

## Purpose

Electronic bi-stable pulse relays BIS-414 24 V enables the user to actuate lighting or other devices from various locations by means of control buttons in parallel connection. The relay have got two switch ON section and enable to switch ON in accordance sequence two circuits of lights or different receiver from many places by pushbuttons connected in parallel.
Relay version " $i$ " is to pin adapted to cooperate with the receivers with high starting current, such as LED fluorescent lamps, ESL fluorescent lamps, electronic transformers, discharge lamps, etc.

## Functioning

Relay power is indicated by a green LED U. Sequential relay has two separate outputs: R1 and R2. Contact state (open/closed) is forced sequentially in accordance with a predetermined program. State of contact is switched by a subsequent impulse from the control key. Switching of R1 and R2 contacts is indicated by the corresponding R1 and R2 red LEDs. In case of a power failure, the contact state is reset. When the supply voltage returns, relay starts with a sequence number 0
-1 -

| Technical data |  |
| :--- | ---: |
| power supply <br> contact / current load (AC-1) | $9 \div 30 \mathrm{~V} \mathrm{AC} / \mathrm{DC}$ |
| control pulse | separated $2 \times 1 \mathrm{NO} /<16 \mathrm{~A}(160 \mathrm{~A} / 20 \mathrm{~ms})$ |
| delay of response | $9 \div 30 \mathrm{~V} /<10 \mathrm{~mA}$ |
| power indication | $0.1 \div 0.2 \mathrm{~s}$ |
| signalling activation | green LED |
| power consumption | $2 \times$ red LED |
| standby |  |
| on | 0.15 W |
| working temperature | 0.9 W |
| terminal | $-25 \div 50^{\circ} \mathrm{C}$ |
| tightening torque | $2.5 \mathrm{~mm}^{2}$ screw terminals |
| dimensions | 0.4 Nm |
| mounting | 1 module $(18 \mathrm{~mm})$ |
| protection level | on TH-35 rail |
|  | IP 20 |

## Wiring diagram




Pressing the button subsequently repeats sequences 0-3.

## Assembly

1. Turn OFF the power
2. Put on the relay on the rail in the switchgear box.
3. Connect the power cable to contacts 1-3, [for DC voltage ( + ) to contact 3 (-) to contact 1].
4. The timers switching which are connect in parallel connect to contact 6
and to cable $+/ \sim$
5. Powered receiver R1 section connected in series to terminals 11-12. Powered receiver R2 section connected in series to terminals 8-9.

Note!
BIS-414i 24 V not compatible with bell pushes equipped with fluorescent lamps.

Table of power


The above data are indicative and will heavily depend on the design of a specific receive (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.

Installation example relay with two sections switching light 24V


