

**ELECTRONIC BI-STABLE PULSE RELAY**  
 sequence-type  
 1-function

**BIS-414i**  
 230V

**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. More information how to make a complaint can be found on the website:  
[www.fif.com.pl/reklamacja](http://www.fif.com.pl/reklamacja)



Do not dispose of this device to a garbage bin with other unsorted waste! In accordance with the Waste Electrical and Electronic Equipment Act any household electro-waste can be turned in free of charge and in any quantity to a collection point established for this purpose, as well as to the store in the event of purchasing new equipment (as per the old for new rule, regardless of brand). Electro-waste thrown in the garbage bin or abandoned in the bosom of nature pose a threat to the environment and human health.

**PURPOSE**

Electronic bi-stable pulse relays BIS-414i 230V 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 diferent receiver from many places by pushbuttons connected in parallel. Switching the relay into another cycle phase is made by another current pulse triggered by pressing any bell push connected to the relay.

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.

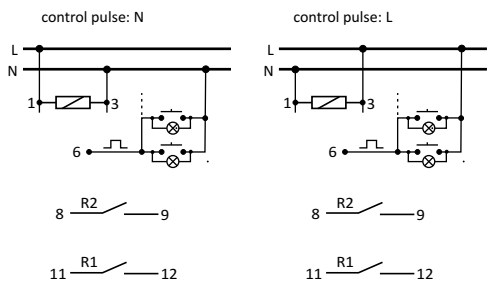
**FUNCTIONING**

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.

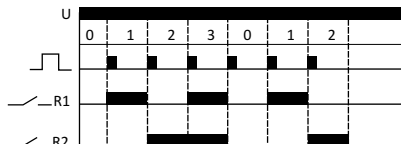
**TECHNICAL DATA**

supply	100÷265V AC
contact/current load AC-1	2×1NO separated /16A(160A/20ms)
control pulse	160÷265VAC <20mA
max. controlling current	Σ5mA
activation delay	0.1÷0.2s
signalling of supply	green LED
signalling of activation	2×red LED
power consumption	
standby	0.15W
on	0.9W
working temperature	-25÷50°C
terminal	2.5mm <sup>2</sup> screw terminals
tightening torque	0.4Nm
dimensions	1 module (18mm)
mounting	on TH-35 rail
protection level	IP20

**WIRING DIAGRAM**



PULSE	STATE OF FUNCTIONING
0	DEACTIVATED SECTION R1 AND R2
1	ACTIVATED ONLY SECTION R1
2	ACTIVATED ONLY SECTION R2
3	ACTIVATED SECTION R1 AND R2



**ASSEMBLY**

1. Turn OFF the power.
2. Put on the relay on the rail in the switchgear box.
3. Connect the power cable to joint 1-3 accordance with choosen control option (control impulse L or N).
4. The timers switching which are connect in parallel connect to joint 6 and to cable which is connect to joint 3.
5. The activated receiver of R1 section connect in series to joint 11-12. The activated receiver of R2 section connect in series to joint 8-9.

**ATTENTION!**

The BIS-414i 230V is compatible with bell pushes equipped with fluorescent lamps.

**Power of receivers**

tungsten	halogen	fluorescent	ESL	LED
2000W	1250W	1000W	500W	250W

The above data are indicative and will depend largely on the design of a specific receiver (especially for LED bulbs, energy saving lamps, electronic transformers and switching power supplies) switching frequency and working conditions.

More information: [www.fif.com.pl](http://www.fif.com.pl)

Example connection the relay with two section switching ON lights in control configuration „zero” (N).

