



BISTABLE RELAY  
group

**BIS-412P**  
**230 V**

**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 compliant can be found on the website:



**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

The BIS-412P electronic bistable pulse relay is designed for group operation. A single relay allows the controlled receiver to be switched on and off after each current pulse caused by pressing the momentary (bell) button of the local control connected to this relay.

The group system allows you to switch off or on all receivers connected to individual relays using the central control buttons.

#### Functioning

Green U/R LED indication:

\* the LED blinks (ON: 30 msec / OFF: 1 sec) - standby mode; the receiver is switched off.

\* the LED is constantly on - the receiver is switched on

#### LC local control

The receiver is switched on after a pulse caused by pressing any one momentary LC button from the local control group.

After the next pulse, the receiver will be switched off.

#### CC central control

SWITCH OFF ALL - after the pulse caused by pressing the momentary CCOFF button, all receivers will be switched off (regardless of their status - off or on).

SWITCH ALL ON - after the pulse caused by pressing the momentary CCON button, all receivers will be switched on (regardless of their status - off or on).



BIS-412P 230V can work with backlit buttons ( $\Sigma I < 5\text{mA}$ ).

#### Installation

1. Switch off the power supply.
2. Mount relay in the flush-mounted box.
3. Connect the power supply cables to terminals in accordance with the markings.



A group of relays operating with a common central control must be supplied from the same phase such as only from the L1 phase.

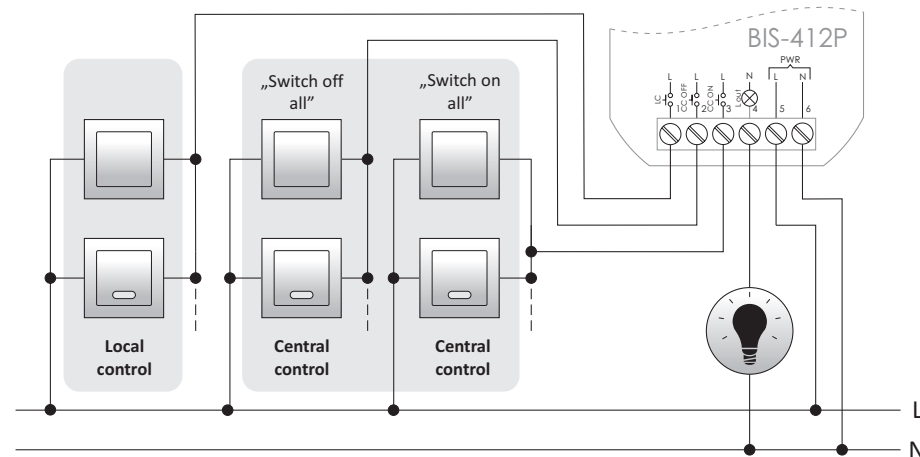
4. Connect the local and central control switches to the LC and CC terminals of the relay according to the function and to the L wire, respectively.



Connecting different phases to the control inputs of the relays will lead to a short circuit in the installation and destruction of the controllers.

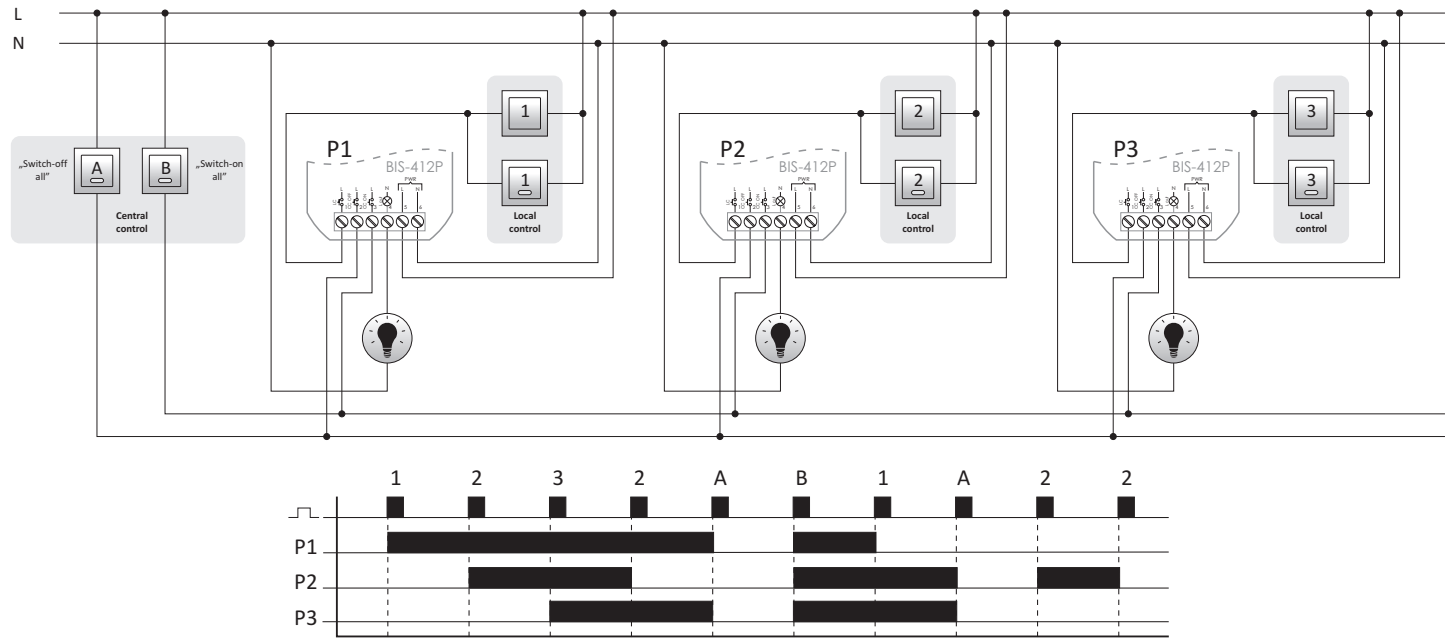
5. Controlled receiver connect in series to terminal 4 and N.
6. Switch on the power supply.

#### Connection scheme



- 1 LC local control – ON/OFF
- 2 CCOFF central control – SWITCH OFF ALL
- 3 CCON central control – SWITCH ON ALL
- 4 230 V LOUT output (controlled receiver power supply)
- 5-6 230 V power supply (L-N)

Connection diagram in a group system



Technical data

power supply	180÷265 V AC
contact	1×NO
maximum load current (AC-1)	16 A/250 V
icontrol pulse L	180÷265 V AC <20 mA
maximum current of control buttons	25 mA
response delay	0.1÷0.2 sec
power/activation indicator	green LED
power consumption	
standby	0.15 W
on	0.6 W
working temperature (non condensed)	-15÷50°C
terminal	2.5 mm <sup>2</sup> screw terminals
tightening torque	0.4 Nm
dimensions	Ø54 (48×43mm), h=25 mm
mounting	in the Ø60 mm flush-mounted box
protection level	IP20

Power table

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

The above data are indicative only 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.