2 Relay actuator 10A

Description

Actuator at 2 independent, interlockable channels, for operating LED, compact fluorescent (CFL) and linear fluorescent lamps with electronic and ferromagnetic transformers or motors (in case of relay interlocking). Each channel is capable of switching up to a maximum of 10A. The device incorporates the function Zero crossing for the proper management of energy-saving lamps.

The device is configurable through MHSuite or through physical configurators; a summary of the main possible functions is provided below:
- Lights switching
- Motors switching
- Operating mode selection (Master, Slave, Master PUL, Slave PUL)
- Load control mode manual selection (with zero crossing, without zero crossing)
- Contact status at power recovery configuration
- Slave device switch-off delay configuration (only in Master/Master PUL mode)

For additional details, see "Configuration". After connecting the device to BUS/SCS and to the load, you can monitor the loads from any properly configured system control device. Moreover, you can locally control the loads by using the buttons on the device: a short press activates or deactivates the load.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with BUS SCS:	18 – 27 Vdc
Input:	5 mA (stand-by)
	55 mA (max - single loads)
	30 mA (max - interlock)
Number of outputs:	2x10A
Operating temperature:	(0) – (+40) °C

Driven loads power/absorption ensured for the configuration with zero crossing and neutral connected (otherwise relay bonding problems may occur):

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps	
250 Vac	2300 W	10 A	500 W	2 A
110 Vac	1100 W	10 A	250 W	2 A

	Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers		Motor reducers for rolling shutters	
	920 W	4 A	920 VA	4 A cosφ 0,5	460 W	2 A
	440 W	4 A	440 VA	4 A cos	250 W	2 A

Protection index:	IP20
Level of robustness:	IK40

NOTE: 1) 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: $P[mW]=140+400*N+10*[Ic1+Ic2]$

P: dissipated power in mW, N: no. of loaded relays, IN: load current corresponding to the N relay.
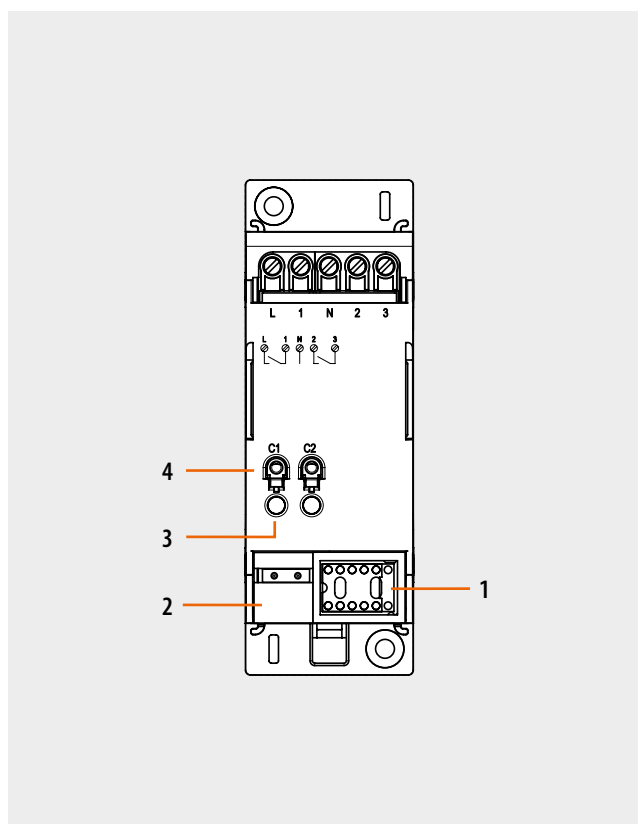
Legend

1. Configurator seat (Note that this must only be used in My Home systems with physical configuration)
2. BUS connector
3. Load status LED
4. Load control pushbutton

Dimensions

Overall size: 2 DIN modules

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL

See the following pages for the configuration procedures.

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If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position. The positions A|PL1 and A|PL2 define the device's local addresses, while M defines the operating mode.
- Configuration via MYHOME_Suite software package, downloadable from the website 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.

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	PL1, PL2=1-9
Group		Group 1 - Group 10 = 0-255	G = 0-9

1.2 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 which has the same address	Slave	M=SLA	
Button (On monostable) ignores Room and General controls	Master PUL	M=PUL	
Delay OFF: Master actuator with OFF control delayed on the corresponding Slave actuator. [1] [2]	0 - 255	No configurator	0 sec.
		M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes
Load control mode [3]		C=0	with zero crossing
		C=1	without zero crossing

NOTE 1): In the Master and Master PUL mode it is possible to set a 0-255 seconds OFF delay (through MYHOME_Suite) and 1-4 minutes delay through the physical configuration. With the OFF control the Master actuator is disabled; the Slave actuator is disabled after the time set with the configurators has elapsed. The configurator value indicated in the table defines the timeout, after which the actuator switches off its Slave.
This mode is operative only if PL1≠PL2

NOTE 2): In blinds configuration, it can only be 0

NOTE 3): For configurations C=0 (or virtual "Zero crossing"), the LED flashes if L and N are not connected. With C=1 and neutral not connected relay can be used simply as a clean contact.

To use "Actuator as Slave with PUL function" and to adjust the "Delay OFF", the "Load type" (Actuator, Lamp, Valve, Differential reset, Fan, Irrigation, Controlled socket, Lock) use the MYHOME_Suite virtual configuration.

2. 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	PL1, PL2=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

NOTE: If PL1=PL2, the 2 relays are interblocked

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 which has the same address	Slave	M=SLA	
Button (On monostable) ignores Room and General controls	Master PUL	M=PUL	
Timed stop. The actuator switches off after the set time has elapsed. Operating mode, only if PL1=PL2.	1-60 seconds, 2-10 minutes, ∞	M=0	1 minute
		M=1	2 minutes
		M=2	5 minutes
		M=3	10 minutes
		M=4	infinite or until next command
		M=5	20 sec.
		M=6	10 sec.
		M=7	5 sec.
		M=8	15 sec.
		M=9	30 sec.

To use "Actuator as Slave with PUL function" and to adjust the "Delay OFF", the "Load type" (Actuator, Blinds, Curtains, Gate, Garage door) use the MYHOME_Suite virtual configuration.

Wiring diagrams

Illuminating devices wiring diagram
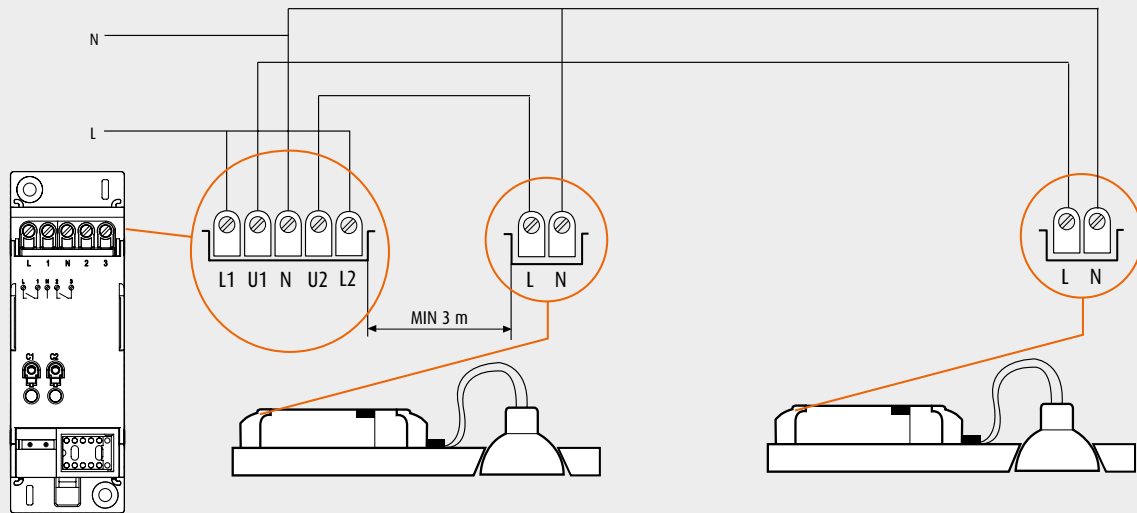
230 Vac motor with 2 windings control diagram

Actuator F411U2

M = AC motor
with 2 windings

L1-N = clockwise rotation
L2-N = counterclockwise rotation
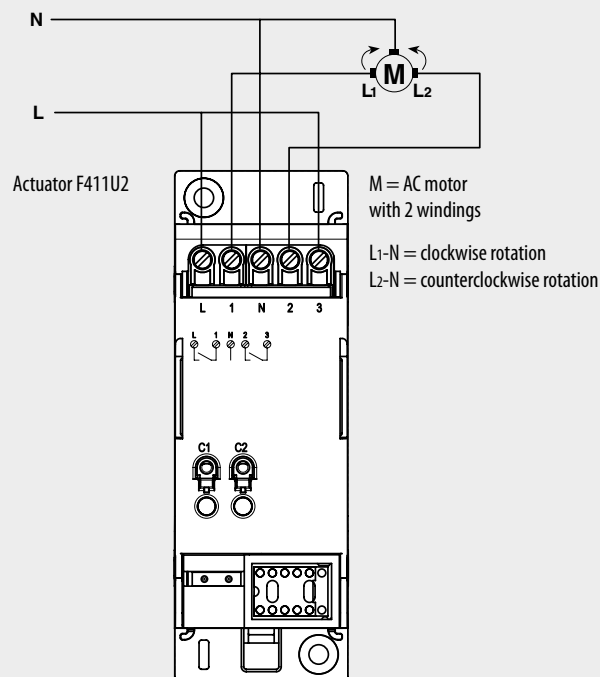
Standards

Directive: Directive 2004/108/CE on electromagnetic compatibility
Installation standards: CEI 64-8
Product standards: IEC 60669-2-1; EN 50428