INSTALLATION GUIDE FOR TYPE E SWITCHES

CONTROL AND SIGNALING SOLUTIONS FOR HARSH ENVIRONMENTS
**Drillings summary table**

<table>
<thead>
<tr>
<th>Switch</th>
<th>Drilling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E / E-EDM</strong></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>E50</strong></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>EDM</strong></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>EDM-C25</strong></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>EM (CPAI / CPAR / CPBR / CPCR)</strong></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

*The specifications and drawings given are subject to change and are not binding unless confirmed by our specialists.*
## Panel thickness summary table

<table>
<thead>
<tr>
<th>Switch</th>
<th>Panel thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With escutcheon plate or symbol*</td>
</tr>
<tr>
<td><strong>E / E-EDM</strong></td>
<td>1,5 à 3 mm</td>
</tr>
<tr>
<td><strong>E50</strong></td>
<td>1,5 à 3 mm</td>
</tr>
<tr>
<td><strong>EDM</strong></td>
<td>2 à 4 mm</td>
</tr>
<tr>
<td><strong>EDM-C25</strong></td>
<td>Mounting on our mosaic tiles □ C25</td>
</tr>
<tr>
<td><strong>EM (CPAI / CPAR / CPBR / CPCR)</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

*Values according to MAFELEC supplied escutcheon plates or symbols

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# Tightening tools and recommended torque values summary table

<table>
<thead>
<tr>
<th>Switches</th>
<th>Standard mounting wrench</th>
<th>Adapter for torque tightening</th>
<th>Torque tightening</th>
<th>Torque* (N.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E / E-EDM</td>
<td>1SNA357100R1600</td>
<td></td>
<td></td>
<td>2 N.m (for indication only)</td>
</tr>
<tr>
<td>E50</td>
<td>1SNA357100R1600</td>
<td></td>
<td></td>
<td>2 N.m (for indication only)</td>
</tr>
<tr>
<td>EDM</td>
<td>1SNA337198R2000</td>
<td>1SNA910708T1200</td>
<td>Standard wrench + adapter</td>
<td>5 N.m</td>
</tr>
<tr>
<td>EDM-C25</td>
<td>1SNA357099R0400</td>
<td>1SNA910703T0500</td>
<td></td>
<td>5 N.m</td>
</tr>
<tr>
<td>EM (CPAI / CPAR / CPBR / CPCR)</td>
<td>1SNA357965T0400</td>
<td>1SNA910712T2500</td>
<td></td>
<td>5 N.m</td>
</tr>
</tbody>
</table>

* Valeurs recommandées si sollicitations de vibrations / séismes

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Installation and maintenance

Fixing of switches EDM

The standard device can be fitted on a 2 to 4 mm thick panel with escutcheon plate or symbol and 4 to 7 mm without.

The product is fixed to the panel through a central nut. 2 people are recommended to fix correctly the switch: a person behind the panel to guide and maintain the product, the other one to set up the escutcheon plate, the central nut and then tighten the switch.

**Step 0 (preparation):**

Separate all the components of the front part of the switch as presented below.

**Step 1:**

Insert the mounting nut on the mounting wrench (reference: 1SNA337198R2000) by pressing on the piston. If the product is equipped with an escutcheon plate, set it up with the rubber washer on the mounting nut.

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Installation and maintenance

Fixing of switches EDM

**Step 2:**

Position the switch at the rear of the panel by respecting the orientation* and take care of the right alignment with the drill hole. Tighten the switch with the mounting wrench and take care of the right adjustment of its position and the position of escutcheon plate.

* Normal orientation of the switch:

Label 11 located on the top.

**Step 3:** (We recommend to realize this step if the products can be subject to vibrations/seismic stresses. In other cases this step is facultative but recommended).

With a calibrated torque wrench, the standard mounting wrench and the adapter (reference: 1SNA910708T1200) complete the tightening by applying a torque of 5 N.m.
**Installation and maintenance**

**Fixing of switches EDM**

**Step 3’**: (lamp) *(Ignore this step if the lamp isn’t used or if it’s installed by factory)*

Set up the lamp in the socket of the switch with your hand.

\[/!\] Take care that the lamp is correctly installed.

**Step 4**:  
Set up the handle in abutment of the mechanical transmission part. \[/!\] A single direction of assembly

**Remplacement lampe**:  
Remove the handle. Use the lamp puller (reference: 1SNA319155R0200) to remove the lamp to be replaced. Set up the replacement lamp. Set up the handle.

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Installation and maintenance

Fixing of switches E or E-EDM

The standard device can be fitted on a 1,5 to 3 mm thick panel.

The product is fixed to the panel through a central nut. 2 people are recommended to fix correctly the switch : a person behind the panel to guide and maintain the product, the other one to set up the escutcheon plate, the central nut and then tighten the switch.

**Step 0**: (preparation)

Separate all the components of the front part of the switch as presented below.

**Step 1**:

Position the switch at the rear of the panel by respecting the orientation* and take care of the right alignment with the drill hole. Set up the mounting nut and tighten the switch with the mounting wrench (reference : 1SNA357100R1600) and take care of the right adjustment of its position

* Normal orientation of the switch:

Label 11 located on the top.

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Installation and maintenance

Fixing of switches E or E-EDM

**Step 2**: (lamp) *(Ignore this step if the lamp isn’t used or if it’s installed by factory)*

Set up the lamp in the socket of the switch with your hand. 
/!\ Take care that the lamp is correctly installed.

**Step 3**: 

Set up the handle in abutment of the mechanical transmission part. /!\ A single direction of assembly

**Lamp replacement**: 

Remove the handle. Use the lamp puller (reference: 1SNA319155R0200) to remove the lamp to be replaced. Set up the replacement lamp. Set up the handle.

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Installation and maintenance

Fixing of switches EDM-C25

The standard device can be fitted on a □ C25 MAFELEC Mosaic panel.

The product is fixed to the panel through a central nut. 2 people are recommended to fix correctly the switch: a person behind the panel to guide and maintain the product, the other one to set up the escutcheon plate, the central nut and then tighten the switch.

Step 0 (preparation):
Separate all the components of the front part of the switch as presented below.

Step 1:
Set up the mounting nut and the symbol on the mounting wrench (reference: 1SNA357099R0400).
Installation and maintenance

Fixing of switches EDM-C25

**Step 2:**

Position the switch at the rear of the panel by respecting the orientation* and take care of the right alignment with the drill hole. Set up the mounting nut and tighten the switch with the mounting wrench and take care of the right adjustment of its position.

![Image of switch installation process]

* Normal orientation of the switch:

Label 11 located on the top.

![Image of switch label]

**Step 3:** *(We recommend to realize this step if the products can be subject to vibrations/seismic stresses. In other cases this step is facultative but recommended)*.

With a calibrated torque wrench, the standard mounting wrench and the adapter (reference: 1SNA910703T0500), complete the tightening by applying a torque of 5 N.m

![Image of torque wrench assembly]

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Installation and maintenance

Fixing of switches EDM-C25

**Step 3**: (lamp) (Ignore this step if the lamp isn't used or if it's installed by factory)

Set up the lamp in the socket of the switch with your hand.

//\ Take care that the lamp is correctly installed

**Step 4**: 

Set up the handle in abutment of the mechanical transmission part. //\ A single direction of assembly

**Lamp replacement**: 

Remove the handle. Use the lamp puller (reference: 1SNA319155R0200) to remove the lamp to be replaced. Set up the replacement lamp. Set up the handle.

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**Installation and maintenance**

**Fixing of switches EM (CPAI/CPAR/CPBR/CPCR)**

The standard device can be fitted on a 1.5 to 3 mm thick panel or on a □ C25 MAFELEC Mosaic panel.

The product is fixed to the panel through a central nut. 2 people are recommended to fix correctly the switch: a person behind the panel to guide and maintain the product, the other one to set up the escutcheon plate, the central nut and then tighten the switch.

**Step 0 (preparation):**
Separate all the components of the front part of the switch as presented below.

**Step 1:**
Set up the mounting on the mounting wrench (reference: 15NA357965T0400).

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Installation and maintenance

Fixing of switches EM (CPAI/CPAR/CPBR/CPCR)

**Step 2:**

Position the switch at the rear of the panel by respecting the orientation* and take care of the right alignment with the drill hole. Set up the mounting nut and tighten the switch with the mounting wrench and take care of the right adjustment of its position.

* Normal orientation of the switch:

Label 11 located on the top.

**Step 3:** *(We recommend to realize this step if the products can be subject to vibrations/seismic stresses. In other cases this step is facultative but recommended)*

With a calibrated torque wrench, the standard mounting wrench and the adapter (reference: 1SNA910712T2500, complete the tightening by applying a torque of 5 N.m

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Installation and maintenance

Fixing of switches EM (CPAI/CPAR/CPBR/CPCR)

Step 3 : (lamp) *(Ignore this step if the lamp isn’t used or if it’s installed by factory)*

Set up the lamp in the socket of the switch with your hand.  
/!\ Take care that the lamp is correctly installed

Step 4 :

Set up the handle in abutment of the mechanical transmission part.  /!\ A single direction of assembly

Remplacement lampe :

Remove the handle. Use the lamp puller (reference : 1SNA319155R0200) to remove the lamp to be replaced. Set up the replacement lamp. Set up the handle.

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Installation and maintenance

Fixing of switches E50

The standard device can be fitted on a 1,5 to 3 mm thick panel.

The product is fixed to the panel through a central nut. 2 people are recommended to fix correctly the switch: a person behind the panel to guide and maintain the product, the other one to set up the escutcheon plate, the central nut and then tighten the switch.

**Step 0: (preparation)**

Separate all the components of the front part of the switch as presented below.

**Step 1:**

Set up the thickness washers on the switch block.
Position the switch at the rear of the panel by respecting the orientation* and take care of the right alignment with the drill hole. Set up the mounting nut and tighten the switch with the mounting wrench (reference: 1SNA357100R1600) and take care of the right adjustment of its position.

*Normal orientation of the switch:
Label 11 located on the top.

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Installation and maintenance

**Wiring of type E switches**

The standard wiring of these switches is realized by soldering or by Fast-On Clip 2,8 X 0,3. The maximal section of cable is 1mm².
For a soldered wiring, we recommend to use a low power soldering iron (~30W), /\ No excesses of cleaning products.
We recommend to use a welding product ROHS type Sn96,5/Ag3/Cu0,5 in CA2.
It is advisable to arrange insulating sleeve on the welds.

The cables are wired with a rear cable outlet . The switch is equipped in standard with a plastic cable support (option ST) in order to attach cables with a collar. It can be also equipped with a metallic cable support (option STM).

**Soldered wiring (option STM)**

**Fast-On Clip 2,8 X 0,3 wiring (option ST)**

**Maintenance of type E switches**

No special cleaning is required.
Never use solvents, acids or any chemicals. Do not use sandpaper or other metal abrasive.

For the protection and maintenance of contacts, make sure that the protective cover is correctly installed.
After a few years of use, remove simply the dust with a vacuum cleaner or a wet fabric. Use only water to moisten slightly the fabric.
For the maintenance of escutcheon plates or handle, use a fabric slightly moistened with a mixture of water and alcohol (type cleaning glasses).