

# Muto Electro Magnetic Lock (Elock MEM4400)

Installation instructions / Wiring manual

936033 - 08-2021

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# 1 Technical specifications

#### 1.1 Overview

These instructions are for installation of MUTO PREMIUM sliding door system XL150 / XL80 / XL120 for the following mounting and style versions:

#### 1. Wall or Ceiling mount

#### 1.1.1 General information

- dormakaba requires use of tempered monolithic or tempered laminated glass.
- dormakaba glass hardware is not suitable for application in rooms where chemicals (e.g. chlorine) are used as indoor swimming pools, saunas or salt-water pools.
- Never move sliding panels faster than walking speed and always stop the door manually before it reaches end position.
- Do not slide doors with excessive force. Install limiting stop to prevent door from opening too far.

#### 1.1.2 Intended use

- For sliding door in dry indoor areas only
- · For manual slowly opening and closing only

#### 1.1.3 Glass requirements and fittings

- The substructure/wall must be able to bear permanent loads and be level (max. tolerance: 1/16" [2] per 39" [1m]).
- Fasteners must be sufficiently dimensioned for the substructure/wall and weight of the door.
- When adjusting glass components, always stick to the required clearance for the respective hardware. Adjust clearance so glass does not come in contact with any hard surfaces such as glass, metal or concrete.
- Do not use excessive force when installing the glass (avoid over tightening screws).

#### 1.1.4 Requirements for glass panel

- dormakaba requires use of fully tempered glass, which complies with ASTM C 1036 and ASTM C 1048. Secondary heat soaking processes are optional but not required. This applies to both tempered monolithic and tempered laminated glass.
- Clamping area must be flat and uncoated (no self-cleaning coating!)
- Never use glass with conchoidal fractures and/or damaged edges.

#### 1.1.5 Safety instructions

- Installation requires two people.
- Only properly qualified and specially trained staff are authorized to mount dormakaba glass hardware.

- Due to crushing hazards and possible injury caused by breakage of glass during mounting, corresponding protective clothing (especially gloves and protective goggles) is required.
- Work on electrical equipment and 240/120 VAC wiring installation must be performed ONLY by qualified personnel.

#### 1.1.6 Symbols used - Safety/Installation



#### CAUTION

Mounting components must meet the requirements of substructure/wall and door weight. Please read the technical information for fittings.



#### WARNING

Risk of breaking glass. When installing the door, support the door panel with a block of wood or similar object.



#### **WARNING**

Electric shock warning!



#### **CLOSING EDGE**

#### 1.1.7 Maintenance, care, repair

- Immediately replace damaged parts.
- Always use original dormakaba parts.
- Clean clamping area with alcohol-based standard commercial cleaning agent before mounting the glass hardware.
- Use a damp clothe for occasional cleaning, especially the track.
- Always use silicone and oil-free cleaners (e.g. acetone).
- Check glass hardware at regular intervals for proper positioning and smooth operation and correct adjustment.
- High traffic door systems require inspection by properly qualified staff (specialized companies or installation firms.)

#### 1.1.8 Disposal

Disposal in accordance with local, state and national regulations.

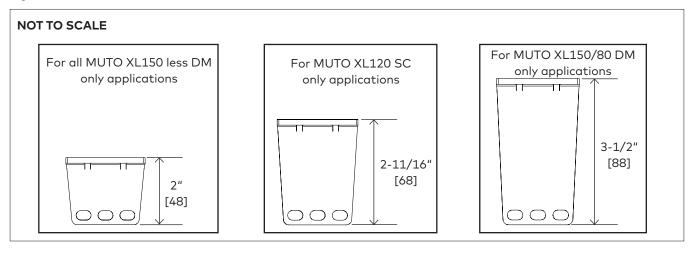
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# 1.2 Specifications - technical data

		Single Door	Single Door
		XL150/80	XL120
Wall or Ceiling mount	Door leaf weight lbs [kg] *	≤330lbs [≤150]	≤264lbs [≤120]
* Including weight of auxiliary hardware.			

## 1.3 Dimensions

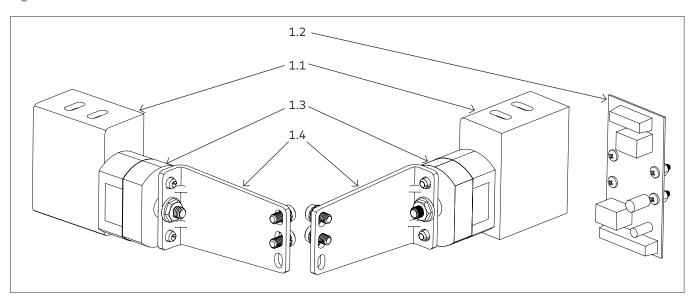
Fig. 1



# 2 Installation instructions

## 2.1 Overall

Fig. 2



- 1.1 MEM4400 mag lock
- 1.2 Circuit board

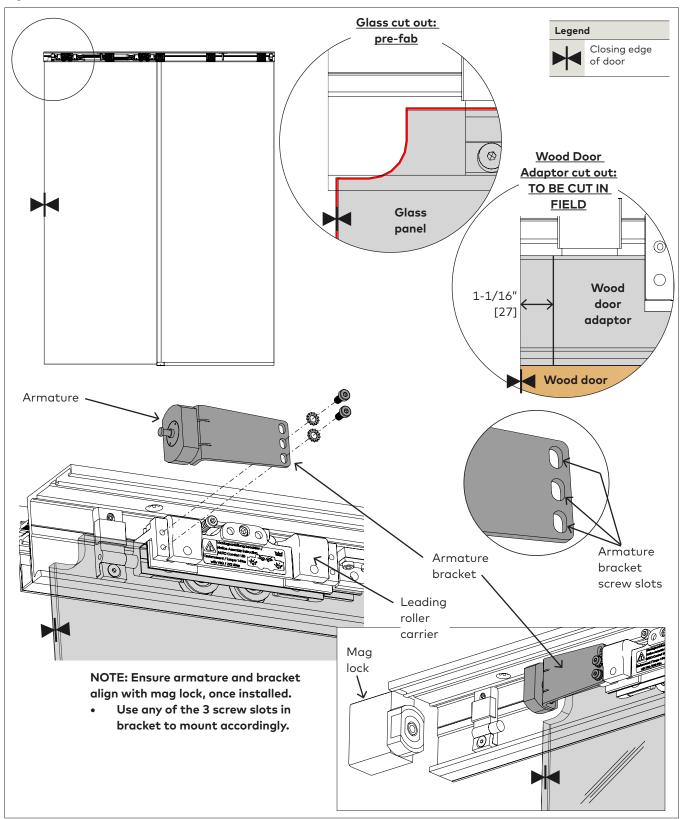
1.3 Armature

1.4 Armature bracket

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## 2.2 Secure armature bracket to rollers: to glass or wood doors

Fig. 3



- 2.2.1 **Glass door:** Ensure glass cut out is toward the closing side of the moving panel.
- 2.2.2 **Wood door:** Cut 1-1/16" [27] from leading end of wood door adaptor.
- 2.2.3 Secure armature bracket to leading roller carrier.
- Use included fasteners.

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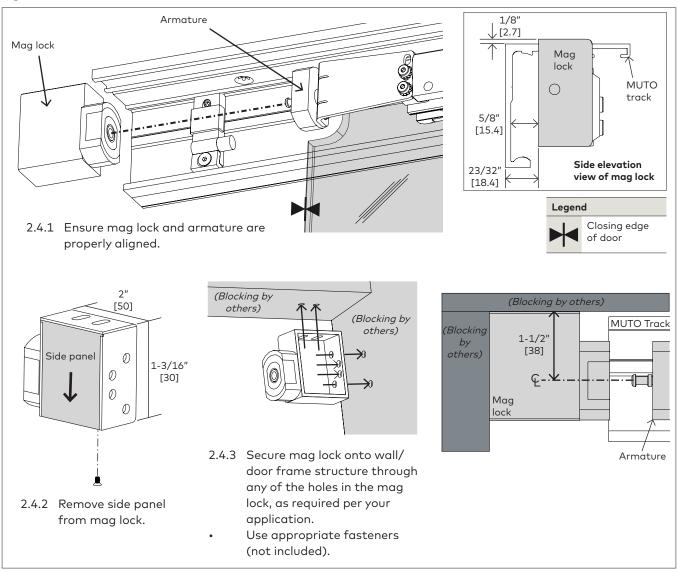
## 2.3 Secure terminal block to door frame

Fig. 4

#### MUTO SYSTEM HIDDEN FOR EASIER VIEWING Inside door 2.3.1 Secure terminal mounting plate jamb to a concealed location in close vacinity to mag lock. *(preferably* in jamb or above ceiling) Use pre-attached fasteners (x4). 2.3.2 Secure terminal board to mountg plate. Use included M3x6mm PH Phillips screws (x4). Terminal mounting Terminal Terminal M3x6mm mounting plate board PH screws plate fasteners

## 2.4 Secure mag lock to wall/door frame structure

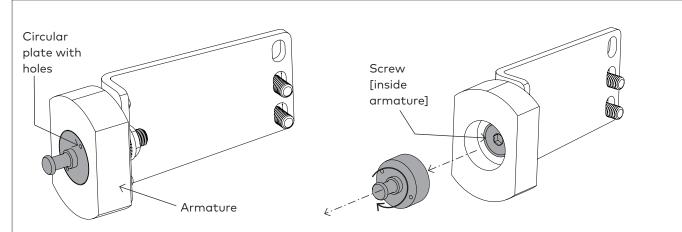
Fig. 5



# 3 Change handing of mag lock

## 3.1 Change handing

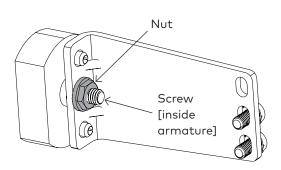
Fig. 6



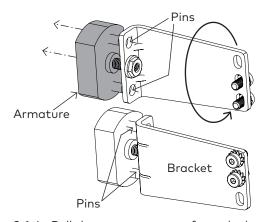
#### To change to another size bracket:

3.1.1 Press spanner wrench into holes in the end of the armature and partially rotate circular plate.

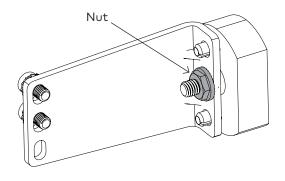




- 3.1.3 Hold nut in place, and unthread/loosen screw from inside armature.
- NOTE: The screw does NOT need to be fully removed.



- 3.1.4 Pull the armature away from the bracket to disengage the two pins.
- 3.1.5 Rotate armature bracket in correct direction depending upon your application, until the two pins reengage in the bracket.



- 3.1.6 Hold nut in place, and tighten screw inside the armature.
- 3.1.7 Place circular plate back into end of armature.
- 3.1.8 Rotate, with spanner wrench, to lock into place.

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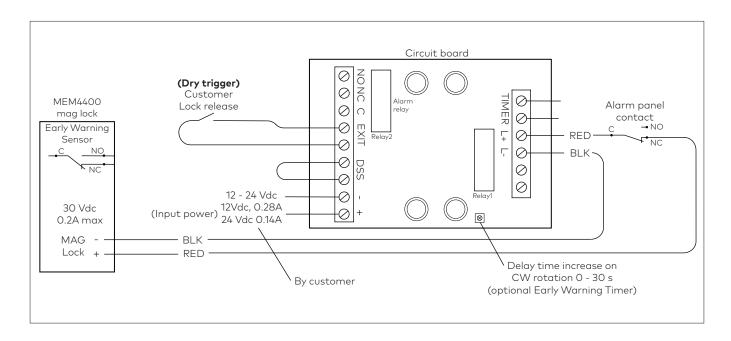
Circular plate with holes

Screw

[inside armature]

# 4 Wiring the circuit board

# 4.1 Wiring diagram



MEM Lock Wirng to PCB	Wire color		
MEM David Laure 12V/DC	Black (-)	Connected Decision Institute	
MEM Power Input, 12VDC	Red (+)	Connects to Power Input	
	Brown (C)		
EW Sensor Output (EW = Early Warning)	White (NC)	Connects to DSS if used	
3,	Grey (NO)		
PCB Connection	Terminal Designation		
Dower land	-		
Power Input	+	+12 VDC, 1A maximum	
Exit Input	EXIT	Connects to customer dry trigger	
DSS Sensor Input	DSS	Use jumper or Early Warning Sensor brown and white wires	
MEM Lock Power Output	L- (BLK)	Connect to Mag Leak	
MEM Lock Power Output	L+ (RED)	— Connect to Mag Lock	
Alarm Relay Output	NO		
30 VDC, 2A max.	NC Use to trigge	Use to trigger auxiliary LED, siren, alarm panel, etc.	
120 VAC, 1A max.	С	<del></del>	
Alarm Relay Timer Input	TIMER	0 to 30 sec. delay timer (EW) Contact closes to activate Alarm Relay Output Use to trigger alarm panel or other.	

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dormakaba USA Inc. 1 Dorma Drive, Drawer AC Reamstown, PA 17567 USA

T: 717-336-3881 F: 717-336-2106