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## BIS-413M-LED 24V

Bistable relay with timing  
switch and „memory”  
contact position



**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-413M-LED allows switching on or off the lighting or other device from several different points by parallel connected, momentary (bell) control switches.

### Functioning

The receiver is switched on after a current pulse caused by pressing any momentary (bell) button connected to the relay. The receiver is turned off after the next impulse or automatically after the set off time. A longer pressing of the momentary button, lasting at least 2 seconds, turns on the relay permanently. The relay will be turned off only after pressing the momentary button again (or after a power supply failure). The supply voltage is indicated by the illumination of the green LED marked as U. Switching the relay on and the countdown to automatic switch-off is signalled by the blinking of the red LED. Permanent switching of the relay is signalled by continuous lighting of the red LED.

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.

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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, any polarity for AC voltage and for DC voltage: connect „+” to terminal 3, „-” to terminal 1.
  4. Momentary switches connected in parallel connect to terminal 6 and the wire, to which terminal 3 is connected.
  5. Powered receiver connect in series to terminals 11-12.
  6. Set the switch-off time with the potentiometer.
- 



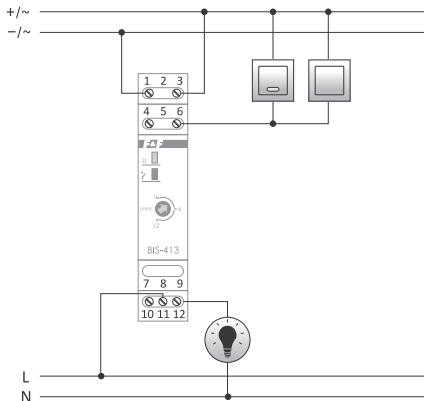
BIS-413M-LED 24V is not compatible with backlit buttons.

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### Contact configuration



## Wiring diagram








- 1-3 relay power supply 9÷30 V AC/DC
- 6 control input
- 11-12 NO contact (active)

## Technical data

power supply	9÷30 V AC/DC
contact	separated 1×NO
maximum load current (AC-1)	16 A (120 A/20 ms)
activation delay	0.1÷0.2 s
adjustment time	1÷12 min.
power indication	green LED
signalling activation	red LED
power consumption	
standby	0.15 W
on	0.8 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

Table for loads supplied with 230 V AC:

				
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.

