

BISTABLE RELAY
 sequential
 4-function

BIS-419i
 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 directly with us. More information how to make a complaint can be found on the website: www.fif.com.pl/reklamacje



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 bistable pulse relay switch that turns on or off lights or other equipment from several different points with the parallel connected momentary (bell) control switches.

BIS-419 relay has two switching sections and allows for switching of two lightning circuits or others receivers from several different points and in accordance with the preselected sequence.

Operation

The relay power supply is indicated by a green LED U. Sequential relay has two separate outputs: R1 and R2. Contact status (closed/open) is forced sequentially in accordance with a predetermined program. Contacts switch to another state after subsequent pulse from control button. R1 and R2 contact activation is indicated by the relevant R1 and R2 red LED. After a power failure, contact state is reset. When the power is back on, the relay starts from the sequence number 0.

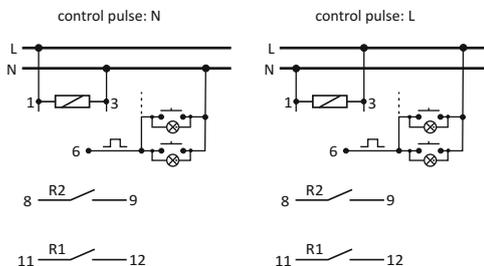
Table of power

incandescent	halogen	fluorescent	energy-saving	LED
2000W	1250W	1000W	500W	250W

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

Wiring diagram



Installation

1. Disconnect the power supply.
2. Mount relay on the rail in the connection box.
3. Connect the power supply cables to terminals 1-3 according to the selected mode of relay control (control pulse L or N).
4. Connect parallel connected momentary switches to the terminal 6 and to the cable, to which the terminal 3 is connected.
5. Powered receiver of section R1 connect in series to terminals 11-12. Powered receiver of section R2 connect in series to terminals 8-9.
6. Set the desired program (sequence) with a knob at the front casing of 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.

Note!

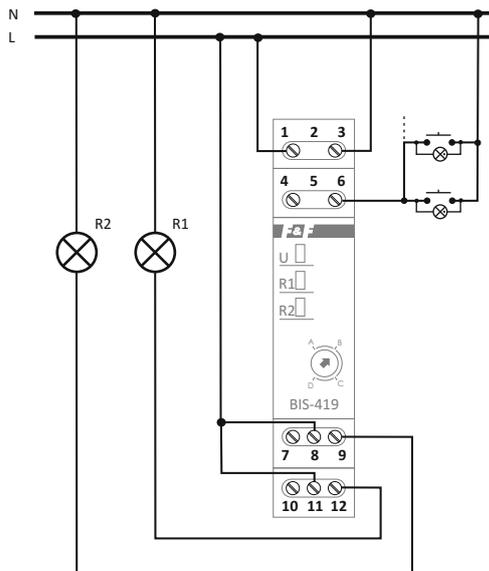
BIS-419i 230 V can be used with backlit buttons ($\Sigma I < 5mA$).



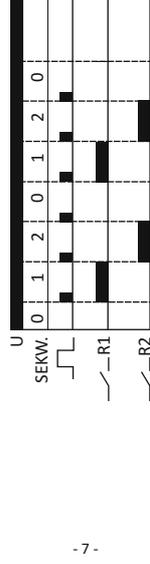
Technical data

power supply	100÷265V AC
contact	2×separated (1×NO)
load current (AC-1)	<16A (16A/20ms)
control pulse	100÷265V AC <20mA
max current control buttons	25mA
activation delay	0,1±0,2s
power indicator	green LED
activation indicator	2× red LED
power consumption	
standby	0.15W
on	0.9W
working temperature	-25÷50°C
terminal	2.5mm ² screw terminals
tightening torque	0.4Nm
dimensions	1 module (18mm)
mounting	on TH-35 rail
ingress protection	IP20

Example of relay installation with two lightning sections in „zero” (N) control system.



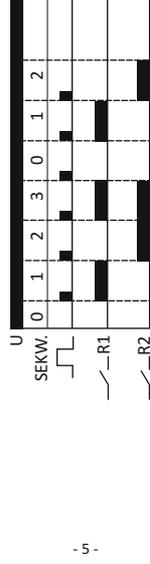
Function C



- 7 -

Pressing the button subsequently repeats sequences 0-3.

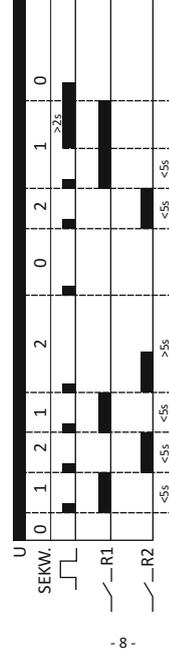
Function A



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Pressing the button subsequently repeats sequences 0-3.

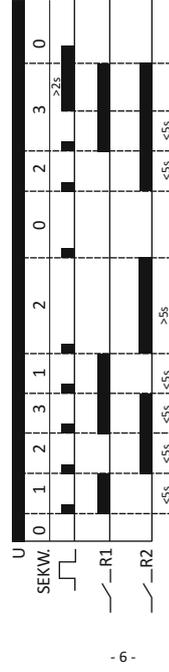
Function D



- 8 -

* Pressing the button subsequently in less than 5 seconds repeats sequences of 1-3.
 * Subsequent pressing of the button after more than 5 seconds disconnects both contacts (sequence 0).
 * Long press - in any sequence - disconnects both contacts (sequence 0).
 * Pressing the button after both relays were turned off restores the last state (memory of state). Does not apply in the case of a relay power failure.

Function B



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* Pressing the button subsequently in less than 5 seconds repeats sequences of 1-3.
 * Subsequent pressing of the button after more than 5 seconds disconnects both contacts (sequence 0).
 * Long press - in any sequence - disconnects both contacts (sequence 0).
 * Pressing the button after both relays were turned off restores the last state (memory of state). Does not apply in the case of a relay power failure.