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## BIS-411BM-LED

Bistable relay



**Do not dispose of this device in the trash along with other waste!** According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



### 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.

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## 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 10-12.
- 



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

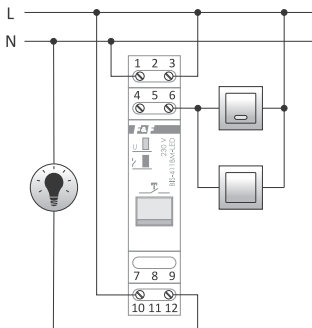
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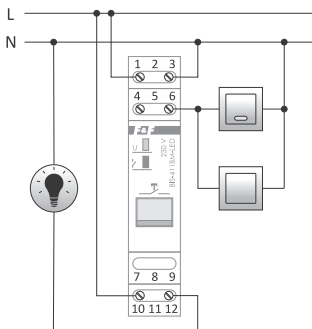
BIS-411BM-LED can work with backlit buttons.

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## 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	165÷265 V AC
contact	separated 1×NO
maximum load current (AC-1)	16 A (160 A/20 ms)
control pulse current	5 mA
activation delay	0.1÷0.2 s
power supply indication	green LED
activation indication	red LED
mechanical life of the button	10 <sup>6</sup> cycles
power consumption	
stand-by	0.15 W
on	0.6 W
terminal	2.5 mm <sup>2</sup> screw terminals
tightening torque	0.4 Nm
working temperature	-25÷50°C
dimensions	1 module (18 mm)
mounting	on TH-35 rail
ingress protection	IP20

## Power table

				
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](http://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 [www.fif.com.pl](http://www.fif.com.pl) on the product page.

