## 《F\&F》

 F\&F Filipowski sp. j.Konstantynowska 79/81, 95-200 Pabianice, POLAND phone/fax (+48 42) $2152383 /(+4842) 2270971$ www.fif.com.pl; e-mail: biuro@fif.com.pl

## BIS-411-LED 24 V

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.
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## Purpose

Electronic bistable pulse relay BIS-411-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. After the next pulse, the receiver will be switched off.
The relay does not have a "memory" of the contact position, which means in the event of a power failure and its subsequent return, the relay contact will be set to „off". This prevents the controlled receivers from being switched on automatically without supervision after a prolonged power failure.

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, any polarity for AC voltage and for DC voltage: connect „+" to terminal $3, \ldots-\prime$ 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.

BIS-411-LED 24 V is not compatible with backlit buttons.

## Wiring diagram



## Example of connection with control pulse L

1-3 relay power supply $9 \div 30 \mathrm{~V} \mathrm{AC/DC}$
6 control input
11-12 NO contact (active)


## Example of connection with control pulse N

1-3 relay power supply $9 \div 30 \mathrm{VAC} / D C$
6 control input
11-12 NO contact (active)

## Technical data

power supply
contact
maximum load current (AC-1)
activation delay
power indication
$9 \div 30 \mathrm{~V} \mathrm{AC/DC}$
separated $1 \times$ NO
16 A ( $120 \mathrm{~A} / 20 \mathrm{~ms}$ )
$0.1 \div 0.2 \mathrm{~s}$
signalling activation green LED
power consumption

| standby | 0.15 W |
| :--- | ---: |
| on | 0.6 W |

$2.5 \mathrm{~mm}^{2}$ screw terminals
0.4 Nm
$-25 \div 50^{\circ} \mathrm{C}$
1 module ( 18 mm )
mounting on TH-35 rail
ingress protection

## Power table

Table for loads supplied with 230 V AC :

| tungsten halogen fluorescent energy-saving LED |  |  |  |
| :--- | :--- | :--- | :--- |
| 2000 W | 1250 W | 1000 W | 500 W |
| 200 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 www.fif.com.pl on the product page.

