

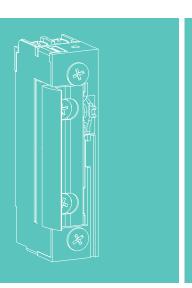


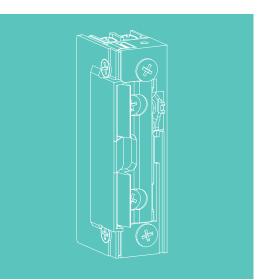


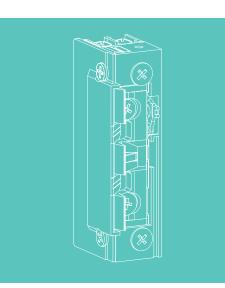
USE **EXCLUSIVELY FOR SPECIALIST COMPANIES!**

MACO PRODOOR

ELECTRICAL AND MECHANICAL DOOR OPENERS







INSTALLATION INSTRUCTIONS

Legends and abbreviations

MACO Protect	Multipoint locking systems/ door locks
Z-TS Z-TF	Cylinder-operated
A-TS	Automatic
A-TS with motor	Automatic with motorised unlocking
M-TS	Fully motorised



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Notes for using these installation instructions

Introduction

Read these instructions carefully before starting installation. Install all components correctly as described in these instructions and observe all safety instructions. If these instructions are not followed, no guarantee can be given for the proper functioning of the system. In the event of non-compliance, we accept no liability for injury to people or for material damage.

Coordinate the required fastening material with the structure and the corresponding load and add it if necessary. Any fixing material supplied only fulfils part of the requirements.

Target group of these instructions

These instructions are intended exclusively for specialised companies and personnel. The work described may only be carried out by specialist personnel.

Retention of documents / instruction

Keep these installation instructions in a safe place for future use and for maintenance.

Hand the operating instructions (download at www.maco.eu - order number 750258) to the end user and instruct them.

Please be sure to comply with your obligation to inform the end user! The complete delivery of a window or door element also includes operating and maintenance instructions!

We provide these for our customers in the download area of our website (www.maco.eu)!

Installation and operation

Before installation: test doors and safety elements. The integrity and ease of movement of the doors must be ensured.

All work (installation, adjustment, etc.) must be carried out in a de-energised state.

Unless otherwise stated, all dimensions are given in millimetres.

All illustrations are symbolic only.

Misprints, errors and changes are reserved.



Safety and warning notices

These installation instructions contain safety instructions before a sequence of actions that could result in personal injury or material damage. The hazard prevention measures described must be strictly adhered to. For the safety of personnel, there are safety instructions in the following 3 stages:



Imminent danger!

Failure to comply with such instructions will result in death or serious injury!



Possible imminent danger!

Failure to comply with such instructions can result in death or serious injury!



Possible imminent danger!

Failure to comply with such instructions may result in minor or slight injuries!

In addition, installation steps that require special attention are labelled with the following note:



Note to avoid material damage or errors when installing the fitting parts on the element.

Intended use

- > MACO e-openers are intended for installation in building doors (front and side entrance doors) and for remote opening of doors without door handles on the outside. This means releasing the latch of a closed door, not unlocking a locked door.
- > The day-release feature of the MACO e-opener/mechanical MACO daytime opener releases the latch for as long as the feature is activated. This allows anyone to open the door from the inside and the outside even without a door handle or key.

Reasonably foreseeable misuse

- > It is specifically considered misuse when:
- > > the product is not used for the intended purpose.
- > > the indicated load limits are exceeded.
- > > the product is installed in fire doors.



Notes for the processing

- > Install all fitting parts correctly as described in these instructions and follow all safety instructions!
- > To prevent electronics errors due to damaged cables, all milling/drilling holes in the area of the cable ducts must be deburred!
- > Assembly and electrical installations must be carried out according to these instructions. Incorrect wiring can lead to the destruction of the electronics.
- > When screwing them together, make sure that the cables are not damaged by the fastening screws!
- > Ensure that the components are in perfect condition before installation; damaged or defective components must not be used under any circumstances.
- > Use the fastening screws provided.
- > Do not use acid-crosslinking sealants, as these can lead to corrosion of the fitting parts.

Improper installation, non-conforming or unusual use, the use of system accessories not expressly approved by MACO, modifications or repair work not expressly authorised by MACO and improper servicing can lead to malfunctions and must be avoided. Any measures not expressly authorised by MACO shall result in the loss of all liability, warranty and any separately agreed guarantee claims.

Product features

Variants

The following variants are each available in 3 designs (see "Designs" section).



MECHANICAL OPENER ("daytime opener")

- > Allows the door to be opened during the day and does not require wiring.
- > When keyless opening of cylinder-operated mechanical or mechanical-automatic multipoint locking systems from the outside is desired.
- > Preferred for door locks with motorised opening, since in these cases the motor locks and unlocks the door.

Z-TS	Z-TF	A-TS	A-TS with motor	M-TS
V	/	/	/	\



ELECTRICAL OPENER ("e-opener")

- > E-openers are used for cylinder-operated mechanical and mechanical-automatic multipoint locking systems to open doors remotely using an intercom system, finger scan, keypad or wall switch.
- > All e-openers come standard with the additional mechanical day-release feature.

Z-TS	Z-TF	A-TS	A-TS with motor	M-TS
/	/	/	-	-



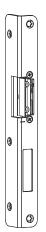
ELECTRICAL OPENER WITH LOCKING

> Allows the door to be opened with a time delay after electronic release and stays unlocked until the door closes.

Z-TS	Z-TF	A-TS	A-TS with motor	M-TS
/	/	/	-	-



Designs



STANDARD OPENER

- For striker plates and strike rails made of U6x32x9 and U6x32x6 (for PVC)
- > For angled striker plates with a long leg (for timber)



OPENER WITH INTEGRATED NARROW LATCH GUIDE

- For striker plates made of U6x24x6 with closed front edge in the latch area (for aluminium)
- For striker plates and strike rails made of U6x24x6 (for timber)
- > For striker plates and strike rails made of U8x28x8 (for timber)
- > For angled striker plates with a short leg (for timber)



OPENER WITH INTEGRATED LATCH GUIDE

- For striker plates made of U6x24x6
 with open front edge in the latch area (for aluminium)
- For striker plates and strike rails made of F24x3 (for aluminium)



OPENER WITH RECESS FOR LATCH GUIDE

 For F32x3 striker plates and strike rails with integrated latch guide (for PVC)

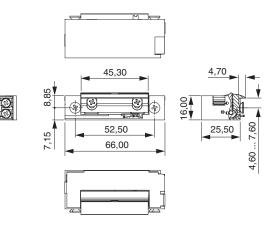
Technical data

Setting range	-2 +1 mm
Latch function	Radius latch
Pulling force	3750 N
Operating temperature	-15 +40 °C
Endurance cycles	200,000
Door hinge direction	Right/left use possible
Rated voltage (SELV)	10 24 V AC/DC
Rated resistance	43 Ω
AC power consumption	175 mA (10 V)
	200 mA (12 V)
	400 mA (24 V)
DC power consumption	240 mA (10 V)
	280 mA (12 V)
	570 mA (24 V)
Standby consumption	0.0 W
Duty cycle	DC 100%
Functionality	Fail-secure (the door can be opened when electrical contact
	is made; when operated with alternating current (AC) a buzzing
	sound can be heard, when operated with direct current (DC) no
	buzzing sound)

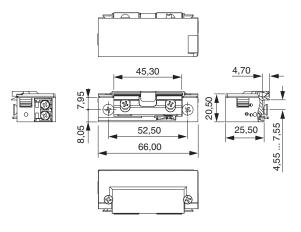


Dimensions (figure not to scale)

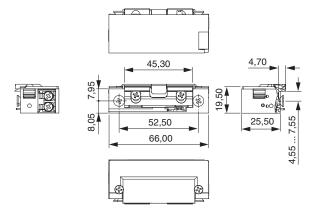
Standard



With integrated latch guide

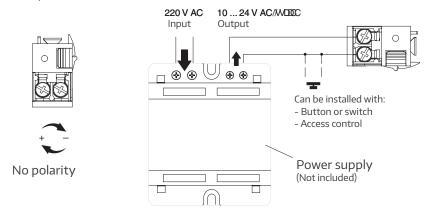


With integrated latch guide (Narrow design)



Electrical connection

(Example)

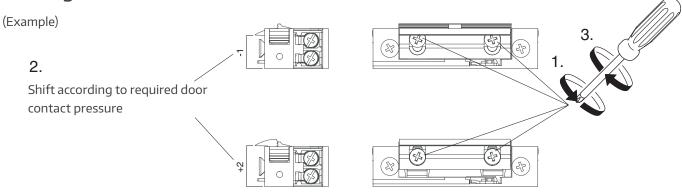




Electric shock!

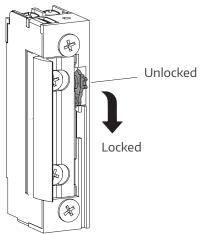
Never connect the opener to 230 V AC! It must be operated with safety extra-low voltage (SELV) of 24 V AC/V DC only. Otherwise, risk of death! When working on the opener, disconnect all poles from the mains.

Setting the latch insert



Mechanical unlocking

(Example)

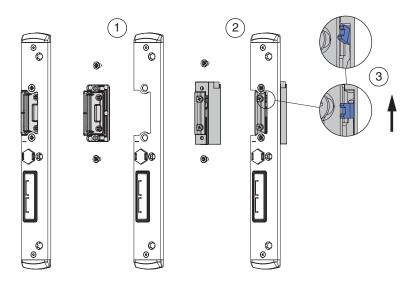




Installing MACO day-release opener or e-opener on the striker plate (manufacturers)

(Example)

- ① Remove latch insert.
- ② Install MACO day-release opener.
- 3 Activate mechanical unlocking on the day-release opener using the lever.
 Mechanical unlocking can remain activated because the day-release mode can be controlled using the day-release slider on the lock (see operating instructions 750258, "Day Release").



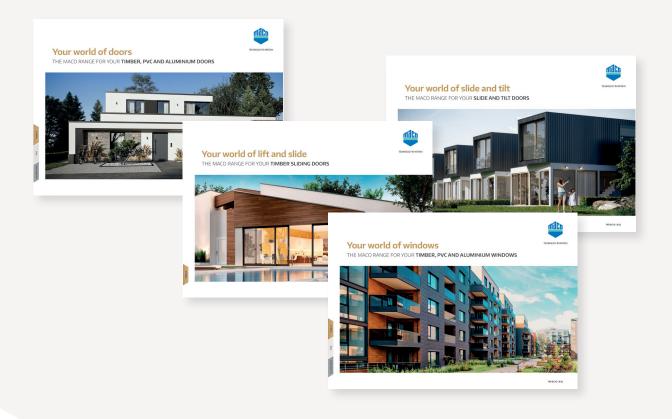
Notes	



Notes

Would you like everything from a single source?

With us you get complete solutions for your large surfaces, windows and doors – for timber, PVC and aluminium. Experience our versatile systems range with comprehensive service included. Discover more on our website **www.maco.eu** or contact your MACO customer advisor.





www.maco.eu/en-GB/contact



TECHNOLOGY IN MOTION

