

## Purpose

Electronic bistable pulse relay BIS-411BM-LED allows switching on or off the lighting or other device from several different points by parallel connected, momentary (bell) control switches. A push button on the housing enables direct control of the circuit without the need to trigger external buttons.

## Functioning

The receiver is switched on after a current pulse caused by pressing any momentary (bell) button connected to the relay. After the next pulse, the receiver will be switched off.

The relay has the feature of the so-called "memory" of the contact position, which means when the power supply is switched back on, the relay will be restored to the state it was in when the power supply was switched off. The button on the housing performs exactly the same function as the external button connected to the terminals of the device. The "LED" version of the relay is equipped with a contact designed to cooperate with receivers with high starting current, such as: LED fluorescent lamps, ESL fluorescent lamps, electronic transformers, discharge lamps, etc.

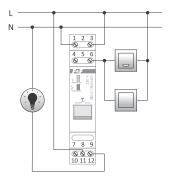
## Mounting

- 1. Disconnect the power supply.
- 2. Fix the relay on a rail in the control box.
- 3.Connect the power wires to terminals 1-3 according to the selected relay control option (control pulse L or N).
- 4. Momentary switches connected in parallel, connect to terminal 6 and to the wire to which terminal 3 is connected.
- 5. Connect the powered receiver in series to terminals 11-12.

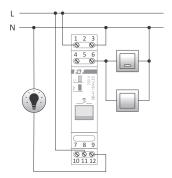
The maximum total backlight current of all connected buttons must not exceed 5 mA.

BIS-411BM-LED can work with backlit buttons.

# Wiring diagram



Example of connection with control pulse L



Example of connection with control pulse N

- 1-3 power supply of the relay 165÷265 V AC
  - 6 control input
- 11-12 NO contact (active)

# Technical data

power supply contact maximum load current (AC-1) control pulse current activation delay power supply indication activation indication mechanical life of the button power consumption stand-by on terminal tightening torque working temperature dimensions mounting ingress protection

165÷265 V AC separated 1×NO 16 A (120 A/20 ms) 5 mA 0.1÷0.2 s green LED red LED 10<sup>6</sup> cycles

0.15 W 0.6 W 2.5 mm<sup>2</sup> screw terminals 0.4 Nm -25÷50°C 1 module (18 mm) on TH-35 rail IP20

## **Power table**

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tungsten	halogen	fluorescent	energy-saving	LED
2000 W	1250 W	1000 W	500 W	250 W

The above data are indicative and will heavily depend on the design of a specific receiver (that is especially important for LED bulbs, energy-saving lamps, electronic transformers and pulse power supply units), switching frequency and operating conditions.

For more information visit: www.fif.com.pl.

## Warranty

The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us.

## CE declaration

F&F Filipowski sp. j. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE. The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at <u>www.fif.com.pl</u> on the product page.

