# Actuator/control for shutter

**MX5220 - Y4672M2S**

## Description

Flush mounted two-module shutter actuator/control with 2 internal 2A 250 VA relays. In addition to the monostable and bistable functionality, it allows the management of the specific shutter position (preset). The device can also be configured to manage a remote actuator.

To be completed with 1 or 2-module covers.

## Technical data

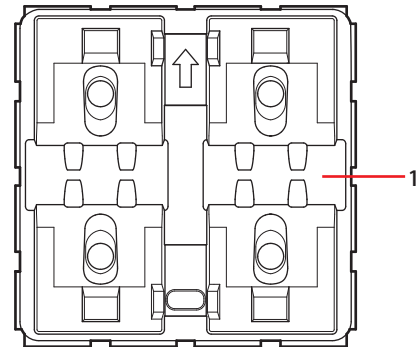| | |
|---|---|
| Operating temperature: | 0 – 40 °C |
| Voltage: | 110 – 230 Vac |
| Operating frequency: | 50/60 Hz |
| Cable section: | 2 x 1,5 m$^2$ or 1 x 2,5 m$^2$ |
| Power supply from SCS Bus: | 18 – 27 Vdc |
| Absorption (max. LED intensity): | 9 mA (stand-by) |
| | 17 mA max (max one load) |
| | 26 mA (max two loads) |

| Loads | Reducer motors for shutters | |
|---|---|---|
| 230 Vac | 460 W | 2 A |
| 110 Vac | 250 W | 2 A |
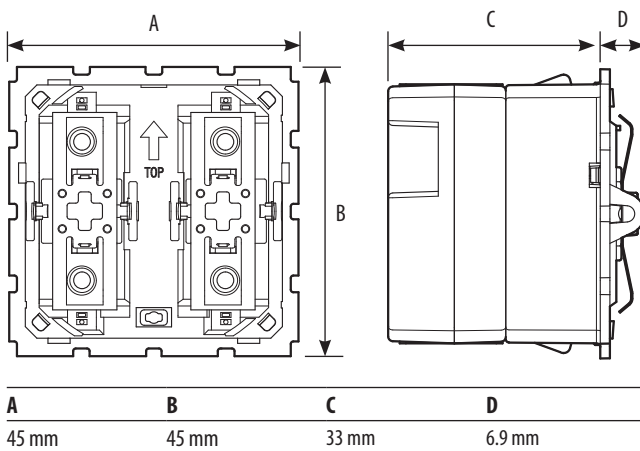
## Control module

Front view



Front view without protective shell



## Dimensional data



| A | B | C | D |
|---|---|---|---|
| 45 mm | 45 mm | 33 mm | 6.9 mm |
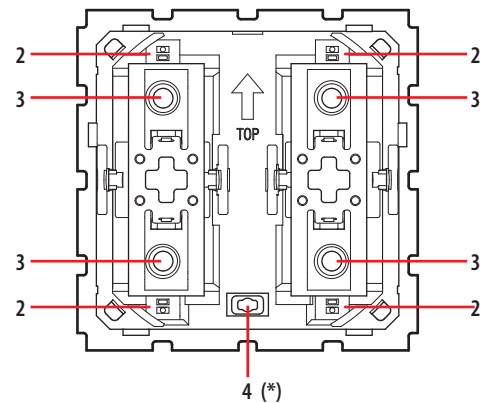
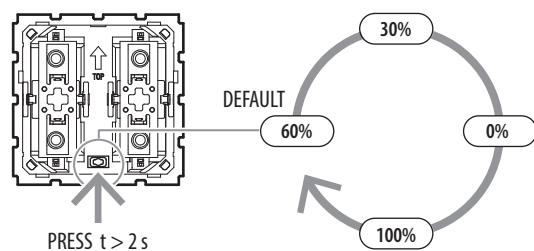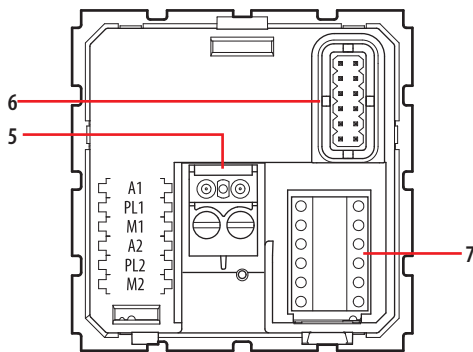## Legend

1. Protective shell
2. Status notification LED:
   Blue steady = load ON
   White steady = load OFF
   Blue flashing = object not configured
3. Control pushbutton
4. LED pushbutton (*)

(*) With the device configured, by pressing the LED button it is possible to set whether the LEDs should always be on (maximum level, medium level or minimum level) or off. Starting from MEDIUM LEVEL, when the pushbutton is kept pressed, every 2 seconds the LED lights will switch from MINIMUM, to OFF, to MAXIMUM, to MEDIUM level.
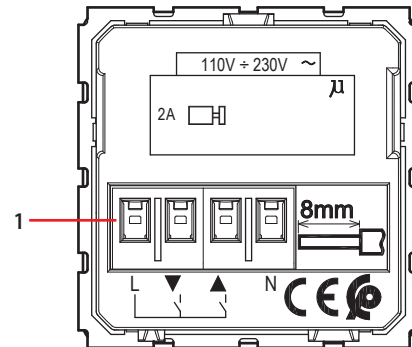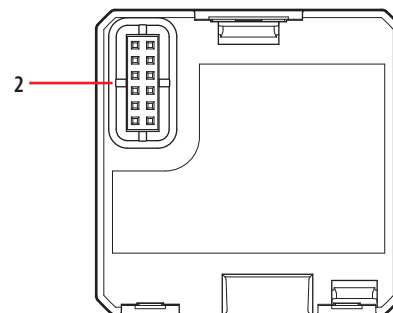


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# Actuator/control for shutter

## Control module

Rear view



### Legend

5. BUS clamp
6. Connector for connection to the actuator module
7. Configurator socket:
   A1 = actuator area
   PL1 = actuator light point
   M1 = actuator mode
   A2 = general command area
   PL2 = general command light point
   M2 = general command mode

## Actuator module

Rear view



Front view



### Legend

1. Load connection clamps
2. Connector for connection to the control module

## List of functions

The device create the following functions:
- Actuator mode for shutter automation with local control
- 1 load actuator (shutter automation) with local control using the left button and remote actuator or scenario control using the right button
- Right key control operating mode
- Plus programmed scenario activation

## Configuration

When installed in a MyHOME system, the device can be configured directly from Home + Project following the App flow, making the process much more simple and immediate.
For device configuration and installation and for any other information, refer to the Apps or documentation that can be downloaded from the website:



**www.homesystems-legrandgroup.com**

**Download App**



**Home + Control**      **Home + Project**

•ANDROID: it requires Android 5.0 or later with access to Google Play



•iOS: it requires an iPhone running iOS 12.0 or later



In addition, PHYSICAL CONFIGURATION will continue to be guaranteed by inserting the configurators in the appropriate housings (*).

The configuration using Home + Project, which can be downloaded from the www.homesystems-legrandgroup.com website, has the advantage of offering many more options when compared with the physical configuration.

For the list of modes and the corresponding meanings refer to the indications of this technical sheet and the Home + Project app.

## (*) Physical configuration

### 1. Actuator mode for shutter automation with local control

Configure A1, PL1 and M1 to define the address and mode of the local actuator.

#### 1.1 Addressing

| Address type | | Configurators |
| --- | --- | --- |
| Apartment | Room | A1=1 – 9 |
| | Light point | PL1=1 – 9 |

#### 1.2 Automation

| Function | Configurators | |
| --- | --- | --- |
| | Standard motor | Pulse motor |
| Shutter UP/DOWN with STOP. The actuator ignores Room and General controls | M1= PUL | M1= 6 |
| Shutter UP/DOWN with STOP in slave mode | M1= SLA | M1= 7 |
| Monostable UP/DOWN | M1= ↑↓M | M1= 4 |
| Bistable UP/DOWN | M1=↑↓ or 0 | M1= 3 |
| UP/DOWN   monostable   short pressure<br>bistable   long pressure | M1= 1 | M1= 5 |

### 2. 1 load actuator (shutter automation) with local control using the left button and remote actuator or scenario control using the right button

#### 2.1 Addressing

Configure A1, PL1 and M1 to define the address and mode of operation of the local actuator (controlled by the left key) as stated in sections 1.1 and 1.3.
Configure A2 and PL2 to define the address of the remote actuator to manage, as per the table below:

| Address type | | Configurators |
| --- | --- | --- |
| Point-to-point | Room | A2= 1 – 9 |
| | Light point | PL2= 1 – 9 |
| Room | | A2= AMB, PL2= 1 – 9 |
| Group | | A2= GR, PL2= 1 – 9 |
| General | | A2= GEN |

#### 2.2 Remote control operating mode

See chapter 3.

### 3. Right key control operating mode

#### 3.1 ON/OFF control:

| Function | | Configurators |
|---|---|---|
| Cyclical | | M2=0 |
| ON | | M2=ON |
| OFF | | M2=OFF |
| Pushbutton | | M2=PUL |
| Timed ON | 0,5 sec | M2=8 |
| | 30 sec | M2=7 |
| | 1 min | M2=1 |
| | 2 min | M2=2 |

#### 3.1.1 ON/OFF control and ADJUSTMENT (Point-to-Point only):

| Function | Configurators |
|---|---|
| Cyclical ON/OFF and ADJUSTMENT.<br>ON/OFF when pressing briefly and adjustment when holding down. | M2=0 |
| ON with upper button, OFF with lower button and DIMMER when held down | M2=0/I |

#### 3.2. Automation control

#### 3.2.1 Addressing

| Address type | | Configurators |
|---|---|---|
| Point-to-point | Room | A1, A2=1-9 |
| | Light point | PL1, PL2=1-9 |
| Room | | A1, A2=AMB, PL1, PL2=1-9 |
| Group | | A1, A2=GR, PL1, PL2=1-9 |
| General | | A1, A2=GEN |

#### 3.2.2 Mode

| Function | Configurators |
|---|---|
| Bistable control | M1, M2=↑↓ |
| Monostable control | M1, M2=↑↓M |
| Bistable control and blades control | M1, M2=6 |

**4. Video door entry functions**

### 4.1 Door lock release control

#### 4.1.1 Addressing

| Addressing type | Configurators |
|---|---|
| Entrance panel address | A=1-9 PL=1-9 [1] |

**Note** [1]: Set the P address (two digits) of the entrance panel from which to control the door lock using the bottom left module.
The bottom right module controls the door lock of entrance panel P+1 se A2=PL2=M2=0.

**Type of function**

| Function | Configurators |
|---|---|
| Door lock release control | M1, M2=3 |

### 4.2 Floor call control

#### 4.2.1 Addressing

Define the address (two digits) of the internal unit to be called using the control device.

| Addressing type | Configurators |
|---|---|
| Internal unit address | A=1-9 PL=1-9 |
| General | A=GEN A/PL=0 |

**Type of function:**

| Function | Configurators |
|---|---|
| Floor call control | M=4 |

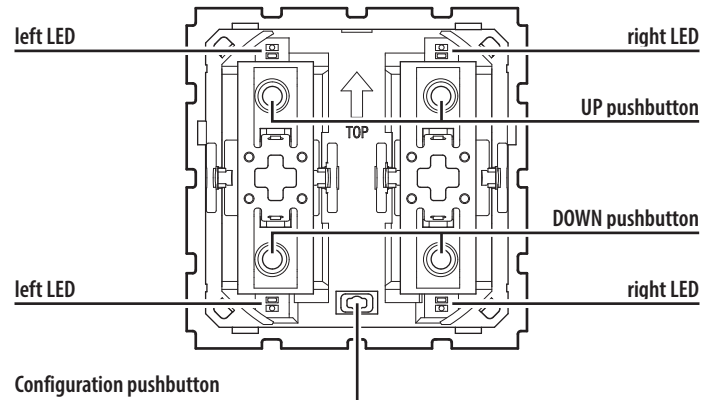### 4.3 Staircase lights control

#### 4.3.1 Addressing

The device takes on the function of pushbutton for switching on the lights of the internal unit identified by its own address (two digits).

| Addressing type | Configurators |
|---|---|
| Internal unit address | A=1-9 PL=1-9 |

**Type of function:**

| Function | Configurators |
|---|---|
| Staircase lights control | M=5 |

**Calibration of the shutter position**



left LED      right LED

UP pushbutton

DOWN pushbutton

left LED      right LED

Configuration pushbutton

**Manual calibration of the shutter position**
This operation ensures that the actuator saves the shutter opening and closing positions.

1. Press the configuration pushbutton for at least 3 seconds. All the LEDs will come on blue.

2. Release the configuration pushbutton. The left LED will flash quickly.

3. Press and release the "UP" pushbutton. The shutter will move upwards, and the left LED will flash slowly.

4. Once the shutter has reached the maximum opening position, press the "DOWN" pushbutton. The shutter will move downwards, and the left LED will flash slowly. During this stage, the actuator measures and saves the time it takes the shutter to close.

5. When the shutter is fully closed, press and release the "UP" pushbutton. The shutter will move upwards to enable the actuator to measure and save the time it takes the shutter to open.

6. When the shutter maximum opening position is reached, press the "DOWN" pushbutton again to complete the calibration procedure. The left LED will return to white steady.

**WARNING**: the calibration precision, and therefore the control of the shutter position, depends on the accuracy with which the limit switch positions are manually detected during the calibration itself.

**Saving the new shutter position (Preset)**
The Preset function gives the possibility of setting the shutter in one of the 9 positions that can be selected through the configurator in the Pre socket. It is also possible to set a different position as required by the user. The procedure, which can be performed from the control device, or the actuator, is as follows:

7. Press the "UP" and "DOWN" pushbuttons to move the shutter to the desired position.

8. Press the STOP pushbutton for at least 10 seconds. The actuator saves the position of the shutter.

9. To confirm that the position has been saved correctly, the left LED will turn blue for 2 seconds.
Irrespective of the shutter position, once this has been stopped by pressing the STOP pushbutton, it will be possible to move it to the preset position

## Wiring diagrams

Wiring diagram for shutter connection



MX5220
Y4672M2S

110V ÷ 230V ~

2A

8mm

L ▼ ▲ N

N L

10 A

N L

Protect with 10 A thermal
magnetic circuit breaker