. Exit button input. Output 12Vac for electric lock activation. Power supply 230Vac. DIN6 casing. For electrical cabinets. Dimensions: 105x90x60.



7903 RF RECEIVER SHOPS/STORES

For installation inside audio or video door entry systems.



7900 COMPATIBLE SINGLE-CHANNEL RECEIVER Trinary dip-switch configuration. A single code for all emitters.



79561 DUAL CHANNEL EMITTER 433 MHz TRINARY

### SECURITY SYSTEM

Maximum 10 users. Exit button input. Output relay (2A,NC/NA). Programmable timing. Monostable/bistable operation. Power supply 12v AC/DC. Small dimensions, for concealing in electrical closets. Dimensions: 90x60x20.



7960 SECURITY RECEIVER

COLLECTIVE GARAGE SYSTEM

Trinary dip-switch configuration. Admits extension card for a 2<sup>nd</sup> channel for auxiliary activation (e.g. lift/elevator). Relay output (2A,NC/NA). Power supply 230Vac. ABS IP65 casing. Dimensions: 91x198x57.



7952 SINGLE-CHANNEL RECEIVER 433MHz 7934 SECOND-CHANNEL CARD

Digital transmitters have one unique code per user. Indicated for access to the garage/car park and remote control of devices: lights, shutters, sirens...



24651 DIGITAL EMITTER

Trinary dip-switch configuration. A single code for all emitters.



79561 DUAL CHANNEL EMITTER 433MHz TRINARY

### **Cityline Memokey**

### **TECHNICAL FEATURES:**

- Maximum capacity: 100 codes.
- Power supply 12Vac/12Vdc. Power supply 12Vac/1,5A (ref.4800) recommended.
- Input for indoor exit pushbutton.
- Input for free access pushbutton.
- 2 relay outputs (2A,NC/No), for lock release activation and alarm connection. Programmable timing.
- Each code can activate one or two relays simultaneously.
- Code accepted/rejected acoustic confirmation.
- Programming from keypad with master code.

### **SPECIFICATIONS**

Dimensions: 130x128 Reader 115x114x45 Flush box 130x128x33 Surface box 54 Environmental protection (IP): 07 Shock resistance (IK): 12 Vac/dc Power supply (V): 40/110 Consumption (mA) w/lock.: -15° to 55° C Operating temperature:



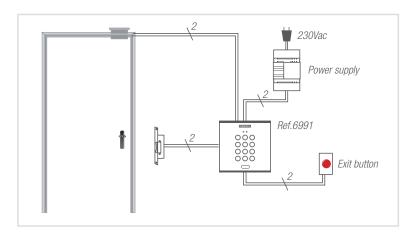
### **REFERENCES**

#### 6991 CITYLINE MEMOKEY READER

Outdoor/Indoor. Integrated in aluminium panel. Backlit keypad manufactured in zamak with signal LEDs.

Flush box included (ref.8948). Surface box optional (ref.7061).

### **INSTALLATION**



-15° to 55°C

### **Cityline Proximity**

### **TECHNICAL FEATURES:**

- Up to 400 users.
- Power supply 12 Vac/Vdc. Power supply 12Vac/1,5A (ref.4800) recommended.
- Exit button input.
- Door sensor input. Forced/open door detection.
- Lock release triggered by relay. Programmable timing.
- LED and buzzer confirm acceptance or rejection of the card presented.
- Programming help LEDs (authorizations, cancellations).
- User programming from reader using master card or by PC (optional).



### **SPECIFICATIONS**

Operating temperature:

 Dimensions:
 130x128

 Reader
 130x128

 Flush box
 115x114x45

 Surface box
 130x128x33

 Environmental protection (IP):
 54

 Shock resistance (IK):
 07

 Power supply (V):
 12 Vac/dc

 Consumption (mA) w/lock.:
 90

### **REFERENCES**

6992 CITYLINE PROXIMITY READER

Outdoor/Indoor. Integrated in aluminium panel. Flush box included (ref.8948). Surface box optional (ref.7061).

11a1 (161.7 00 1)

2306 PROGRAMMING KEYPAD

24661 READER-PC INTERFACE

For managing user authorizations/cancellations via PC (optional). The WINPROX software may be downloaded from your formax com-

downloaded from www.fermax.com

#### Identifiers

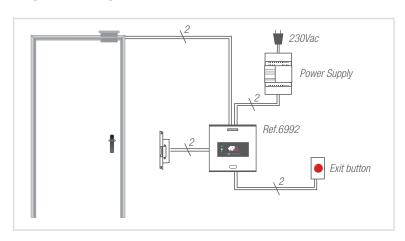


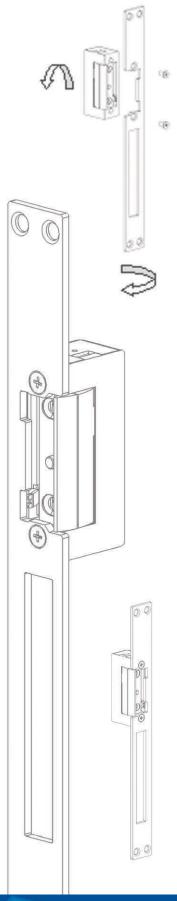
23361 PROXIMITY CARD WITHOUT MAGNETIC STRIP

2336 PROXIMITY CARD WITH MAGNETIC STRIP

44501 PROXIMITY KEYRING

### **INSTALLATION**





ASSEMBLY INSTRUCTIONS

FERMAX

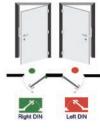


Right DIN



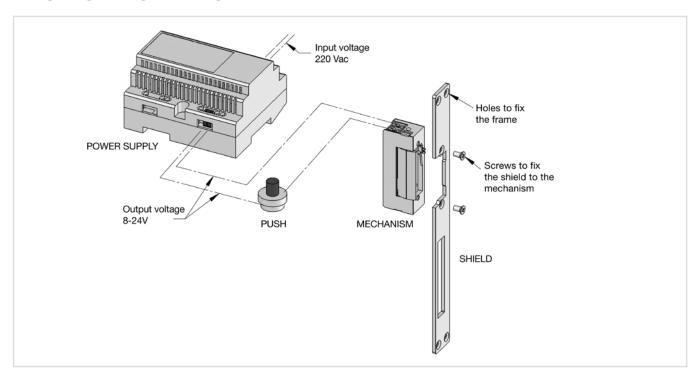
### Hand change: Left DIN - Right DIN

- Remove the screws on the front, removing the shield from the mechanism.
- Turn the shield 180° horizontally and the mechanism vertically.
- Screw back on again to fit the shield to the mechanism.





### **ELECTRICAL INSTALLATION**



### **ASSEMBLY TIPS**

Before making electrical connections, please check the lock release electrical specifications as well as the voltage and type of current supplied by the power supply.

Remove any remaining traces of material from the framework where the lock release will be introduced.

Do not apply any kind of paint or coating to the lock release or its shield.

Do not grease the mechanism.

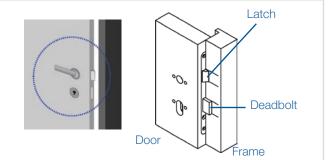
Do not remove the mechanism cover.

Keep the lock release free from moisture.

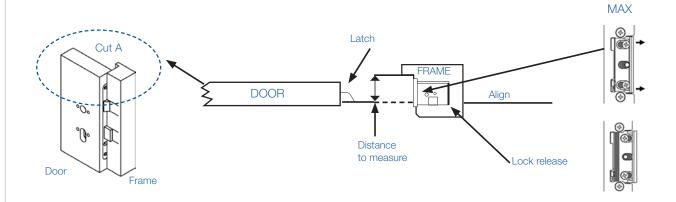


### Lock assembly

1 Close the door and mark the latch position (and the deadbolt if there is one) on the frame to define the vertical position.



2 Align the flat surfaces of the latch and the lock release deadbolt so that they are parallel and with a minimum clearance, so that the latch does not exert pressure on the lock release bolt. Measure the distance indicated with which you can define the horizontal position.



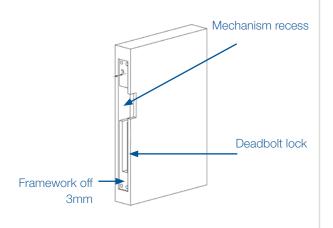
NOTE: With automatic mechanisms A, the latch must press on the bolt mechanism (approx. 3mm) for it to work automatically.

The MAX version adjustable latch allows an exact fit between latch and bolt up to 4mm.

3 When the vertical and horizontal position of the lock release has been defined, make a hole in the door frame to fit the mechanism and lock.

The box housing and lock mechanisms must have a minimum depth of 31mm (or higher for series 620, 460, 470 or if the lock bolt requires more depth).

4 Make a 3mm framework to fit the shield, to keep it in the same plane.

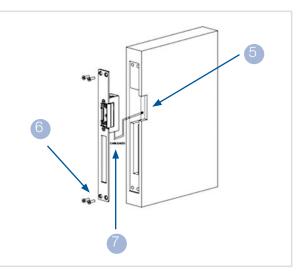




### Lock assembly

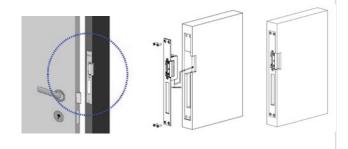
- Additionally, a fitting is needed on the side for movement of the 5 lock release latch/bolt. In the 410 Series this is no longer required, as it has a radial latch.
- 6 Mark the holes for the anchor screws.

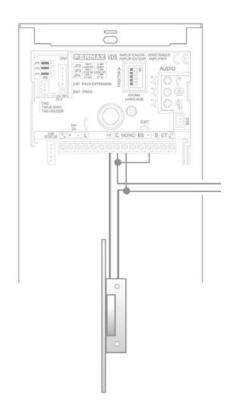
  Must be drilled to fit the holes in the shield
- 7 The wiring hole must be made inside, near the lock release casing.

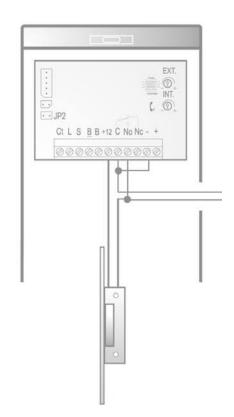


8 Connect the wires. Fit the lock release in the recess and tighten the holding screws.

The shield surface and frame must be on the same plane so that the door can close properly.

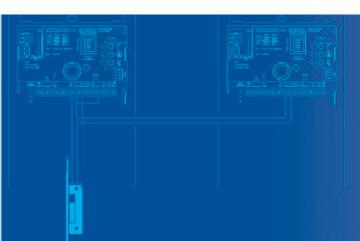






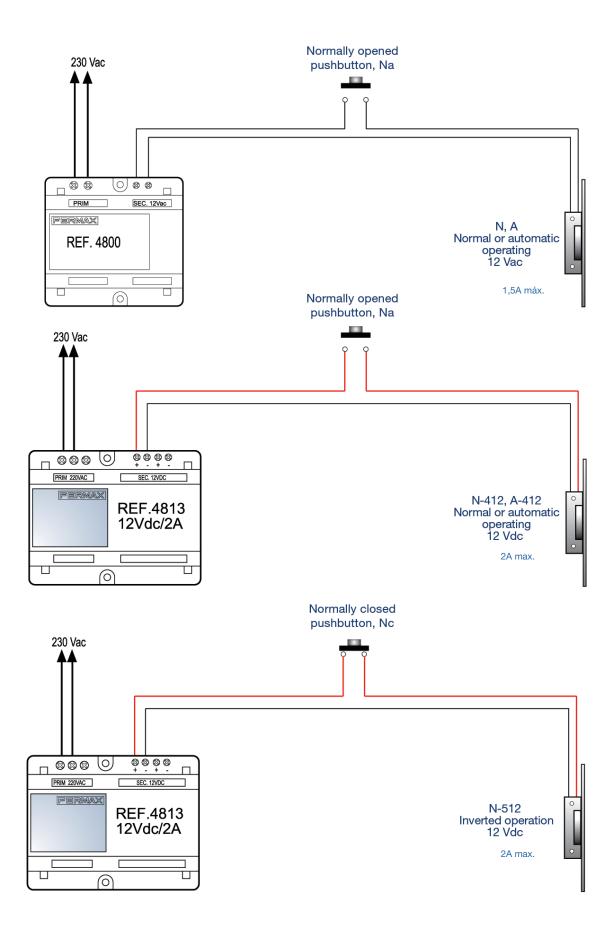
# INSTALLATION DIAGRAMS







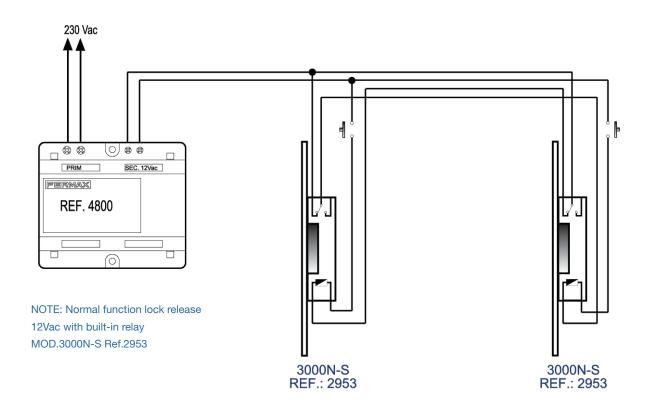
### DOOR OPENING BY LOCK RELEASE OPERATION



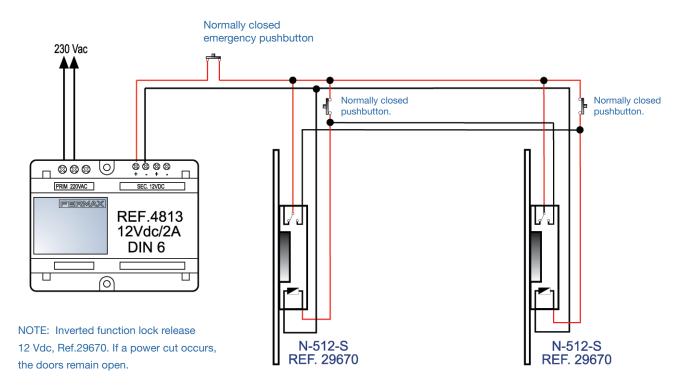


### DOOR OPENING WITH AUTOMATIC BLOCKING OF ANOTHER DOOR.

#### NORMAL OPERATION 12 Vac

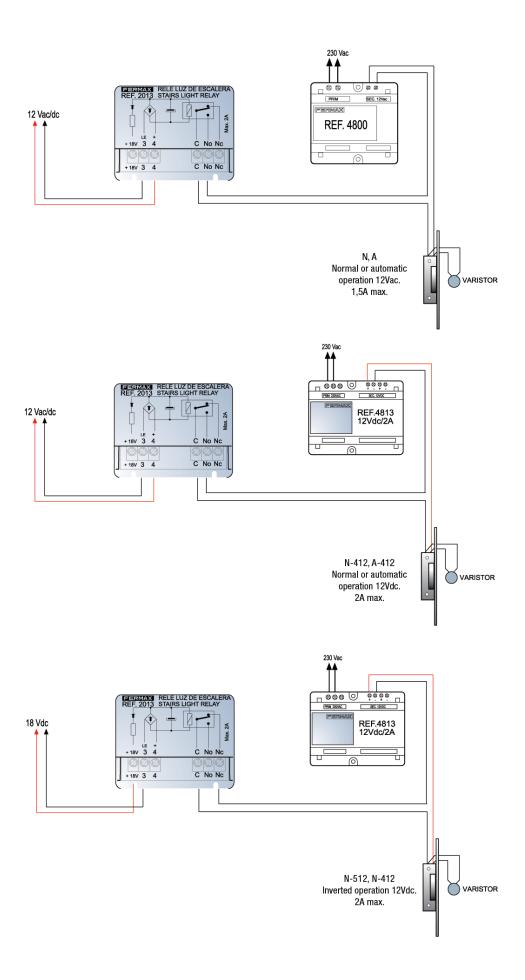


### **INVERTED OPERATION 12 Vdc**



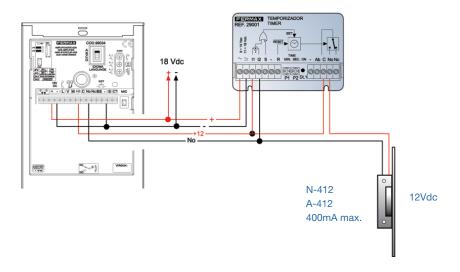


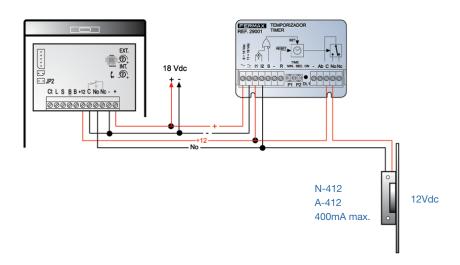
### INSTALLATION WITH RELAY REF.2013 ACCORDING TO LOCK RELEASE OPERATING TYPE

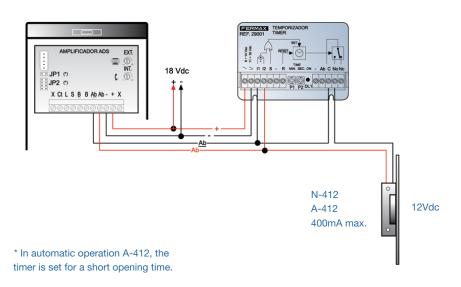




### **VDS/ADS DOOR OPENING WITH TIMER**

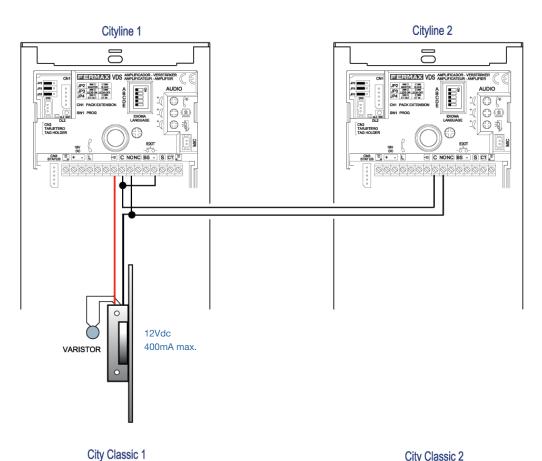


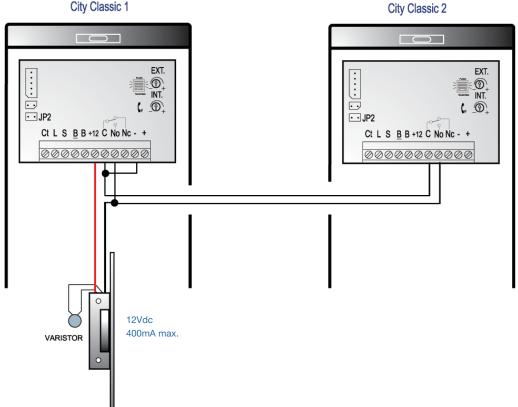






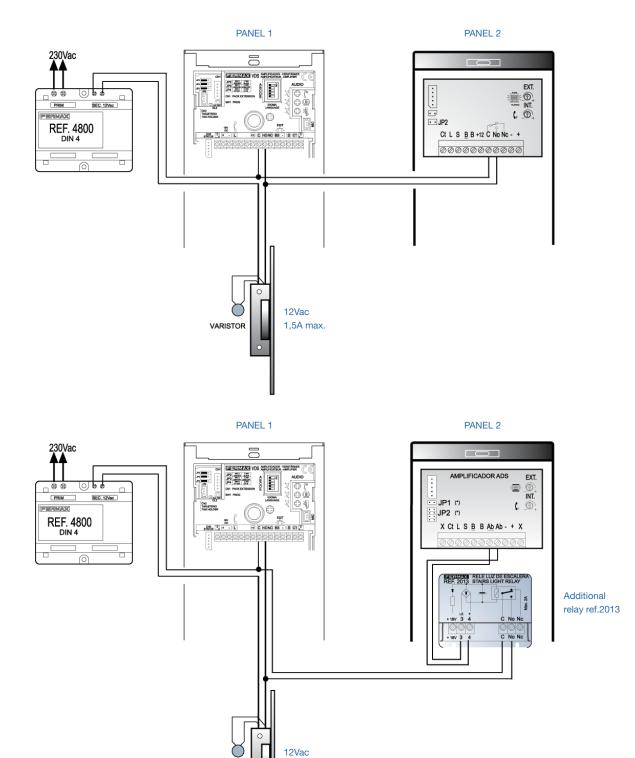
### **OPENING THE SAME DOOR (12Vdc)**







### **OPENING THE SAME DOOR (12Vac)**



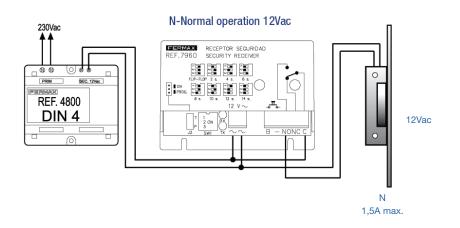
1,5A max.

VARISTOR



### **INSTALLATION DIAGRAMS**

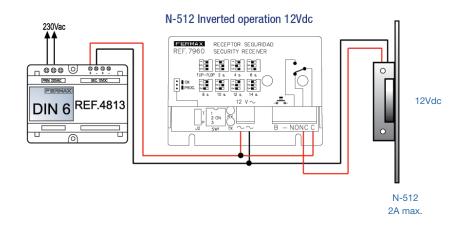
### REMOTE CONTROL OPENING. RECEIVER REF.7960





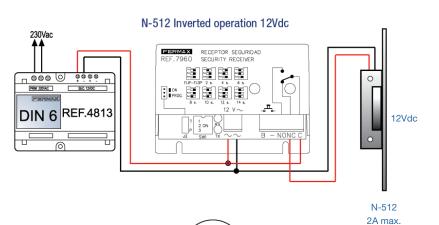
4 s.

Monostable receiver configuration. Each pressing of the emitter will open the door during 4s.





Monostable receiver configuration. Each pressing of the emitter will open the door during 4s.





Flip-flop receiver configuration. Each pressing of the emitter will open or close the door.



NOTE: Normal operation door release 12Vac, Ref.3071. Inverted operation door release 12Vdc, Ref.2967. This receiver requires remote controls Ref.24651.

Remote control Ref.24651 emitter

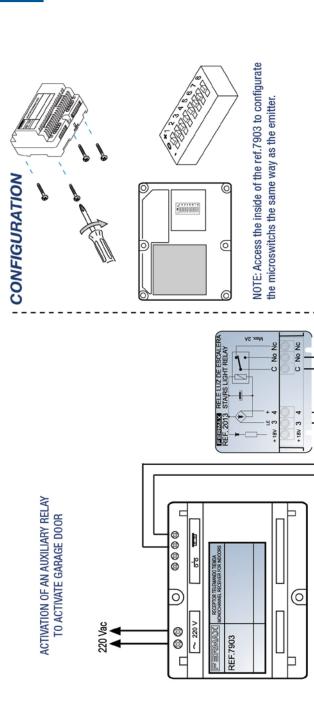
9999999

Requires emitter ref.79561.

OPENING OF A NORMAL OPERATION

**DOOR RELEASE 12Vac** 

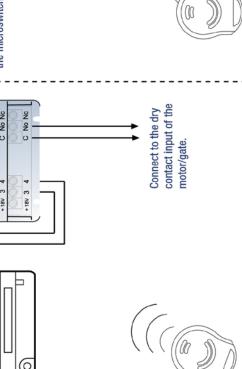
**FERMAX** 



0

**⊗** 

REF.7903



12 Vac

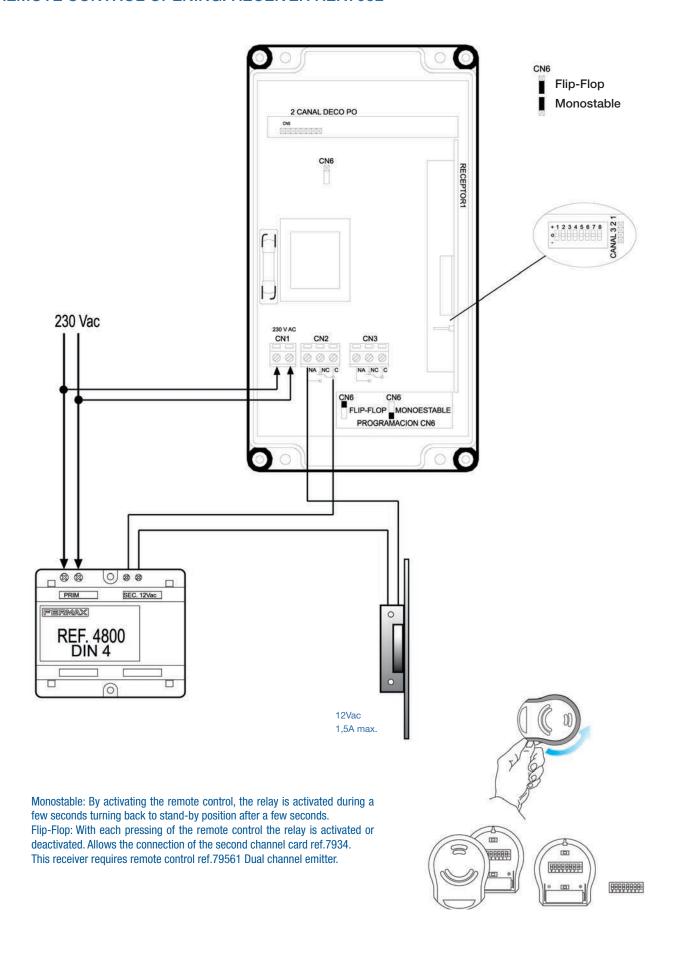
0

6

NOTE: When the emitter 79561 is activated the receiver 7903 will supply a voltage of 12 Vac during a few seconds.



### **REMOTE CONTROL OPENING. RECEIVER REF.7952**



## REFERENCE INDEX







### REFERENCE INDEX

REF.	DESCRIPTION	PAGE
1076	MAGNETIC CONTACT	48
2013	RELAY 12Vac/12Vdc 2A	49
2060	EMERGENCY BATTERY ADAPTOR 12VDC	47
2070	BATTERY 12V/2,2A ACID LEAD	47
2306	PROGRAMMING KEYPAD	54
2336	PROXIMITY CARD WITH MAGNETIC STRIP	54
2337	BATTERY 12V/7A ACID LEAD	47
2796	LOCK RELEASE MOD.500ND-412-MX	20
2797	LOCK RELEASE MOD.500A-412-MX	20
2798	LOCK RELEASE MOD.500AD-412-MX	20
2799	LOCK RELEASE MOD.500N-512-MX	20
2802	LOCK RELEASE MOD.410N-L22-MAX	18
2803	LOCK RELEASE MOD.410ND-L22-MAX	18
2804	LOCK RELEASE MOD.410A-L22-MAX	18
2805	LOCK RELEASE MOD.410AD-L22-MAX	18
2806	LOCK RELEASE MOD.410ND-412-P22-MAX	18
2807	LOCK RELEASE MOD.410AD-412-P22-MAX	18
2808	LOCK RELEASE MOD.410N-512-P22-MAX	18
2809	LOCK RELEASE MOD.410N-412-L22-MAX	18
2810	LOCK RELEASE MOD.410ND-412-L22-MAX	18
2811	LOCK RELEASE MOD.410A-412-L22-MAX	18
2812	LOCK RELEASE MOD.410AD-412-L22-MAX	18
2813	LOCK RELEASE MOD.410N-512-L22-MAX	18
2814	UNIVERSAL LOCK RELEASE MOD.450A-412-M	16
2815	UNIVERSAL LOCK RELEASE MOD.450Aa-S	16
	UNIVERSAL LOCK RELEASE MOD.450AD-412-M	16
2816 2817	UNIVERSAL LOCK RELEASE MOD.450Aa-412-S	16
2818	UNIVERSAL LOCK RELEASE MOD.450AD-M	16
2819	UNIVERSAL LOCK RELEASE MOD.450AaD-412-S	16
2820	UNIVERSAL LOCK RELEASE MOD.450AD-S	16
2821	UNIVERSAL LOCK RELEASE MOD. 450AaD-S	16
2822	UNIVERSAL LOCK RELEASE MOD.450A-M	16
2824	UNIVERSAL LOCK RELEASE MOD.450N-412-M	16
2826	UNIVERSAL LOCK RELEASE MOD.450N-512-M	16
2828	UNIVERSAL LOCK RELEASE MOD.450N-512-N	
	UNIVERSAL LOCK RELEASE MOD.450ND-412-M	16
2830	UNIVERSAL LOCK RELEASE MOD.450ND-M	
2832		16
2834	UNIVERSAL LOCK RELEASE MOD.450ND-S  UNIVERSAL LOCK RELEASE MOD.450N-M	16
2836 2838	GX-TYPE SHIELD	16
2868	MX-TYPE SHIELD	45
2869 2870	MECHANISM MOD.850A  LOCK RELEASE MOD.520N-PX	26
2871	LOCK RELEASE MOD 520A-PX	22
2872	LOCK RELEASE MOD 520N-412-PX	22
2873	LOCK RELEASE MOD 520N-512-PX	22
2874	LOCK RELEASE MOD 620N-SX	21
2875	LOCK RELEASE MOD.620Aa-SX	21
2876	LOCK RELEASE MOD.620N-GX	21
2877	LOCK RELEASE MOD.620Aa-GX	21
2878	ELECTRIC RIM LOCK MOD.961-DOUBLE KEY	38
2879	ELECTRIC RIM LOCK MOD.962-DOUBLE KEY+PUSHBUTTON	38
2880	LOCK RELEASE MOD.500N-SX	20

REF.	DESCRIPTION	PAGE
2882	LOCK RELEASE MOD.500A-SX	20
2883	LOCK RELEASE MOD.500AD-SX	20
2884	LOCK RELEASE MOD.500N-MX	20
2885	LOCK RELEASE MOD.500ND-MX	20
2886	LOCK RELEASE MOD.500A-MX	20
2887	LOCK RELEASE MOD.500AD-MX	20
2888	LOCK RELEASE MOD.500N-412-SX	20
2889	LOCK RELEASE MOD.410N-412-P22-MAX	18
2890	LOCK RELEASE MOD.410A-412-P22-MAX	18
2891	B22-TYPE GREY SHIELD	44
2892	L22-TYPE GREY SHIELD	45
2893	M-TYPE SHIELD	45
2894	P22-TYPE GREY SHIELD	44
2895	T-TYPE GREY SHIELD	45
2897	FLOOR RETAINING MAGNET 24VDC/50 Kg	47
2899	WALL RETAINING MAGNET 2 INPUT 24VDC/50 Kg	47
2907	UNIVERSAL LOCK RELEASE AD-424-S	17
2908	UNIVERSAL LOCK RELEASE A-424-S	17
2909	UNIVERSAL LOCK RELEASE A-S	17
2910	UNIVERSAL LOCK RELEASE AD-S	17
2911	UNIVERSAL LOCK RELEASE N-S	17
2912	UNIVERSAL LOCK RELEASE ND-S	17
2913	DOOR CONTACT 2C (DOUBLE)	48
2917	LOCK RELEASE A-2001 CHROME	29
2922	DOOR CONTACT 3C (TRIPLE)	48
2923	LOCK RELEASE N-2001 CHROME	29
2924	UNIVERSAL LOCK RELEASE N-G	17
2925	UNIVERSAL LOCK RELEASE ND-G	17
2926	UNIVERSAL LOCK RELEASE A-G	17
2927	UNIVERSAL LOCK RELEASE AD-G	17
2940	LOCK RELEASE N-2003 AL.ANOD	31
2942	LOCK RELEASE A-2003 AL.ANOD	31
2948	LOCK RELEASE N-2005 CHROME	30
2950	LOCK RELEASE A-2005 CHROME	30
2952	LOCK RELEASE N-2007 GREY	30
2953	LOCK RELEASE MOD.3000N-S	19
2954	LOCK RELEASE A-2007 GREY	30
2956	LOCK RELEASE MOD,460N BISEL	23
2958	UNIVERSAL LOCK RELEASE N-412-S	17
2961	CRYSTAL LOCK RELEASE MOD.CA CHROME	40
2962	UNIVERSAL LOCK RELEASE N-424-S	17
2964	2007-TYPE GREY CASE	46
2967	UNIVERSAL LOCK RELEASE N-512-S	17
2968	UNIVERSAL LOCK RELEASE N-524-S	17
2969	LOCK RELEASE MOD,9000N GREY	25
2909	LOCK RELEASE MOD.9000Aa GREY	25
2973	S-TYPE SHIELD  D TYPE CREY SHIELD	44
2974	P-TYPE GREY SHIELD	44
2975	G-TYPE GREY SHIELD	45
2976	1001-TYPE BROWN SHIELD. LEFT DIN	45
2977	1002-TYPE BROWN SHIELD. RIGHT DIN	45
2979	2001-TYPE CHROME CASE	46
2981	2003-TYPE GREY COVER/CASE	46
2983	2005-TYPE CHROME CASE	46
2984	LOCK RELEASE MOD.8000N WITH CHAIN	39



### REFERENCE INDEX

REF.	DESCRIPTION	PAGE
2985	GE-TYPE SHIELD	45
2987	2006-TYPE GREY CASE	46
2989	LOCK RELEASE MOD.NGB	32
2991	ELECTRIC RIM LOCK MOD.932 W/KEY+PUSHBUTT.	37
2996	CRYSTAL LOCK RELEASE MOD.CN CHROME	40
2997	CRYSTAL LOCK RELEASE MOD.CND CHROME	40
2998	CRYSTAL LOCK RELEASE MOD.CAD CHROME	40
3000	LOCK RELEASE N-2006 GREY	29
3002	LOCK RELEASE A-2006 GREY	29
3004	LOCK RELEASE MOD.6000N	33
3005	LOCK RELEASE MOD.6000A	33
3006	LOCK RELEASE MOD.6000AD	33
3007	ELECTRIC RIM LOCK MOD.931 DOUBLE KEY	37
	LOCK RELEASE MOD.470N	
3027	LOCK RELEASE MOD.470N-412	24
3028		24
3029	LOCK RELEASE MOD.470N-512	24
3030	LOCK RELEASE MOD.480N	34
3031	LOCK RELEASE MOD. 480Aa	34
3032	LOCK RELEASE MOD.480N-412	34
3033	LOCK RELEASE MOD.480N-512	34
3034	LOCK RELEASE MOD.490N	35
3035	LOCK RELEASE MOD.490Aa	35
3036	LOCK RELEASE MOD.490N-412	35
3037	LOCK RELEASE MOD.490N-512	35
3038	UNIVERSAL LOCK RELEASE A-412-S	17
3039	UNIVERSAL LOCK RELEASE N-412-G	17
3040	LOCK RELEASE MOD.410N-P22-MAX	18
3041	LOCK RELEASE MOD.410ND-P22-MAX	18
3042	ELECTRIC RIM LOCK MOD.933 W/KEY-NO PUSHBUTTON FUNCTION	37
3048	LOCK RELEASE MOD.410A-P22-MAX	18
3049	SX-TYPE SHIELD	44
3050	ELECTROMAGNETIC LOCK RELEASE FLUSH-MOUNTED 300KG	28
3051	SURFACE ELECTROMAGNETIC LOCK 500Kg	41
3052	SURFACE ELECTROMAGNETIC LOCK 300KG	41
3057	UNIVERSAL LOCK RELEASE MOD.450A-412-S	16
3058	UNIVERSAL LOCK RELEASE MOD.450AD-412-S	16
3059	UNIVERSAL LOCK RELEASE MOD.450ND-412-S	16
3061	LOCK RELEASE MOD.460N-412	23
3062	LOCK RELEASE MOD.460N-512	23
3063	LOCK RELEASE MOD.9000N-412 GREY	25
3064	LOCK RELEASE MOD.PN (panic)	36
3065	LOCK RELEASE MOD.PN-412 (panic)	36
3066	LOCK RELEASE MOD.PN-512 (panic)	36
3067	LOCK RELEASE MOD.PN-424 (panic)	36
3068	LOCK RELEASE MOD.410AD-P22-MAX	18
3069	UNIVERSAL LOCK RELEASE MOD.450A-S	16
3070	UNIVERSAL LOCK RELEASE MOD.450N-412-S	16
3071	UNIVERSAL LOCK RELEASE MOD.450N-S	16
3072	LOCK RELEASE MOD.6000N-412	33
3073	LOCK RELEASE MOD.6000N-512	33
3074	LOCK RELEASE MOD.NGB-412	32
3075	LOCK RELEASE MOD.NGB-412	32
3077	BRACKET L-2 FOR REF.3051	41

REF.	DESCRIPTION	PAGE
3079	Z BRACKET DOUBLE	41
3082	DOOR CONTACT 4C (MONITORED DEADBOLT)	48
3083	FLEXIBLE CONDUIT	49
3084	RIGID VANDAL PROOF CONDUIT	49
3088	L-TYPE GREY SHIELD	45
3089	53-TYPE GREY SHIELD	44
3093	UNIVERSAL LOCK RELEASE AD-412-S	17
3094	CRYSTAL LOCK RELEASE MOD.CIIA-SX INOX	27
3095	CRYSTAL LOCK RELEASE MOD.CIIN-SX INOX	27
3096	CRYSTAL LOCK RELEASE MOD.CIIN-412-SX INOX	27
3098	CRYSTAL LOCK RELEASE MOD.CIIN-512-SX INOX	27
3101	AUTOMATIC LOCK MOD.850/50A	26
3102	AUTOMATIC LOCK MOD.850/25A	26
3103	AUTOMATIC LOCK MOD.850/35A	26
3104	AUTOMATIC LOCK MOD.850/30A	26
3105	LOCK RELEASE MOD.500ND-412-SX	20
3106	LOCK RELEASE MOD.500A-412-SX	20
3107	LOCK RELEASE MOD.500AD-412-SX	20
3108	LOCK RELEASE MOD.500N-512-SX	20
3109	LOCK RELEASE MOD.500N-412-MX	20
3264	ELECTRIC LOCK COMMANDER VAC	47
3491	RELAY DIN 12VDC (220VAC/12A)	49
4800	POWER SUPPLY 12VAC/1,5A	47
4813	POWER SUPPLY 12VDC/2A	47
6991	CITYLINE MEMOKEY READER	53
6992	CITYLINE PROXIMITY READER	54
7061	SURFACE BOX S-1	53
7900	COMPATIBLE SINGLE-CHANNEL RECEIVER	52
7903	RF RECEIVER SHOPS/STORES	52
7934	SECOND-CHANNEL CARD	52
7952	SINGLE-CHANNEL RECEIVER 433MHZ	52
7960	SECURITY RECEIVER	52
8948	FLUSH BOX S-1	53,54
23361	PROXIMITY CARD WITHOUT MAGNETIC STRIP	54
24651	DIGITAL EMITTER	52
24661	READER-PC INTERFACE	54
28148	UNIVERSAL LOCK RELEASE MOD.450A-412-M MAX	16
28168	UNIVERSAL LOCK RELEASE MOD.450AD-412-M MAX	16
28188	UNIVERSAL LOCK RELEASE MOD.450AD-M MAX	16
28208	UNIVERSAL LOCK RELEASE MOD.450AD-S MAX	16
28228	UNIVERSAL LOCK RELEASE MOD.450A-M MAX	16
28248	UNIVERSAL LOCK RELEASE MOD.450N-412-M MAX	16
28268	UNIVERSAL LOCK RELEASE MOD.450N-512-M MAX	16
28288	UNIVERSAL LOCK RELEASE MOD.450N-512-S MAX	16
28308	UNIVERSAL LOCK RELEASE MOD.450ND-412-M MAX	16
28328	UNIVERSAL LOCK RELEASE MOD.450ND-M MAX	16
28348	UNIVERSAL LOCK RELEASE MOD.450ND-S MAX	16
28368	UNIVERSAL LOCK RELEASE MOD.450N-M MAX	16
29001	TIMMER	49
29078	UNIVERSAL LOCK RELEASE AD-424-S MAX	17
29088	UNIVERSAL LOCK RELEASE A-424-S MAX	17
29098	UNIVERSAL LOCK RELEASE A-S MAX	17
29108	UNIVERSAL LOCK RELEASE AD-S MAX	17
29118	UNIVERSAL LOCK RELEASE N-S MAX	17
	S E IOO LE EOOK FILLED IOL IV O IVIAV	17

### FERMAX

### REFERENCE INDEX

REF.	DESCRIPTION	PAGE
29128	UNIVERSAL LOCK RELEASE ND-S MAX	17
29178	LOCK RELEASE A-2001 CHROME MAX	29
29238	LOCK RELEASE N-2001 CHROME MAX	29
29248	UNIVERSAL LOCK RELEASE N-G MAX	17
29258	UNIVERSAL LOCK RELEASE ND-G MAX	17
29268	UNIVERSAL LOCK RELEASE A-G MAX	17
29278	UNIVERSAL LOCK RELEASE AD-G MAX	17
29408	LOCK RELEASE N-2003 AL.ANOD MAX	31
29428	LOCK RELEASE A-2003 AL.ANOD MAX	31
29488	LOCK RELEASE N-2005 CHROME MAX	30
29508	LOCK RELEASE A-2005 CHROME MAX	30
29528	LOCK RELEASE N-2007 GREY MAX	30
29548	LOCK RELEASE A-2007 GREY MAX	30
29580	LOCK RELEASE MOD.3000N-412-S	19
29588	UNIVERSAL LOCK RELEASE N-412-S MAX	17
29620	LOCK RELEASE MOD.3000N-424-S	19
29628	UNIVERSAL LOCK RELEASE N-424-S MAX	17
29670	LOCK RELEASE MOD.3000N-512-S	19
29678	UNIVERSAL LOCK RELEASE N-512 MAX	17
29680	LOCK RELEASE MOD.3000N-524-S	19
29688	UNIVERSAL LOCK RELEASE N-524-S MAX	17
30008	LOCK RELEASE N-2006 GREY MAX	29
30028	LOCK RELEASE A-2006 GREY MAX	29
30388	UNIVERSAL LOCK RELEASE A-412-S MAX	17
30398	UNIVERSAL LOCK RELEASE N-412-G MAX	17
30578	UNIVERSAL LOCK RELEASE MOD.450A-412-S MAX	16
30588	UNIVERSAL LOCK RELEASE MOD.450AD-412-S MAX	16
30598	UNIVERSAL LOCK RELEASE MOD.450ND-412-S MAX	16
30698	UNIVERSAL LOCK RELEASE MOD.450A-S MAX	16
30708	UNIVERSAL LOCK RELEASE MOD.450N-412 S MAX	16
30718	UNIVERSAL LOCK RELEASE MOD.450N-S MAX	16
30938	UNIVERSAL LOCK RELEASE AD-412-S MAX	17
44501	PROXIMITY KEYRING	54
79561	DUAL-CHANNEL EMITTER 433MHZ TRINARY	52
88101	RELAY 18VDC DOUBLE CONTACT	49





























