

4 relay actuator 2A

F411/4

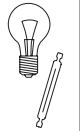
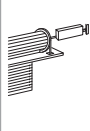

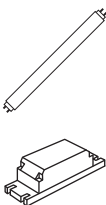

Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates four independent relays with a common terminal for the activation of four loads, and includes local control pushbuttons for each individual load.

The device can be installed as part of a MyHOME system, and configured physically or virtually. In this case if two adjoining positions (e.g. PL2 and PL3) are assigned the same configurator, the actuator may set two of the four relays in interlocking mode, for the control of loads such as rolling shutter motors, curtain motors, etc. If all the PL positions have the same configurator, the actuator sets the four relays for the control of motorised shutters. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	60 mA ¹⁾
Number of outputs:	4x2 A
Dissipated power with max. load:	2.4 W ²⁾
Operating temperature:	(-5) – (+45) °C
Power/Consumption of driven loads:	

Incandescent lamps Halogen lamps	Geared motors for rolling shutters	LED lamps Compact fluorescent lamps	Linear fluorescent lamps Electronic transformers	Ferromagnetic transformers
				
230 Vac 460 W 2 A	460 W 2 A	70 W Max. 2 lamps	70 W 0.3 A	2 A cosφ 0.5 460 VA

Protection index:	IK04
Impact resistance:	IP20

NOTE: 1) for versions before batch 14W39, the maximum absorption is 40mA

NOTE: 2) The dissipated power indicated is that corresponding to the device with all the relays loaded at the maximum load.

With lower loads also the dissipated power is lower and may be calculated by means of the following formula: $P[mW] = 140 + 400 * N + 10 * (I_{c1}^2 + I_{c2}^2 + \dots + I_{cN}^2)$

P: dissipated power in mW, N: number of loaded relays, I_{cN}: load current corresponding to the N relay.

Dimensions

Size: 2 DIN modules

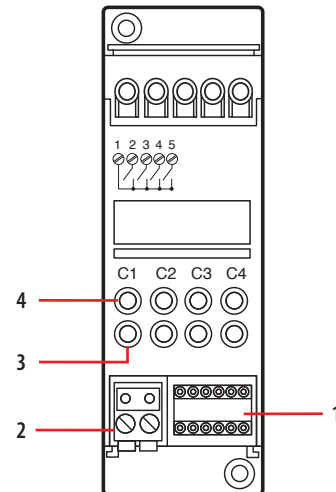
List of Functions

The device performs the following functions:

1. LIGHT SWITCH
2. SHUTTER AUTOMATION CONTROL
3. ROLLING SHUTTER AUTOMATION CONTROL

See the following pages for the configuration procedures.

Front view



Legend

1. Configurator socket (note that this must only be used in MyHOME systems with the physical configuration)
2. BUS connector
3. Load status LED
4. Load control button

Configuration

If the device is installed in a MyHOME system it can be configured in two ways:

- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MyHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MyHOME_Suite software package.

When installed in a Lighting Management system, the actuator can be configured in the following ways:

- PLUG&GO
- PROJECT&DOWNLOAD

Note: For this device, the MyHOME Server automatically configures 4 channels.

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9

NOTE: To configure the "Group" address use MyHOME_Suite virtual configuration

1.2 Mode

Function	Virtual configuration (MyHOME_Suite)		Physical configuration
		Parameter / setting	
Master Actuator		Master	M=0
Actuator as Slave. Receives a control sent by a Master actuator with the same address		Slave	M=SLA
Pushbutton (ON monostable) ignores Room and General controls		Master PUL	M=PUL

To use the "Actuator as a slave with PUL function" and to adjust the "OFF delay", the "Type of load" (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) and the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MyHOME_Suite virtual configuration.

2. Shutter automation control

2.1 Addressing

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9

NOTE: To configure the "Group" address use MyHOME_Suite virtual configuration

2.2 Mode

Virtual configuration (MyHOME_Suite)		Physical configuration		
Function	Parameter / setting			
Master Actuator	Master	M=0		
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA		
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL		
Timed stop for shutter motor drives. The actuator switches off after the set time has elapsed. This mode is only operative if PL1=PL2=PL3=PL4 with relay interlocking in pairs.	1-60 seconds, 2-10 minutes, ∞	PL1=PL2=PL3=PL4	M=0	20 seconds
			M=1	15 seconds
			M=2	25 seconds
			M=3	60 seconds

To use the "Actuator as a slave with PUL function" and for the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MyHOME_Suite virtual configuration.

3. Rolling shutter automation control

3.1 Addressing

Address type	Virtual configuration (MyHOME_Suite)		Physical configuration
Point-to-point	Room	0-10	A=0-9
	Lighting point	0-15	PL=1-9

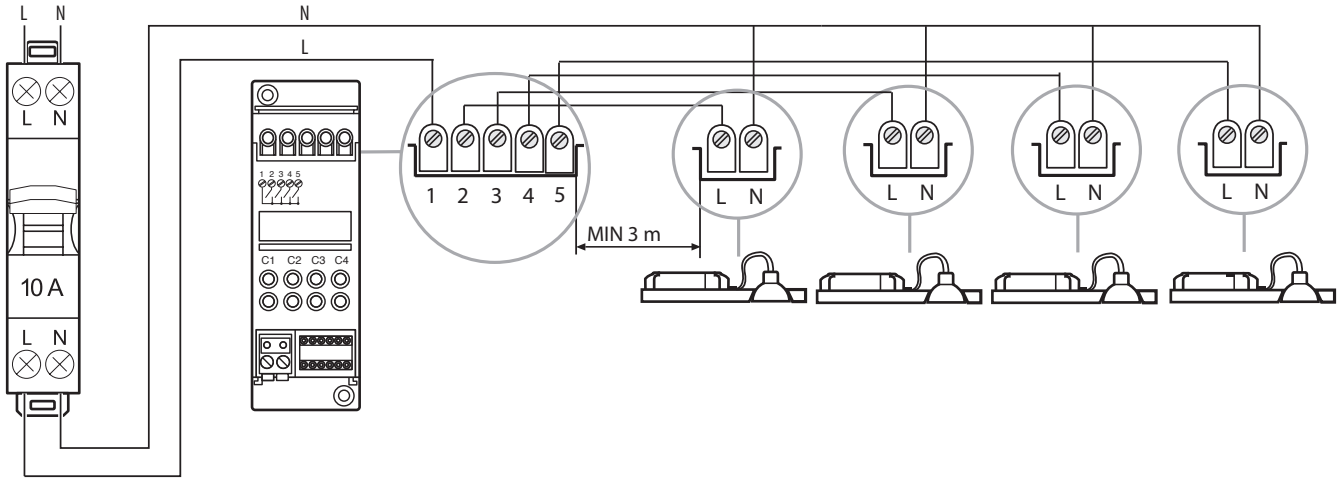
NOTE: To configure the "Groups" use MyHOME_Suite virtual configuration

3.2 Mode

Virtual configuration (MyHOME_Suite)		Physical configuration		
Function	Parameter / setting			
Master Actuator	Master	M=0		
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA		
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL		
Timed stop for rolling shutter motor drive. The actuator switches off after the set time has elapsed. This mode is only operative if PL...=PL...+1 (same configurators), therefore with the two relays interlocked.	1-60 seconds, 2-10 minutes, ∞	PL...=PL+1	M=0	1 minute
			M=1	2 minutes
			M=2	5 minutes
			M=3	10 minutes
			M=4	Until the motor's limit stop
			M=5	20 seconds
			M=6	10 seconds
			M=7	5 seconds
			M=8	15 seconds
			M=9	30 seconds

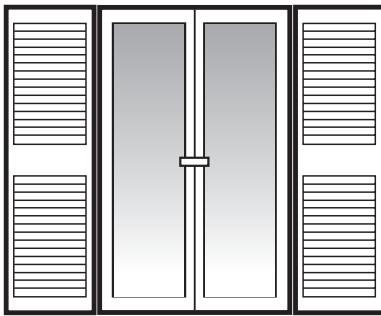
Wiring diagrams

Diagram for connecting light devices



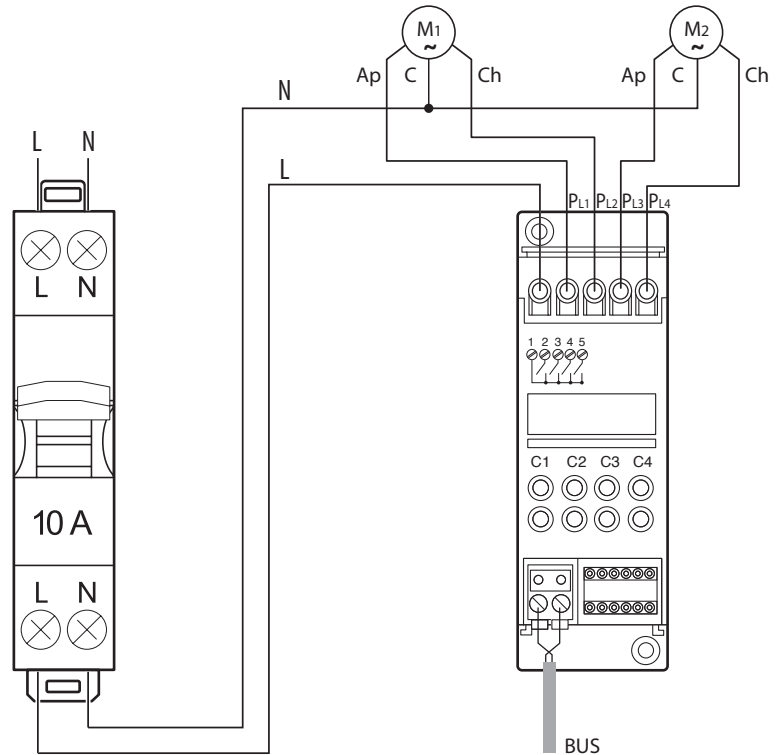
Protect with 10 A thermal magnetic circuit breaker

Diagram for shutter movement control



M1 = motor controlling the internal rabbit shutter
 M2 = motor controlling the external rabbit shutter
 PL1 and PL2 = contacts: they must be interlocked to each other and must always be fitted to the internal rabbit shutter
 PL3 and PL4 = contacts: they must be interlocked to each other and must always be fitted to the external rabbit shutter

WARNING: configure PL1 = PL2 = PL3 = PL4



Protect with 10 A thermal magnetic circuit breaker

Operation:

- The opening of the shutter with external rabbit must start before the one with internal rabbit. The opening of PL1 will start 3 seconds after the start of PL3.
- The closing of the shutter with external rabbit must start after the one with internal rabbit. The closing of PL4 will start 3 seconds after the start of PL2.
- The total time for the full opening/closing of the shutters must be adjustable between 15 and 25 seconds. This adjustment is possible during installation, based on the size of the shutters, to allow for strong winds.