Features

Electronic step relay and dimmer for control of lighting levels

- 2 versions available:
  - panel or box mount
  - 17.5 mm modular
- Use with 3 or 4 wire connection
- "Soft" On and Off transitions
- Two selectable operating modes: with or without previous light level memory
- Suitable for incandescent and halogen lighting loads (with or without transformer or electronic supply)
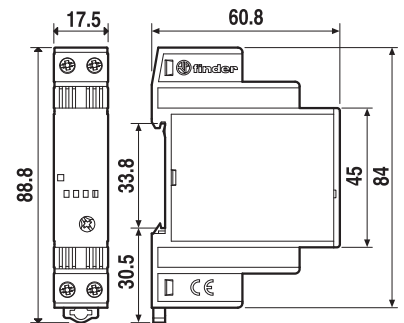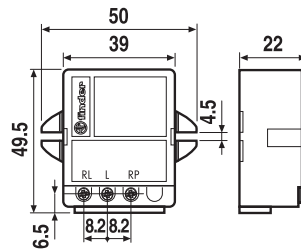- Thermal protection against overload

NEW 15.51

- Maximum lamp load 400 W
- Multi-function

NEW 15.61

- Maximum lamp load 500 W
- Multi-function

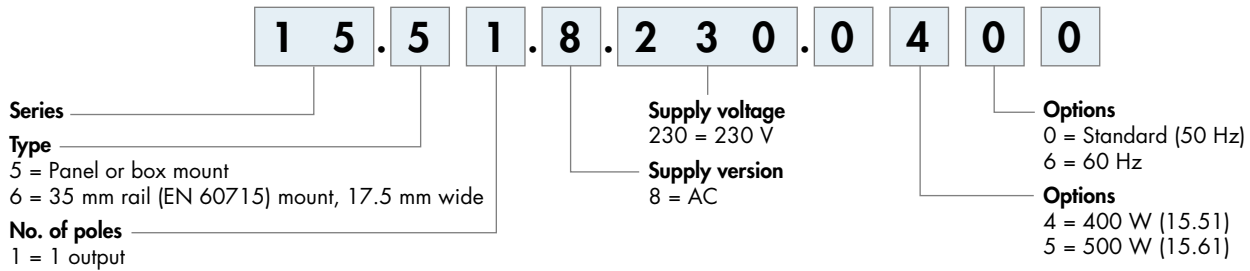| Output data		15.51	15.61
Rated voltage	V AC	230	230
Power max.	(230 V) W	400	500
Power min.	(230 V) W	10	5
Nominal lamp rating: incandescent	(230 V) W	400	500
halogen	(230 V) W	400	500
transformers & electronic supplies for halogen lamps	W	400	500
Supply specifications			
Nominal voltage (U_N)	V AC (50Hz)*	230	230
Operating range		$(0.8…1.1)U_N$	$(0.8…1.1)U_N$
Power stand-by	W	≤ 1	≤ 0.8
Technical data			
Ambient temperature range	°C	−10…+50	−10…+50
Protection category		IP 40	IP 40
Approvals (according to type)		CE PC	CE

* Version for 60Hz available (see ordering information).

Note

1) If the lighting load comprises low voltage halogen lamps fed through either electromagnetic or electronic transformers, then do not connect more than one transformer per 15.51 dimmer or two transformers per 15.61 dimmer. Use only toroidal transformers.
2) It is essential not to drive electromagnetic transformers without the lamp load connected.
3) For the 15.61 with load lamp > 300W, adequate ventilation must be provided - a gap of 5 mm on both side of the dimmer is suggested.
4) Not compatible with illuminated push-buttons.

Ordering information

Example: type 15.51, electronic step relay and dimmer, 230 V AC.

| 1 | 5 | . | 5 | 1 | . | 8 | . | 2 | 3 | 0 | . | 0 | 4 | 0 | 0 |

Series

Type
5 = Panel or box mount
6 = 35 mm rail (EN 60715) mount, 17.5 mm wide

No. of poles
1 = 1 output

Supply voltage
230 = 230 V

Supply version
8 = AC

Options
0 = Standard (50 Hz)
6 = 60 Hz

Options
4 = 400 W (15.51)
5 = 500 W (15.61)

Technical data

Other data			15.51	15.61
Power lost to the environment				
without load		W	0.7	0.8
with rated load		W	2.2	2.0
Max cable length for push-button connection		m	100	100
Other data				
Max. wire size			solid cable	stranded cable
		mm²	1x6 / 2x4	1x4 / 2x2.5
		AWG	1x10 / 2x12	1x12 / 2x14
⊕ Screw torque		Nm	0.8	0.8

Thermal protection and signalling

LED (type 15.61 only)	Supply voltage	Thermal protection
———————	OFF	—
▮ ▮ ▮ ▮ ▮	ON	—
▮▮▮▮▮▮▮▮▮	ON	ALARM

ALARM
The internal thermal protection will detect an unsafe temperature, due to overload or incorrect installation, and will turn the dimmer output off.
It is possible to turn the dimmer on, by push button, only when the temperature reduces to a safe level (after 1 to 10 minutes, depending on installation conditions) and after removing the cause of the overload.

Functions

Type	Setting	Step dimming
15.51	see "Operating mode setup"	**Operating mode 1 (with memory):** the previous light level is memorized.
15.61		

Operating mode 1 (with memory): the previous light level is memorized.

Long control pulse: The light level is progressively raised or lowered through a maximum of 10 incremental steps.

Short control pulse: Alternately switches between On and Off.
When switching On, the light level assumes the value set during the previous On state.

Type	Setting	Step dimming
15.51	see "Operating mode setup"	**Operating mode 2 (without memory):** on switch off, the light level is not memorized.
15.61		

Operating mode 2 (without memory): on switch off, the light level is not memorized.

Long control pulse: The light level is progressively raised or lowered through a maximum of 10 incremental steps.

Short control pulse: Alternately switches On or Off between the maximum light level and the off state.

Type	Setting	Linear dimming
15.61		**Operating mode 3 (with memory):** the previous light level is memorized.

Operating mode 3 (with memory): the previous light level is memorized.

Long control pulse: The light level is progressively raised or lowered.

Short control pulse: Alternately switches between On and Off.
When switching On, the light level assumes the value set during the previous On state.

Type	Setting	Linear dimming
15.61		**Operating mode 4 (without memory):** on switch off, the light level is not memorized.

Operating mode 4 (without memory): on switch off, the light level is not memorized.

Long control pulse: The light level is progressively raised or Lowered.

Short control pulse: Alternately switches On or Off between the maximum light level and the off state.
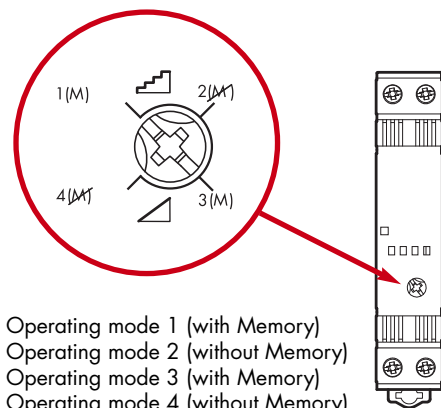
Operating mode setup

Type 15.51

On **15.51** operating mode 1 is preset, but it is possible to change it using the following sequence:
a) remove the supply voltage;
b) press the control button;
c) apply the supply to the relay, keeping the button closed for 3 second;
d) On button release, the light will flash twice to indicate the selection of operating mode 2, or flash once for operating mode 1.
Repeating the above steps will alternately change between operating modes.

Type 15.61
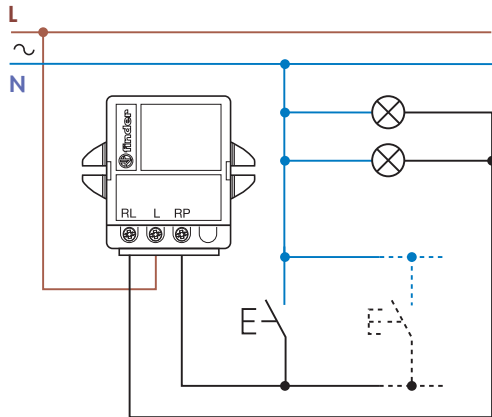
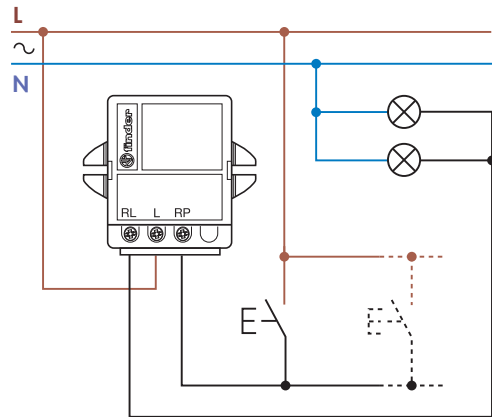On **15.61** it is possible to select the required operating mode 1, 2, 3 or 4 using the front selector.

1(M) = Operating mode 1 (with Memory)
2(M) = Operating mode 2 (without Memory)
3(M) = Operating mode 3 (with Memory)
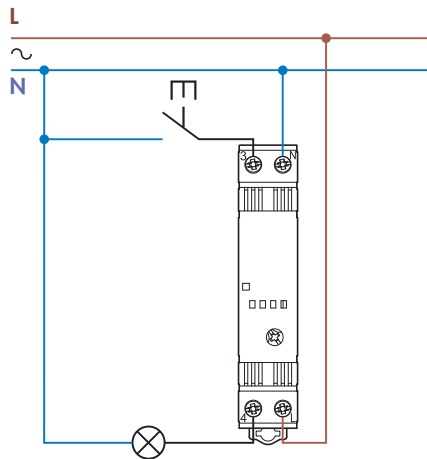4(M) = Operating mode 4 (without Memory)

3

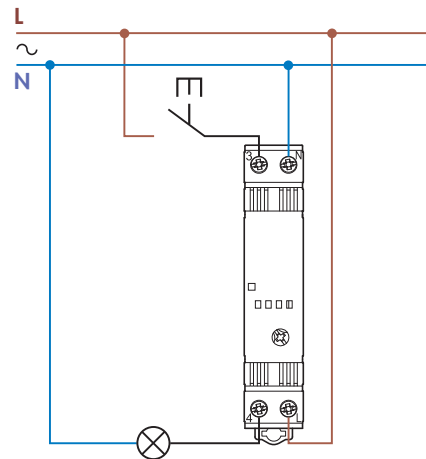## Wiring diagrams

Type 15.51 - 3 wire connection

Type 15.51 - 4 wire connection

Type 15.61 - 3 wire connection

Type 15.61 - 4 wire connection

Accessories

020.01

| **Adaptor for panel mounting** for type 15.61, 17.5 mm wide | 020.01 |

060.72

| **Sheet of marker tags** for type 15.61, plastic, 72 tags, 6x12 mm | 060.72 |