NINZ FIREDOORS	**Ninz s.p.a. Corso trento, 2/A** **I-38061 ALA (TN) / ITALY** www.ninz.it **Tel. + 39 0 464 678300** **Fax. + 39 0 464 679025** info@ninz.it	**Security Electromagnet Art. 13700TD**	**A024-GB** **12/12**

CE

Denomination	Security electromagnet	*Commercial codes*
Manufacturer	Opera s.r.l. via Portogallo 43 41122 – Modena (MO) – ITALY	**Security electromagnet art. 13700TD**
Standard	Electromagnetic compatibility EMC – UNI CEI 70011	**Suitable for 1 wing doors or for active (main) wing of 2 wing doors**
Certificate No.	0123/02	

SYMBOLS USED

CAUTION
Indicates danger for persons and material. Failure to observe the warnings marked by this symbol may have serious consequences such as injury and damage to material.

ATTENTION
Indicates danger of damage to material. Failure to observe the warnings marked by this symbol may have the consequence of damage to material.

NOTE
Technical warning of particular importance.

DESCRIPTION OF THE PRODUCT
Security electromagnet with 300Kg holding force, state sensor and reclosing timer - adjustable from 0 to 90 seconds. Variable 12/24 Vdc power supply by means of specific jumper. Electromagnet body in silver anodized aluminium, armature plate in nickel-plated steel and armature plate base in stainless steel.

OPERATION
By making the armature plate adhere perfectly to the electromagnet and supplying power, the armature plate will be held by the electromagnet. Press the unlock button (not included) to make the electromagnet release the armature plate for the time which was set previously with the specific adjustment trimmer. Once the delay time has passed the electromagnet reactivates and retains the armature plate as soon as it adheres perfectly to the electromagnet. The electromagnet is ready for a new work cycle.

NOTICE
The electromagnet is designed to be installed on the internal side of the door and must not be exposed to atmospheric agents.

RECOMMENDATIONS
In order for the electromagnet to provide a high degree of security it is installed only on doors and frames which are in good condition. Therefore the door must be checked to ensure that it is installed correctly and that there is nothing which obstructs its movement.

Be careful that any seal gaskets installed on the door do not prevent correct operation of the electromagnet.

During installation the mounting instructions indicated in this document must be followed scrupulously. At the end of the work the installer must deliver this document to the door owner.

The armature plate base must be firmly fixed to the door while the armature plate must be slightly "floating" once fixed to the base. In order to achieve this effect the included rubber closing pad must be used as described in these instructions.

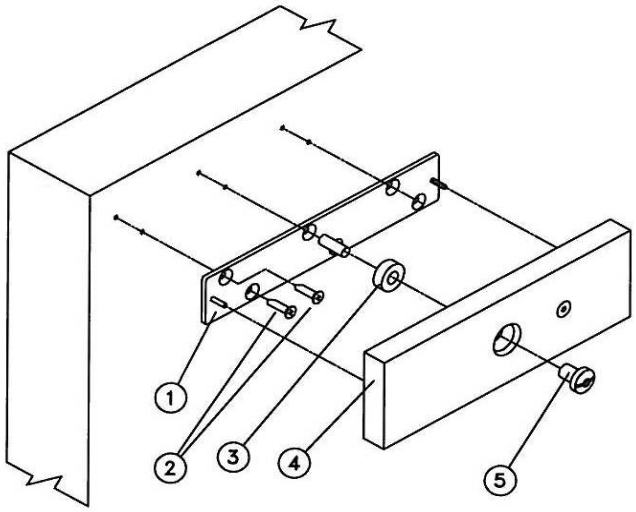
IMPORTANT: check the correct polarity and theposition of the jumpers before powering the electromagnet. The electromagnet could be damaged both by an inversion of polarity and incorrect positioning of the jumpers.

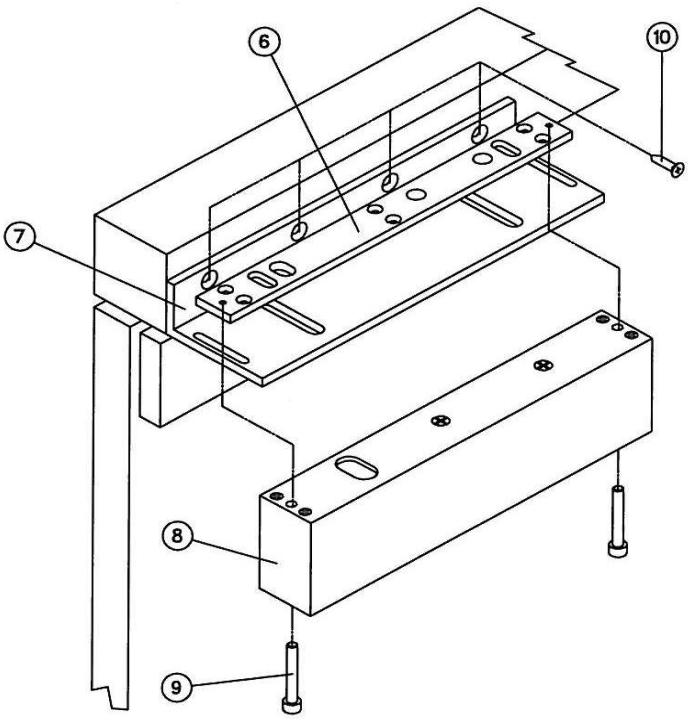
To return the door to the closed position the use of a door closer is recommended. In order to achieve maximum holding force the armature plate and the electromagnet must adhere perfectly.

All of the components provided and described must be positioned and installed in conformity to this document.

TECHNICAL CHARACTERISTICS

MODEL	DIMENSIONS mm	ELECTRICAL POWER Vdc	ABSORBED CURRENT	FORCE	HALL SENSOR	LED AND RELAY C./N.A / N.C. DOOR STATUS	TIME DELAY
13700 TD	250X41X24	12 / 24 Vdc	500mA a 12V 250mA a 24V	Up to 300 Kg.	YES	YES	0 – 90sec.





PACKAGE CONTENTS

Posizione	pz.	Descrizione
1	01	Base armature plate Art. 03003NZ
2	06	T.S.P. Phillips self-tapping screw Ø4.2x12
3	01	Rubber thickness Ø15 x Ø9.4 x 3.5
4	01	Armature plate
5	01	M6 female screw
6	01	Draw plate for 137
7	01	"L" bracket Art. 03700NZ
8	01	Electromagnet
9/A	02	T.C.E.I. M4x25 screw for installation with Art.03700NZ
9/B	02	T.C.E.I. M4x20 screw for standard installation
10	08	T.S.P. Phillips self-tapping screw Ø4x25

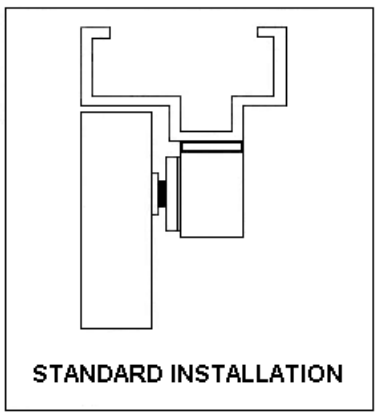
Required tools

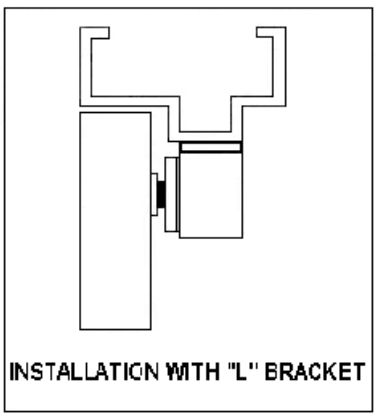
S3 Allen key (included), medium Phillips screwdriver or electric screwdriver, large flat screwdriver, electric drill and bit for steel Ø3mm e Ø10mm.

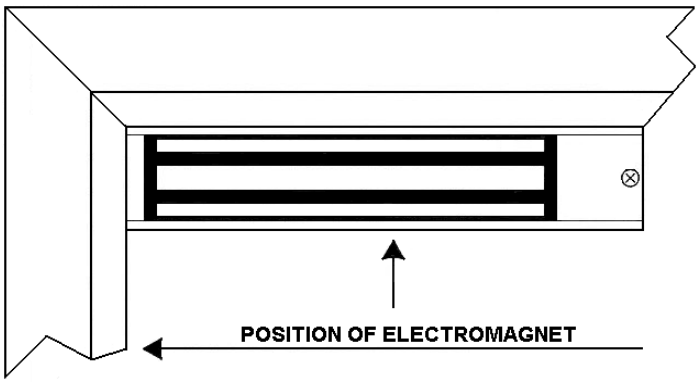
Notes

- For fixing the base armature plate, the "L" bracket or the 137 draw plate drill Ø3 holes.
- Screw in the female screw (5) all the way, then verify that the thickness of the rubber (3) allows the armature plate (4) to swivel in order to allow maximum adherence with the magnetic surface.
- The "L" bracket - Art. 03700NZ (6) is supplied with Univer and Rever glass doors.

INSTALLATION EXAMPLES







IMPORTANT

- Installation must be carried out by qualified personnel following and observing all the indications contained herein.
- For correct installation all included components must be installed.

☞
- Modifications with respect to the indications are not permitted, nor the use of components other than those indicated in the package contents.

- Before proceeding with installation ensure that all the contents of the package correspond, taking into consideration that the "L" bracket - Art. 03700NZ - is included only with Univer and Rever glass doors.Before proceeding with installation ensure that all the contents of the package correspond, taking into consideration that the "L" bracket - Art. 03700NZ - is included only with Univer and Rever glass doors.
- Ensure that the panic lock is applied on the door.

STANDARD INSTALLATION

– Position the electromagnet (8) in the upper corner opposite the hinge on the push side of the door.
– Using the draw plate for 137 (6) as a drilling template, drill 2 Ø3mm holes in correspondence with the two eyelets and fix with 2 Ø4x25 self-tapping screws (10).
– Fix the electromagnet (8) to the draw plate for 137 (6) using the T.C.E.I. M4x20 screws (9/B) and the provided S3 Allen key.
– Using the electromagnet (8) as a guide, identify the fixing point for the armature plate base (1) on the door. Using the same as a template, drill 6 Ø3mm holes in the relative fixing points.
– Fix the armature plate base (1) to the door using the 6 Ø4.2x12 self-tapping screws.
– Complete installation of the armature plate (4) inserting the rubber spacer (3) between the same and the armature plate base (1) and tighten the female screw (5) all the way as indicated in the diagram on page 2.

☞ – Ensure that the rubber spacer (3) allows the armature plate (4) to swivel in order to allow maximum adherence to the magnetic surface.

– Approach the door and ensure that it completes the entire travel and that the armature plate (4) adheres perfectly to the magnetic part of the electromagnet (8). If necessary, use the 2 Ø4x25 self-tapping screws (10) previously positioned in the eyelets of the draw plate for 137 (6) to adjust the position of the electromagnet (8).
– Once the electromagnet (8) has been positioned drill 6 Ø3mm holes in correspondence to the respective fixing points of the draw plate for 137 (6) and secure everything using the remaining 6 Ø4x25 self-tapping screws(10).
– Drill the frame with the Ø10 bit in correspondence with the wire run eyelet already present on the draw plate for 137 (6).
– Carry out the electrical connection and adjustment of the reclosing delay time with the specific trimmer as shown in the diagram on page 4.

△ – Pay particular attention to the correct polarity and the position of the jumpers before powering the electromagnet. The electromagnet could be damaged both by an inversion of polarity and incorrect positioning of the jumpers.

– Using the S3 Allen key and the T.C.E.I. M4x20 screws (9/B) fix the electromagnet (8) to the draw plate for 137 (6) checking that all of the screws have been correctly tightened.
– Powering the electromagnet (8) ensure that the door is retained. If the holding power is weak check that the armature plate (4) swivels slightly and is not fixed and that it adheres perfectly to the magnetic part of the electromagnet (8) and that the power supply voltage and jumper positions are correct.

INSTALLATION WITH "L" BRACKET

– Using the S3 Allen key and the T.C.E.I. M4x25 screws (9/A) fix the electromagnet (8) to the "L" bracket (7) using the draw plate for 137 (6) and position it in the upper corner opposite the hinge on the push side of the door. See the figure on page 2. Verify that the electromagnet (8) is able to run along the eyelets on the "L" bracket (7) without bumping into the door frame.
– Using the "L" bracket (7) as a drilling template, drill 4 Ø3mm holes in correspondence with the two eyelets and fix with 4 Ø4x25 self-tapping screws (10).
– Using the electromagnet (8) as a guide, identify the fixing point for the armature plate base (1) on the door. Using the same as a template, drill 6 Ø3mm holes in the relative fixing points.
– Fix the armature plate base (1) to the door using the 6 Ø4.2x12 self-tapping screws.
– Complete installation of the armature plate (4) inserting the rubber spacer (3) between the same and the armature plate base (1) and tighten the female screw (5) all the way as indicated in the diagram on page 2.

☞ – Ensure that the rubber spacer (3) allows the armature plate (4) to swivel in order to allow maximum adherence to the magnetic surface.

– Approach the door and ensure that it completes the entire travel and that the armature plate (4) adheres perfectly to the magnetic part of the electromagnet (8). If necessary adjust the position of the electromagnet (8) loosening the 2 T.C.E.I. M4x25 screws (9/A).
– Once the electromagnet (8) is positioned, tighten the 2 T.C.E.I. M4x25 screws (9/A).
– Carry out the electrical connection and adjustment of the reclosing delay time with the specific trimmer as shown in the diagram on page 4.

△ – Pay particular attention to the correct polarity and the position of the jumpers before powering the electromagnet. The electromagnet could be damaged both by an inversion of polarity and incorrect positioning of the jumpers.

– Powering the electromagnet (8) ensure that the door is retained. If the holding power is weak check that the armature plate (4) swivels slightly and is not fixed and that it adheres perfectly to the magnetic part of the electromagnet (8) and that the power supply voltage and jumper positions are correct.

MAINTENANCE

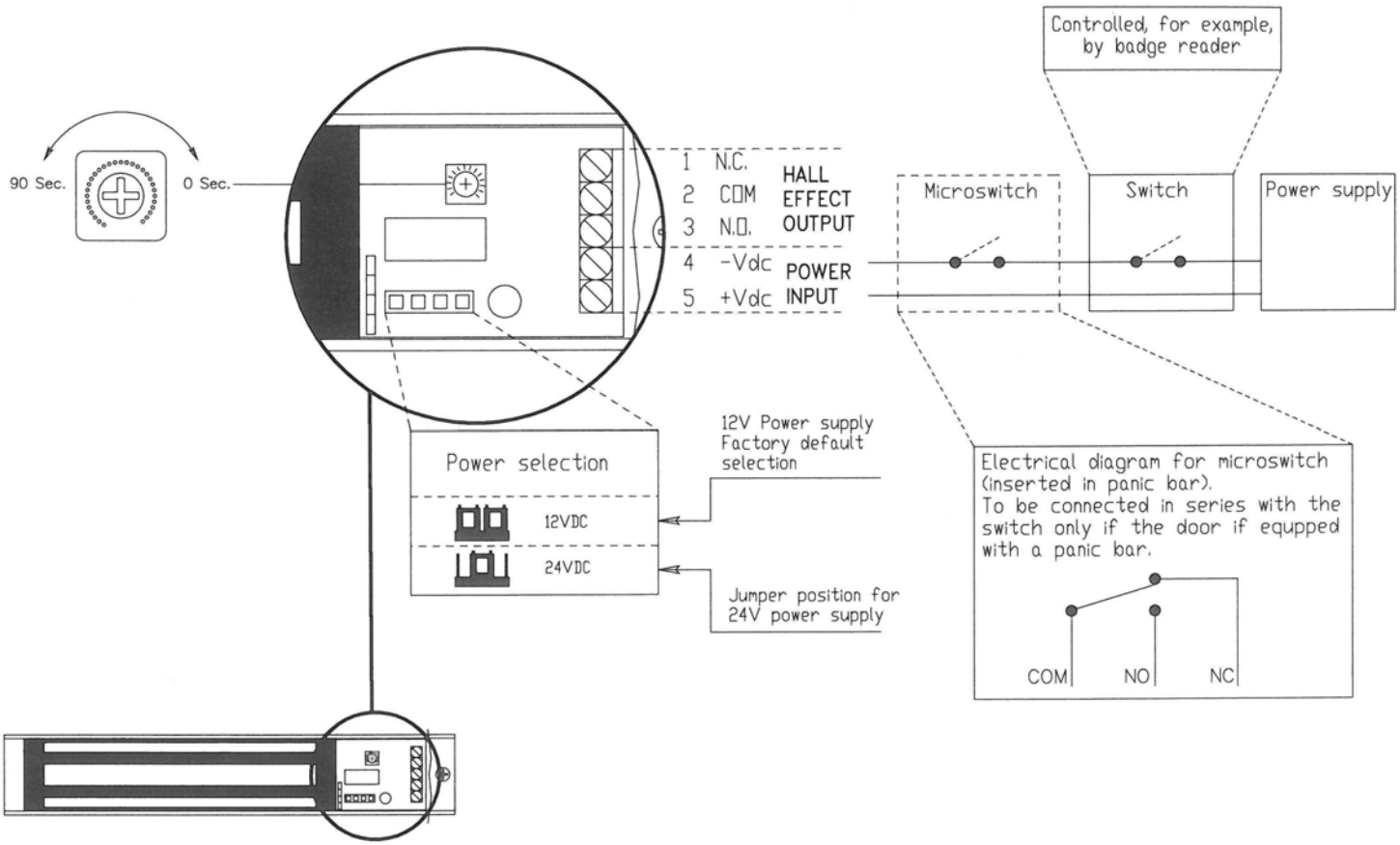
In order to guarantee suitability for use, the following routine maintenance checks should be carried out at intervals of no more than six months:

– Check that the electromagnet firmly retains the door and that pressing the unlock button releases it.

△ – Ensure that all the parts are firmly fixed to the frame and that the armature plate is able to oscillate around the central fixing screw.

– Ensure that the electromagnet and the armature plate are always clean.
– Do not clean the contact surfaces with abrasive and corrosive products.
– Avoid bumping the contact surfaces with pointed objects or foreign elements which could compromise the mirror-like characteristic.
– Protect the surfaces by applying a light layer of silicone lubricant.

CONNECTION DIAGRAM AND POWER SUPPLY SELECTION



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The electromagnet does not attract the armature plate.	No current arrives at the electromagnet	1. Check the cabling 2. Check the power supply
Magnetic force is weak	The electromagnet and the armature plate do not match up Power supply voltage is too low	1. Check the alignment between the magnet and the armature plate 2. Check that the armature plate is not fixed rigidly to the frame, but that the rubber closing pad allows it to oscillate 3. Check that the contact surfaces are free of burrs or dirt 4. Check the voltage value 5. Check the position of the jumpers
Delay in opening	Insertion of an additional diode on the electromagnet power supply	Remove the additional diode (an MOV is already predisposed inside the electromagnet to prevent the return of EMF)
The hall effect sensor does not work	The sensor and the magnet are not aligned	Check the alignment between the magnet and the armature plate

☞ These instructions must be delivered to the door owner who will conserve them to provide a technical document to personnel carrying out routine and special maintenance operations.