Contact interface in DIN module   F428

Description

This device lets you integrate traditional control devices (switches, pushbuttons, etc.) in advanced systems with BUS operating logic.

Therefore, it is possible to extend the use of the Lighting Management system in rooms where traditional systems are already present or in historic and prestigious rooms whereby the complete or partial remaking of the electric system would entail heavy masonry work. The old but valuable switch with its no longer compliant wiring can therefore continue to be used with it, as the connection to the load to be controlled is carried out safely by connecting it with its respective interface with no-voltage contact.

Contact N1 controls light point PL1, contact N2 controls light point PL2.

It is possible to connect:
- Two N/O (normally open) and N/C (normally closed) traditional switches or buttons;
- A switch.

The device is fitted with 2 LEDs to signal contact closure, programming/deletion, and the status of the control devices.

Front view

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	9 mA
Dissipated power with max. load:	0.2 W

Dimensions

Size: 2 DIN modules

Legend

1. Clamps for connection to traditional devices
2. Configurator socket (note that this must only be used in MyHOME systems with the physical configuration).
3. BUS
4. LED
5. Button

Configuration

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

1) PHYSICAL CONFIGURATION, inserting the configurators in position.

2) 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.
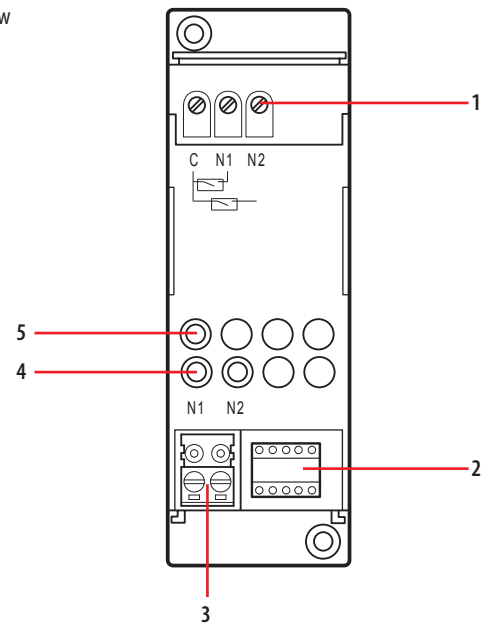
3) Home + Project app, available from all the stores.

When used as a component of the Lighting Management system, use the specific types of configuration (Plug&go, Project&Download).

The interface consists of two independent control units, which are identified with the positions PL1 and PL2 in the physical configuration and the term Module 1 and Module 2 in the MyHOME_Suite and Home + Project virtual configuration. The two units can send:
- commands to two actuators for two independent loads (On, Off or adjustment) identified with the address PL1 and PL2 and the mode specified in M or;
- a command to the F420 scenario module;
- a double command intended for a single load (motor for blinds Up-Down, curtains Open-Close) identified with the address PL1=PL2 and specified Configuration mode M. The interface has an LED for indicating proper operation and three terminals for connection to traditional devices such as:
- two N/O (normally open) and N/C (normally closed) traditional switches or buttons;
- a switch.

List of Functions

The device performs the following functions:
- LIGHT SWITCH
- AUTOMATION CONTROL
- DEVICE LOCKING/UNLOCKING
- SCENARIO MODULE CONTROL
- PROGRAMMED SCENARIO ACTIVATION
- PLUS LIGHTING MANAGEMENT SCENARIO ACTIVATION
- PLUS PROGRAMMED SCENARIO ACTIVATION

See the following pages for the configuration procedures.

Physical configuration

| A | PL1 | PL2 | M | SPE |

The interface includes two independent control units, identified with positions N1 and N2. The two units can send:
- Commands to two actuators for two independent loads (On, Off or adjustment) identified with the address PL1 and PL2 and the mode specified in M **or;**
- A command to the F420 scenario module;
- A double command intended for a single load (motor for rolling shutter Up/Down, Open/Close curtains) identified with the address PL1 = PL2 and mode specified M.

Function selection

To configure the contact numbers use MyHOME_Suite virtual configuration

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=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status You can also configure the "Installation level" and the "Destination level".

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MyHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Cyclic		SPE=0, M=0
ON		SPE=0, M=ON
OFF		SPE=0, M=OFF
Cyclic (N/O contact only)		SPE=1, M=7
Button		SPE=0, M=PUL
ON with button at N2, OFF with button at N1		SPE=0, M=O/I
Timed ON	0.5sec	SPE=0, M=8
	2sec	SPE=8, M=1
	30sec	SPE=0, M=7
	1min	SPE=0, M=1
	2min	SPE=0, M=2
	3min	SPE=0, M=3
	4min	SPE=0, M=4
	5min	SPE=0, M=5
	10min	SPE=8, M=2
	15min	SPE=0, M=6

For timed ON with period 0-255 hours, 0-59 minutes and 0-59 seconds use MyHOME_Suite virtual configuration

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MyHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT ON/OFF when pressing briefly and adjustment when holding down	SPE=0, M=0
ON with button at N2, OFF with button at N1 and DIMMER when held down	SPE=0, M=0/I
ON with adjustment at 10%	SPE=3, M=1
ON with adjustment at 20%	SPE=3, M=2
ON with adjustment at 30%	SPE=3, M=3
ON with adjustment at 40%	SPE=3, M=4
ON with adjustment at 50%	SPE=3, M=5
ON with adjustment at 60%	SPE=3, M=6
ON with adjustment at 70%	SPE=3, M=7
ON with adjustment at 80%	SPE=3, M=8
ON with adjustment at 90%	SPE=3, M=9

For the functions of "Cyclic with custom point-to-point adjustment", "Cyclic with custom adjustment", "Cyclic dimmer without adjustment", "Custom dimmer ON without adjustment", "Custom dimmer OFF without adjustment", "ON with custom adjustment", "OFF with custom adjustment", use MyHOME_Suite virtual configuration.

1.2.3 Blink command

When an actuator receives a blink command, it implements it by closing and opening the relay for a time equal to T that can be configured as shown in the table.
Combine it with a command configured OFF to switch it off.

Virtual configuration (MyHOME_Suite)	Physical configuration
Parameter / setting	
Blink 0.5 s	SPE=2, M=0
Blink 1 s	SPE=2, M=1
Blink 1.5 s	SPE=2, M=2
Blink 2 s	SPE=2, M=3
Blink 2.5 s	SPE=2, M=4
Blink 3 s	SPE=2, M=5
Blink 3.5 s	SPE=2, M=6
Blink 4 s	SPE=2, M=7
Blink 4.5 s	SPE=2, M=8
Blink 5 s	SPE=2, M=9

For blinking with a period of from 5.5 to 8 seconds, use 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=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		general	A=GEN

With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status You can also configure the "Installation level" and the "Destination level".

2.2 Mode

Virtual configuration (MyHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Bistable control		PL1=PL2 SPE=0 M=↑↓
Monostable control		PL1=PL2 SPE=0 M=↑↓M

3. Device locking/unlocking

3.1 Addressing

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

3.2 Mode

Virtual configuration (MyHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Disable		SPE=1 , M=1
Enable		SPE=1, M=2

To configure the "Installation level" and the "Destination level" and use MyHOME_Suite virtual configuration

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MyHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Light point (of the scenario module)	0-15	PL1, PL2=0-9

NOTE: PL2 must be equal to PL1, or not be configured (in which case the button connected to terminal PL2 is disabled)

4.2 Mode

Virtual configuration (MyHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Scenario modification and activation		
Scenario No.	1-16	SPE=6[1], M=1-8
Scenario activation		
Scenario No.	1-16	SPE=4[2], M=1-8

NOTE: For Delayed activation of the top/bottom button use MyHOME_Suite virtual configuration
NOTE 1): With SPE=6 you can call and program scenarios within module F420. M=1-8: group of scenarios to be controlled (see table).

NOTE 2): With SPE=4 it is only possible to call up the scenario saved in module item F420. M=1-8: group of scenarios to be controlled (see table).

M	First contact PL1	Second contact PL2
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

A=0-9 and PL1=1-9 are the room and the light point of the scenario module to be controlled. PL2 must be equal to PL1 or not be configured (in which case the second contact is disabled).

Scenario programming

To program, change or delete a scenario you need to enable programming module F420 so that the status LED is green (press the
locking/unlocking button on the scenario module for at least 0.5 seconds) and then continue with the following steps:

1) press one of the four special control buttons to which the scenario should be associated to for 3 seconds and the corresponding LED will start blinking;

2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;

3) confirm the scenario by briefly pressing the corresponding button on the special control to exit the programming mode;

4) to change a scenario, or to create new ones to use with the other buttons, repeat the procedure
starting from point 1. To recall an already set scenario, briefly pressing the corresponding button on the control is enough. If you want to delete a scenario completely, press and hold down the corresponding button for approximately 10 seconds.

5. Programmed scenario activation

Enabling buttons for sending a command to the scenario programmer MH200N.
The address of the assigned command in positions A and PL must be unique and match the scenario to be activated. The control can be connected at any point in the system (local bus or riser).

5.1 Addressing

		Virtual configuration (MyHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=1-9

NOTE: If PL1=PL2 the two buttons connected to the interface activate two different scenarios.
If PL1≠PL2 the two buttons activate the same scenario

5.2 Mode

	Virtual configuration (MyHOME_Suite)	Physical configuration
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Button N1	0-31	SPE=0 M=CEN
Button N2	0-31	SPE=0 M=CEN

6. Plus Light Management scenario activation

For the configuration please refer to MyHOME_ Suite

7. Plus programmed scenario activation

To configure the address 1 - 2047 of the scenario and the number of buttons 0 - 31 on
the control device, use MyHOME_Suite virtual configuration

Wiring diagram

NOTE: Interfaces cannot be installed in parallel: this type of wiring could cause electromagnetic compatibility problems.

NOTE: The maximum permissible distance between interface and contact is 50 metres when using a generic cable, but it can be extended to up to 200 metres if one of the following cables is used: L4669, 336904, 336905.