Dimmers for LED bulbs and dimmable fluorescent lamps DIM-15 and SMR-M

Technical data

	DIM-15	SMR-M
Supply voltage	AC 230V / 50-60 Hz	
Supply voltage tolerance	-15%; +10%	
Apparent power	max. 1.5VA	
Loss power	max. 0.7W	
Supply indication	green LED	
Controlling		
Control terminals	x	L - S
Control wire	AC 230V	
Control voltage	AC 0.3-0.6 VA	
Control input power	min. 80 ms / unlimited	
Control impulse length	Yes	
Glow tubes connection	230V - max. 15pcs	230V - max. 10pcs
Max. amount of glow lamps connected to controlling input	(measured with glow lamp 0.68mA/230VAC)	(measured with glow lamp 0.68mA/230VAC)
Output		
Contactless	2 x MOSFET	
Load*	300W (at cos fi=1)	160W (at cos fi=1)
Output status indication	red LED	x
Other data		
Operating temperature	-20C ... +35C	
Storing temperature	-20C ... +60C	
Operating position	any	
Mounting	DIN rail EN 60715	free at connection wires
Protection degree	IP40 from front panel / IP10 terminals	IP30 in standard conditions
Overvoltage category	III.	
Pollution level	2	
Terminal wires	max. 2x2.5; with sleeve 1x1.5mm2	x
Dimensions	90 x 17.6 x 64 mm	49 x 49 x 21 mm
Weight	57 g	38 g
Standards	EN 60669-2-1, EN 61010-1	

* Due to a large number of light source types, the maximum load depends on the internal construction of dimmable LEDs and ESL bulbs and their power factor cos φ.
The power factor of dimmable LEDs and ESL bulbs ranges from cos φ = 0.95 to 0.4.
An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

Advantages

- Designated for dimming of:
  a) LED bulbs and LED light sources
  b) dimmable saving fluorescent lamps
- Enables gradual setting of luminance by push-button (non-detent) or parallel buttons
- Returns to last state upon re-energization
- Type of light source (LED or saving fluorescent lamp) is set by switch-over on the front panel of device
- Minimal luminance, set by potentiometer on the front panel, eliminates flashing of some types of saving fluorescent lamps

DIM-15
- Supply voltage 230V AC
- Output status is indicated by red LED:
  - shines when output is active
  -flashes while heating overload, at the same time output is disconnected
- 1-MODULE version, DIN rail mounting, saddle terminal)

SMR - M
- Button-controlled dimmer intended to be installed in an installation box (e.g. KU-68) into the existing electrical wiring
- Protection against excessive temperature inside the device - switches off the output
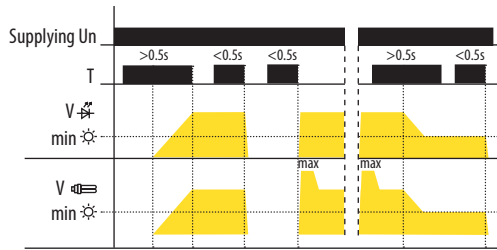
Connection

DIM-15

SMR-M
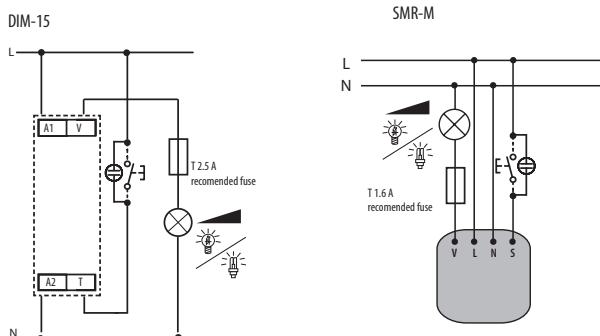
Light source type setting

dimmable saving fluorescent lamps

LED bulbs

Functions and controlling

Supplying Un
T
V
min
V
min

>0.5s <0.5s <0.5s >0.5s <0.5s

max max

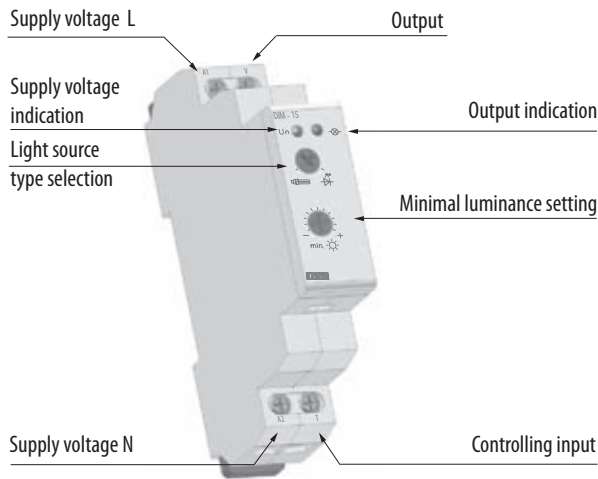**Controlling::**
- short button press (<0.5s) turns the light off or on
- long press (>0.5s) enables slight regulation of light intensity
- setting of minimal luminance is possible only during decreasing of luminance by long button press

Devices description

Supply voltage L
Output
Supply voltage indication
Output indication
Light source type selection
Minimal luminance setting
Supply voltage N
Controlling input

DIM-1S
Un

Minimal luminance setting:
LED bulb:
- if the light is turned off, short press (<0.5s) switches the light onto last set luminance level
Saving fluorescent lamp:
- if the light is turned off, short press increases the luminance onto maximal level (saving fluorescent lamps fires up) and then luminance decreases onto set level
- setting of minimal luminance by saving fluorescent lamps serves for harmonizing of lowest light intensity prior its unprompted switching off

Additional information
- it is possible to dim only LED bulbs equipped with capacitator supplying
- it is not possible to dim saving fluorescent lamps without marking: dimmable
- an incorrect setting of light source has effect only on dimming range, it means neither dimmer or load get demaged
- maximal load is counting with usage of LC filter

Minimal luminance setting
Light source type selection
Supply voltage indication
Output to an appliance
Switch (button)
Phase
Neutral

SMR-M
Dimmer
230V
LOAD
S N L V

DATA