Muto Electro Magnetic Lock
(Elock MEM4400)

Installation instructions / Wiring manual
936033 – 10-2018
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1 Technical specifications

1.1 Overview

These instructions are for installation of MUTO PREMIUM sliding door system XL150 / XL80 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 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.

1.1.5 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!

TIPS AND RECOMMENDATIONS
Information note

CLOSING EDGE

1.1.6 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 cloth 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.)

1.1.7 Disposal
Disposal in accordance with local, state and national regulations.
1.2 Specifications - technical data

<table>
<thead>
<tr>
<th>Wall or Ceiling mount</th>
<th>Single Door XL150/80</th>
<th>Single Door XL120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door leaf weight lbs [kg] *</td>
<td>≤330lbs [≤150]</td>
<td>≤264lbs [≤120]</td>
</tr>
</tbody>
</table>

* Including weight of auxiliary hardware.

1.3 Dimensions

Fig. 1

![NOT TO SCALE Diagram](image)

For all MUTO XL150 less DM only applications

For MUTO XL120 SC only applications

For MUTO XL150/80 DM only applications

2 Installation instructions

2.1 Overall

Fig. 2

![Diagram](image)

1.1 MEM4400 mag lock
1.2 Circuit board
1.3 Armature
1.4 Armature bracket
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.

**NOTE:** Ensure armature and bracket align with mag lock, once installed.
- Use any of the 3 screw slots in bracket to mount accordingly.
2.3 Secure terminal block to door frame

Fig. 4

**MUTO SYSTEM HIDDEN FOR EASIER VIEWING**

- **2.3.1** Secure terminal mounting plate 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).

2.4 Secure mag lock to wall/door frame structure

Fig. 5

- **2.4.1** Ensure mag lock and armature are properly aligned.
- **2.4.2** Remove side panel from mag lock.
- **2.4.3** Secure mag lock onto wall/door frame structure through any of the holes in the mag lock, as required per your application.
  - Use appropriate fasteners (not included).
3 Change handing of mag lock

3.1 Change handing

Fig. 6

3.1.1 Rotate armature bracket in correct direction depending upon your application.
4 Wiring the circuit board

4.1 Wiring diagram

MEM Lock Wiring to PCB

<table>
<thead>
<tr>
<th>MEM Power Input, 12VDC</th>
<th>Wire color</th>
<th>Terminal Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black (-)</td>
<td>Connects to Power Input</td>
</tr>
<tr>
<td></td>
<td>Red (+)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EW Sensor Output (EW = Early Warning)</th>
<th>Wire color</th>
<th>Terminal Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EW Sensor Output (EW = Early Warning)</td>
<td>Brown (C)</td>
<td>Connects to DSS if used</td>
</tr>
<tr>
<td>EW Sensor Output (EW = Early Warning)</td>
<td>White (NC)</td>
<td></td>
</tr>
<tr>
<td>EW Sensor Output (EW = Early Warning)</td>
<td>Grey (NO)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PCB Connection</th>
<th>Terminal Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Input</td>
<td>-</td>
</tr>
<tr>
<td>Power Input</td>
<td>+</td>
</tr>
<tr>
<td>Power Input</td>
<td>+12 VDC, 1A maximum</td>
</tr>
<tr>
<td>Exit Input</td>
<td>EXIT</td>
</tr>
<tr>
<td>Exit Input</td>
<td>Connects to customer dry trigger</td>
</tr>
<tr>
<td>DSS Sensor Input</td>
<td>DSS</td>
</tr>
<tr>
<td>DSS Sensor Input</td>
<td>Use jumper or Early Warning Sensor brown and white wires</td>
</tr>
<tr>
<td>MEM Lock Power Output</td>
<td>L- (BLK)</td>
</tr>
<tr>
<td>MEM Lock Power Output</td>
<td>Connect to Mag Lock</td>
</tr>
<tr>
<td>MEM Lock Power Output</td>
<td>L+ (RED)</td>
</tr>
<tr>
<td>Alarm Relay Output</td>
<td>NO</td>
</tr>
<tr>
<td>Alarm Relay Output</td>
<td>NC</td>
</tr>
<tr>
<td>Alarm Relay Output</td>
<td>Use to trigger auxiliary LED, siren, alarm panel, etc.</td>
</tr>
<tr>
<td>Alarm Relay Output</td>
<td>C</td>
</tr>
<tr>
<td>Alarm Relay Timer Input</td>
<td>TIMER</td>
</tr>
<tr>
<td>Alarm Relay Timer Input</td>
<td>0 to 30 sec. delay timer (EW)</td>
</tr>
<tr>
<td>Alarm Relay Timer Input</td>
<td>Contact closes to activate Alarm Relay Output</td>
</tr>
<tr>
<td>Alarm Relay Timer Input</td>
<td>Use to trigger alarm panel or other.</td>
</tr>
</tbody>
</table>