

Universal dimmer 2x300W

F418U2 - 0 036 51

Description

2-channel dimmer for the management of LED and dimmable compact fluorescent lamps (CFL) lamps, halogen lamps and electronic transformers.

The device is able to control a maximum load of 300W for each channel or a single maximum load of 600W in a two channel parallel configuration.

The device is configurable through MHSuite or through physical configurators; a summary of the main possible functions is provided below:

- Dimming
- Operating mode selection (Master, Slave, Master PUL, Slave PUL)
- Manual selection of the type of load
- Minimum dimming level 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, a long press controls it

Standards, Certifications and Marks

CE certification.

IEC 60669-2-5: Switches for household and similar fixed electrical installations.

EN 50491-5-2: Home and building electronic systems (HBES).

SDTEMC_IMM: Internal test.

Technical data

Operating temperature:	0 ÷ 40 °C	
SCS circuit:	Power supply voltage:	18 ÷ 27Vdc
	Power consumption:	18mA (max) (loads in ON status)
230V/127V mains circuit:	Power supply voltage:	220 ÷ 240Vac / 110 ÷ 127Vac, 50 ÷ 60Hz
	Power consumption:	5W (max) (220 ÷ 240Vac, 110 ÷ 127Vac, loads in ON status)
	Fuse:	T 3.15 H 250V (fuse Time-Lag 3.15A)

Driven loads power/absorption:

	Incandescent lamps Halogen lamps	Dimmable LED lamps* Compact dimmable fluorescent lamps Halogen lamps with magnetic/electronic transformers
Separate channels	2x300W (220 ÷ 240Vac)	2x300VA (220 ÷ 240Vac)
	2x150W (110 ÷ 127Vac)	2x150VA (110 ÷ 127Vac)
Parallel channels	600W (220 - 240Vac)	600VA (220 - 240Vac)
	300W (110 - 127Vac)	300VA (110 - 127Vac)

Note (*): For the most common dimmable and CFL LEDs available on the market, the 300VA power corresponds to about 200W.

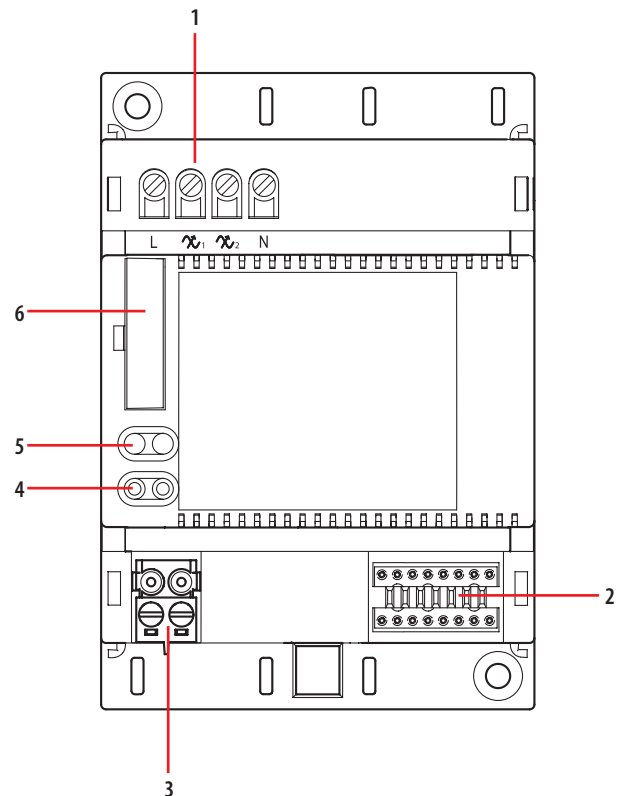
Caution: Devices with production batch from 23W16 provide for a more performing dimming.

For more information please refer to the "Configuration / Minimum advanced level" section.

Dimensions

Overall size: 4 DIN modules

Front view



Legend

1. 230V/127V power supply connection and loads
2. Configurator seat (to be used only in MyHOME systems with physical configuration)
3. BUS/SCS
4. 2 ON/OFF/control buttons, one for each channel
5. 2 LEDs (green/red)

General indications of the device:

- Green LED1 on / Green LED2 on / Red LED1 flashing quickly/
Red LED2 off: Unconfigured device
- Green LED1 on / Green LED2 on / Red LED1 flashing 1s ON / 1s OFF/
Red LED2 off: Configuration / test session in progress

Indications relating to the single channel with configured device:

- Green LED off / red LED off: Unconfigured channel
- Green LED on / red LED off: Load off
- Green LED on / red LED on: Load on
- Green LED on / red LED flashing 0.5s ON / 0.5s OFF:
No 230V/127V power supply
- Green LED off / red LED flashing 0.5s ON / 1.5s OFF: Overcurrent

6. Fuse

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 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.

Note: For this device, the MyHOME Server automatically configures 2 channels.

Addressing

Address type	Virtual configuration (MyHOME_Suite)		Physical configuration
Point-to-point	Room	0-10	A=1-9
	Channel 1 lighting point	0-15	PL1=1-9
	Channel 2 lighting point	0-15	PL2 = 0-9
Group	Group 1 - Group 10: 0-255		G=0-9 ¹⁾

NOTE 1): Group not configurable if the mode is Slave.

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 which has the same address	Slave		M=SLA	
Button (On monostable) ignores Room and General controls	Master PUL		M=PUL	
Actuator as slave with PUL function	Slave PUL		-	
Delay OFF: Master actuator with OFF control delayed on the corresponding Slave actuator. ¹⁾	0 - 255 seconds		M=1	1 minute
			M=2	2 minutes
			M=3	3 minutes
			M=4	4 minutes

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. Only for point-to-point or group control. With the OFF control the Master actuator is disabled, the Slave actuator is disabled after the time set with the corresponding parameter has elapsed.

The ON control activates at the same time the Master actuator and the Slave actuator. The following OFF control disables the Master actuator and keeps the Slave actuator active for the period of time set by the configurator 1 - 4 inserted in M of the Master actuator as shown in the table.

Type of load

Virtual configuration (MyHOME_Suite)

Type of loads configurable on channel 1	Type of loads configurable on channel 2 ¹⁾
LED leading edge	LED leading edge
LED trailing edge / electronic transformers ²⁾	LED trailing edge / electronic transformers ²⁾
CFL leading edge	CFL leading edge
CFL trailing edge	CFL trailing edge
Halogen lamps	Halogen lamps

NOTE 1): Channel 2 configurable only if the parallel mode is not configured (specifically, only if channel 1 is not configured as a double dimmer). In the case of configuration with two independent channels, the type of load for channel 2 may be selected regardless of the setting for the channel 1.

Physical configuration

Configuration	Type of load on channel 1	Type of load on channel 2
TY=0	LED leading edge	LED leading edge
TY=1	LED trailing edge	LED trailing edge
TY=2 ³⁾	LED leading edge	LED trailing edge
TY=3 ³⁾	LED trailing edge	LED leading edge

NOTE 2): With this setting it is generally possible to control electronic transformers (always check the information on the type of driving allowed indicated on the transformer).

NOTE 3): Configurable only if the parallel mode is configured (specifically, only if: PL2≠PL1).

Minimum advanced level			
Virtual configuration (MyHOME_Suite)		Physical configuration ¹⁾	
Function	Parameter / setting		
The configurator in this position defines the minimum value of the light intensity obtainable by means of the dimmed adjustment.	1-100	MIN1/MIN2=0	Default (10%) ²⁾
		MIN1/MIN2=1	1%
		MIN1/MIN2=2	5%
		MIN1/MIN2=3	10%
		MIN1/MIN2=4	15%
		MIN1/MIN2=5	20%
		MIN1/MIN2=6	25%
		MIN1/MIN2=7	30%
		MIN1/MIN2=8	35%
		MIN1/MIN2=9	40%

NOTE 1): The configurators are MIN1 and MIN2, each for the corresponding channel.
 MIN2 can only be set if the second channel is configured and if the parallel mode is not configured (i.e. it must be: MIN2=0 if PL2=0 or PL2=PL1).
NOTE 2): The default value is set to ensure the best performance with LED lamps load.

Avertissement :

Pour le fonctionnement correct de l'actionneur, configurer le type d'ampoule à piloter en utilisant le cavalier de configuration en position TY ou le paramètre correspondant en configuration virtuelle. Si l'ampoule ne s'allume pas ou fonctionne de manière instable (papillotement), sélectionner au moyen des cavaliers de configuration en positions MIN1 et MIN2 ou de la configuration virtuelle, le niveau minimum de l'intensité lumineuse jusqu'à l'obtention de la valeur permettant d'ajuster le fonctionnement de l'ampoule.



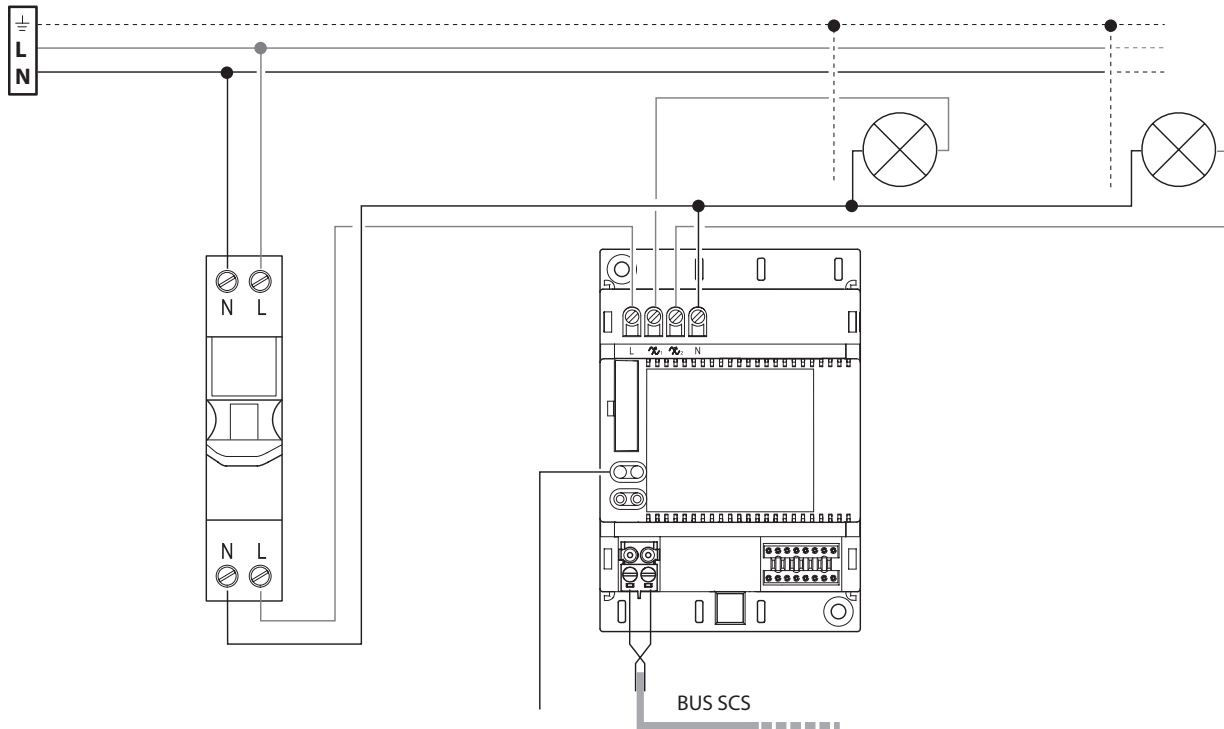
Devices manufactured after production batch 23W16 offer a better minimum dimmer adjustment level. If installed in systems with devices belonging to previous production batches, differences in light levels between the two dimmers may occur. In order to continue to guarantee the same experience, we recommend that you set the matching level percentages found in the attached table:

	Percentage of the light level																								
Production batch <23W16	-	-	-	-	-	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Production batch ≥23W16	1	5	10	15	20	25	28	33	37	42	47	50	54	59	65	70	75	77	80	84	87	90	94	97	100

The output of this function is closely linked to the performance of the light bulb. The better the performance, the better the result will be, avoiding the 'flickering' effect.

Wiring diagrams

Wiring diagram for configuration with 2 independent channels



Wiring diagram for parallel mode configuration

