Actuator 16A

F523

Description

The device is an actuator with 1 bistable relay with zero crossing functionality, intended for the load control management and/or automation functions.
The actuator is capable, in an isolated manner, of assessing the frequency (50 Hz) and voltage (230 Vac)

In load control mode:
The actuator will be given a priority indicating the tripping order that will be followed by the F521 load control central unit (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all the configuration software programs. Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

In automation mode, the actuator can perform the following functions:
- All operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays;
- Possibility of group configuration (G)
- Additional modes using the M configuration socket.

In mixed load control and automation mode, the following rules are followed:
The local button performs the load control management function (forcing/end of forcing)
- If the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.
- If the load is DISABLED by the load control central unit, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a command, ENABLING or FORCING, from load control management.
During disabling, the actuator keeps the statuses requested by the Automation commands in memory. After RE-ENABLING the relay is placed in the status required by the last automation command.
This function has been conceived for applications where the load control management function is implemented, with the need, via automation commands, of performing hourly load scheduling. If during the DISABLING stage the relay is switched OFF due to the scheduling settings, when re-enabling takes place it will stay switched OFF.

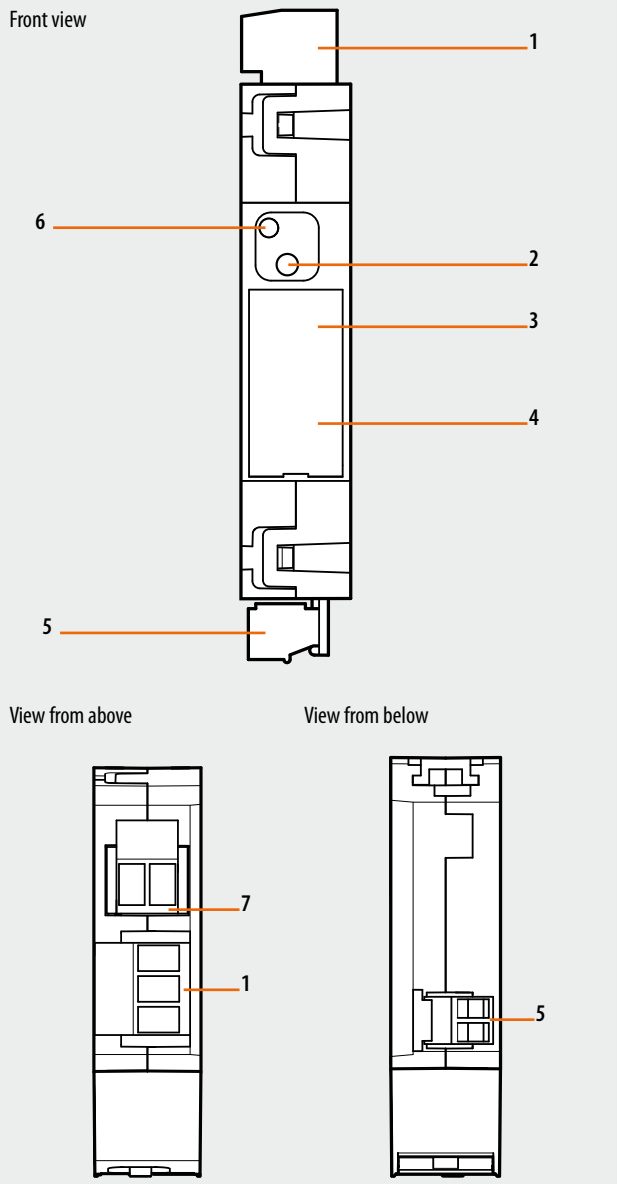
The bistable relay enables preserving the status of the load even if there is no voltage on the SCS BUS (and subsequent device reset).
The device has a footprint of 1 DIN module and has a housing for 6 configurators: A, PL, G, M, P1, P2

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	10 mA max
Operating temperature:	0 – 40°C
Power/Consumption of driven loads:	Incandescent lamps and halogen lamps 10 A / 2300 W LED lamps and compact fluorescent lamps 500 W / Max 10 lamps Linear fluorescent lamps and electronic trans formers 4 A / 920 W Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

Dimensions

1 DIN module



Legend

1. 230 Vac connection
2. Button for load forcing
3. Virtual configuration pushbutton (future use)
4. Configurator socket
5. BUS connection
6. User interface LED, SEE TABLE on following pages
7. Load connection

Configuration

The device 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.

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
Groups		Group 1 - Group 10=0-255	G=0-9

1.2 Mode

1.2.1 Lights control

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	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1)]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function", to define the load to be controlled and the "closed/open" state of the relay after a reset, use MYHOME_Suite virtual configuration.

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.
Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

1.2.2 Load control command

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Priority	1-63	P1,P2: 01-63

To use "Phase" (Single, 1, 2 and 3), "Type of load", "Load status upon central unit enabling" and "AC or DC voltage" use MYHOME_Suite virtual configuration.

LED signals according to the status of the actuator in automation mode:

Device status	LED status
Load OFF	GREEN
Load ON	ORANGE

LED signals according to the status of the actuator in load control management mode:

Device status	LED status
Enabled	ORANGE
Forced	ORANGE flashing 1s/1s on GREEN
Disabled	RED

LED signals according to the status of the actuator in automation and load control management mode:

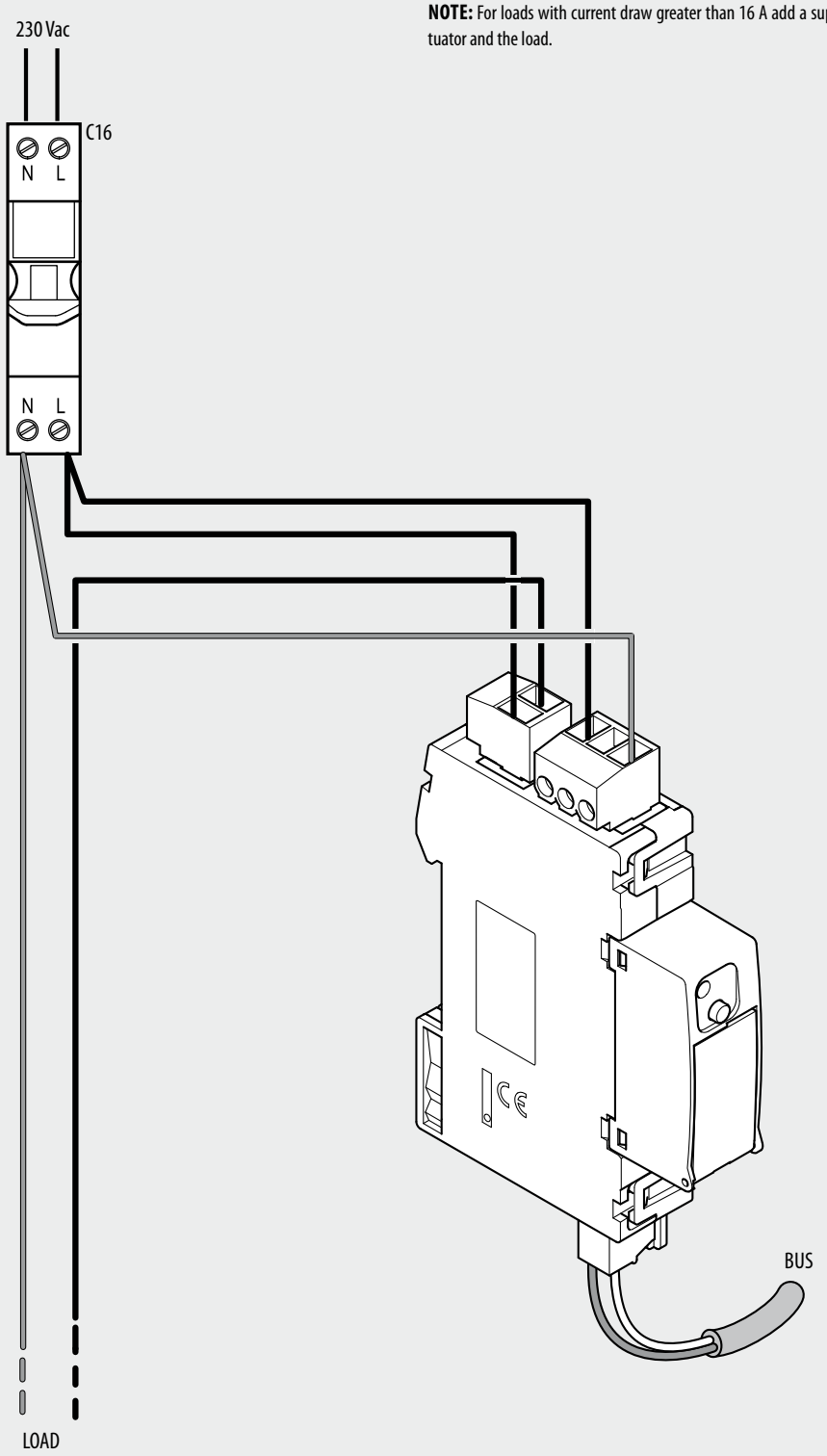
Device status	LED status
Enabled + ON	ORANGE
Enabled + OFF	GREEN
Disabled	RED
Forced + ON	ORANGE flashing 1s/1s on GREEN
Forced + OFF	ORANGE flashing 1s/1s

Common LED notifications:

Device status	LED status
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

Actuator connection:



NOTE: For loads with current draw greater than 16 A add a supporting relay between the actuator and the load.