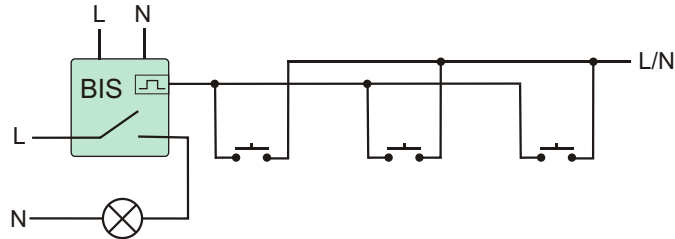


3. ELECTRONIC BI-STABLE PULSE RELAYS

PURPOSE

Electronic bi-stable pulse relays enables the user to actuate lighting or other devices from various locations by means of control buttons in parallel connection.

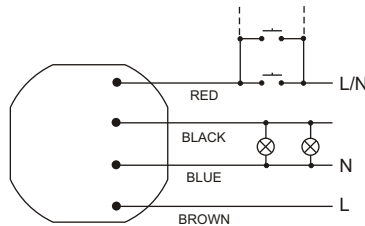


SWITCH ON - SWITCH OFF TYPE

FUNCTIONING

The receiver is actuated by means of a current pulse triggered by pushing any bell push connected to the relay. The receiver is deactivated by another pulse or after a preset time. The relay does not "memorize" the position of the relay contact, i.e. in case of supply voltage decay and the subsequent return of supply voltage, the relay contact will be set in the off position. Such a solution prevents the automatic actuation of the receivers controlled that might occur without proper supervision after a long-lasting decay of supply voltage.

BIS-402

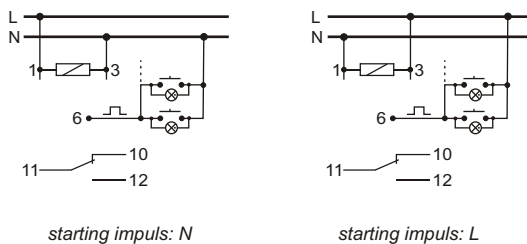


supply	230V AC
current load	<10A
controlling current	0,5+1mA
activation delay	0,1+0,2sec
power consumption	0,4W
connection	wires 4x1mm ² ; l=10cm
working temperature	-25+50°C
dimensions	Ø55, h=13mm
fixing	to under plaster box Ø60

ATTENTION!

The BIS-402 is not compatible with bell pushes equipped with fluorescent lamps.

BIS-411



supply	230V AC
current load	<10A
controlling current	0,5+1mA
activation delay	0,1+0,2sec
sygnalling of supply	green LED
sygnalling of activation	red LED
power consumption	0,8W
connection	screw terminals 2,5mm ²
working temperature	-25+50°C
dimensions	1 module (18mm)
fixing	on rail TH-35

ATTENTION!

The BIS-411 is compatible with bell pushes equipped with fluorescent lamps.

WITH TIMING SWITCH

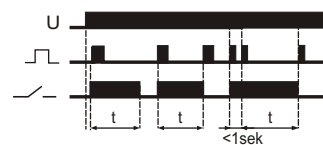
FUNCTIONING

The receiver is actuated by means of a current pulse triggered by pushing any bell push connected to the relay. The receiver is deactivated by another pulse or after a preset time.

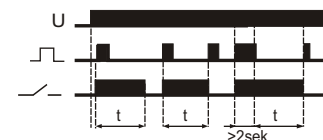
BIS-403: Pressing the control button twice in time to 1 sec., that will effect the activate lighting permanently until the next pulse which will turn off the relay. [In this software version of the relay available while stocks last]

BIS-413: Press and hold the control button longer then 2 sec, that will effect the activate lighting permanently until the next pulse which will turn off the relay.

The relay does not "memorize" the position of the relay contact, i.e. in case of supply voltage decay and the subsequent return of supply voltage, the relay contact will be set in the off position. Such a solution prevents the automatic actuation of the receivers controlled that might occur without proper supervision after a long-lasting decay of supply voltage.

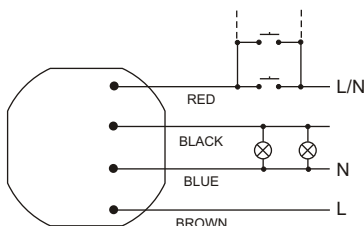
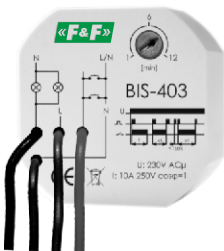


BIS-403



BIS-413

BIS-403

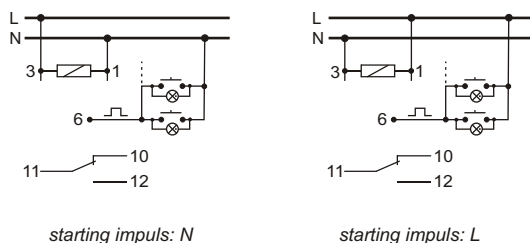


supply	230V AC
current load	<10A
controlling current	0,5±1mA
activation delay	0,1+0,2sec
switching OFF delay (to set)	1+12min
power consumption	0,4W
connection	wires 4×1mm ² ; l=10cm
working temperature	-25+50°C
dimensions	Ø55, h=13mm
fixing	to under plaster box Ø60

ATTENTION!

The BIS-403 is not compatible with bell pushes equipped with fluorescent lamps.

BIS-413

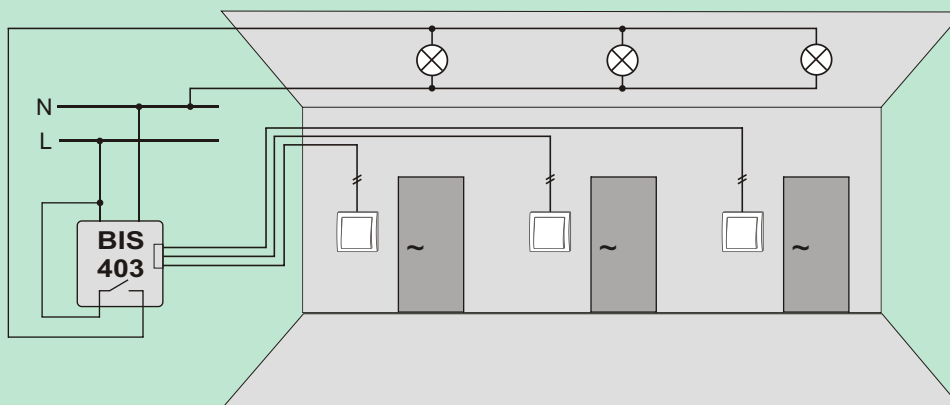


supply	230V AC
current load	<10A
controlling current	0,5±1mA
activation delay	0,1+0,2sec
switching OFF delay (to set)	1+12min
sygnalling of supply	green LED
sygnalling of activation	red LED
power consumption	0,8W
connection	screw terminals 2,5mm ²
working temperature	-25+50°C
dimensions	1 module (18mm)
fixing	on rail TH-35

ATTENTION!

The BIS-413 is not compatible with bell pushes equipped with fluorescent lamps.

PRACTICAL SOLUTIONS



Example of control system for three-point hall lighting.

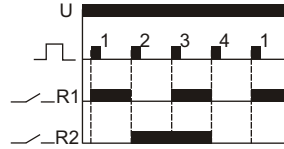
SEQUENCE-TYPE

FUNCTIONING

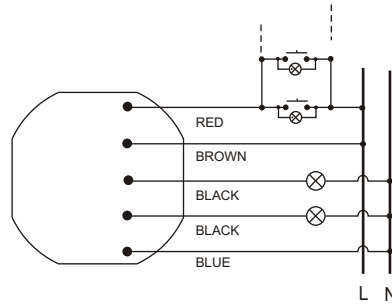
Switching the relay into another cycle phase is made by another current pulse triggered by pressing any bell push connected to the relay.

The relay does not “memorize” the position of the relay contact, i.e. in case of supply voltage decay and the subsequent return of supply voltage, the relay contact will be set in the off position. Such a solution prevents the automatic actuation of the receivers controlled that might occur without proper supervision after a long-lasting decay of supply voltage.

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



BIS-404

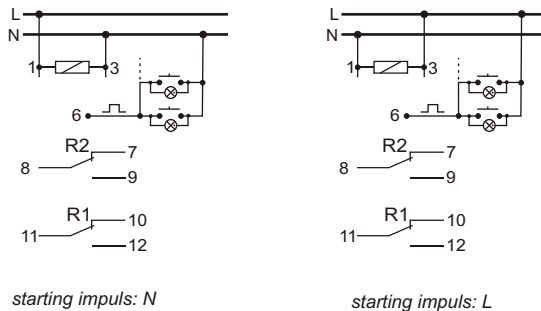


supply	230V AC
contacts	2×1N/O
current load	2×(<5A)
controlling current	0,5±1mA
activation delay	0,1±0,2sec
power consumption	0,56W
connection	wires 5×1mm ² ; l=10cm
working temperature	-25+50°C
dimensions	Ø55, h=13mm
fixing	to under plaster box Ø60

ATTENTION!

The BIS-404 is not compatible with bell pushes equipped with fluorescent lamps.

BIS-414

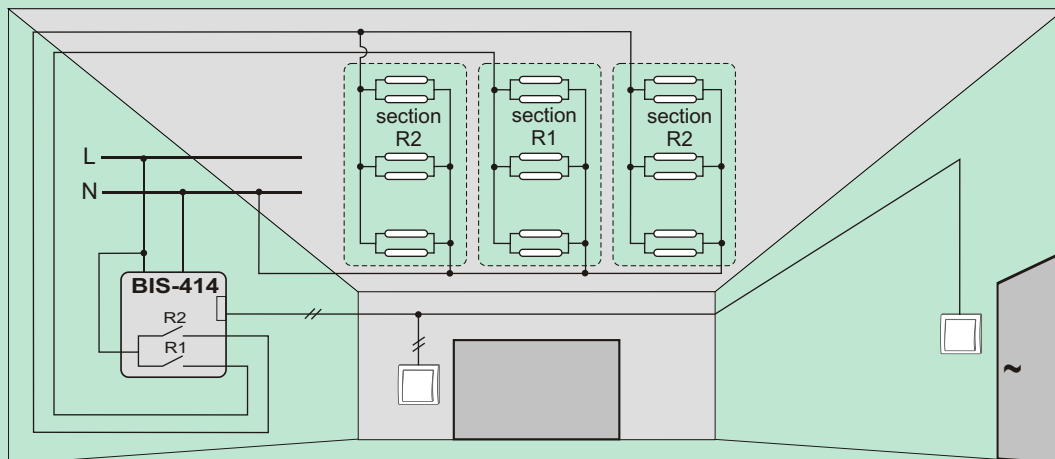


supply	230V AC
contacts	2×1N/O
current load	2×(<10A)
controlling current	0,5±1mA
activation delay	0,1±0,2sec
switching OFF delay (to set)	1±12min
signalling of supply	green LED
signalling of activation	2×yellow LED
power consumption	0,8W
connection	screw terminals 2,5mm ²
working temperature	-25+50°C
dimensions	1 module (17,5mm)
fixing	on rail TH-35

ATTENTION!

The BIS-414 is not compatible with bell pushes equipped with fluorescent lamps.

PRACTICAL SOLUTIONS



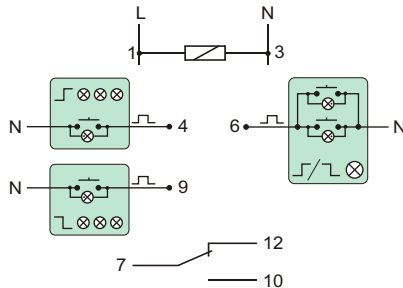
Example of lighting system which allows control of light intensity by actuating one of the sections R1 and R2 from any location in the room.

GROUP-TYPE (HOTEL-TYPE)

BIS-412 WITH CONTROLLING INPUTS 'ACTIVATE ALL' AND 'DEACTIVATE ALL'

FUNCTIONING

BIS-412 electronic bi-stable pulse relay is designed for operation in a group configuration. A single relay enables the activation and deactivation of the receiver controlled after each current pulse triggered by pushing a local control momentary push-button (bell-push). The group configuration enables the deactivation or activation of all receivers connected to individual relays by means of the central control push-buttons



supply BIS-412 230V	230V AC
BIS-412 24V	24V AC/DC
current load	<16A
controlling current	0,5÷1mA
activation delay	0,1÷0,2sec
signalling of supply	green LED
signalling of activation	red LED
power consumption	0,8W
connection	screw terminals 2,5mm ²
working temperature	-25÷50°C
dimensions	1 module (18mm)
fixing	on rail TH-35

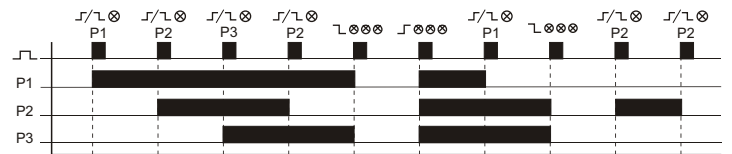
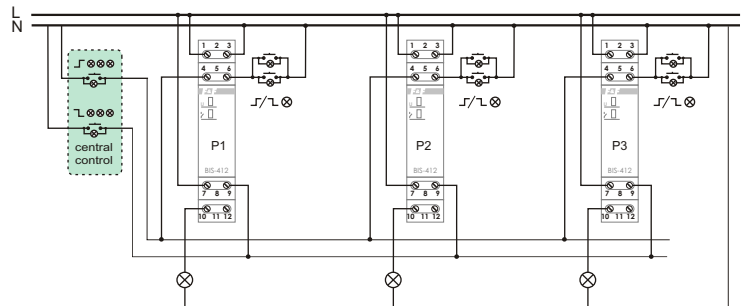
Local control

The receiver is activated after a current pulse that is triggered by pushing one optional momentary push-button $\text{J/L} \otimes$ belonging to the local control group. The contact of the relay is switched to the 7-10 position. After a next current pulse, the receiver will be deactivated (the contact of the relay returns to the 7-12 position).

Central control

DEACTIVATE ALL - after a current pulse triggered by pushing the $\text{L} \otimes \otimes \otimes$ momentary push-button, all receivers will be deactivated (regardless of their status, i.e. deactivation or activation) that are controlled separately by individual relays. The contact in each relay will be switched to the 7-10 position.

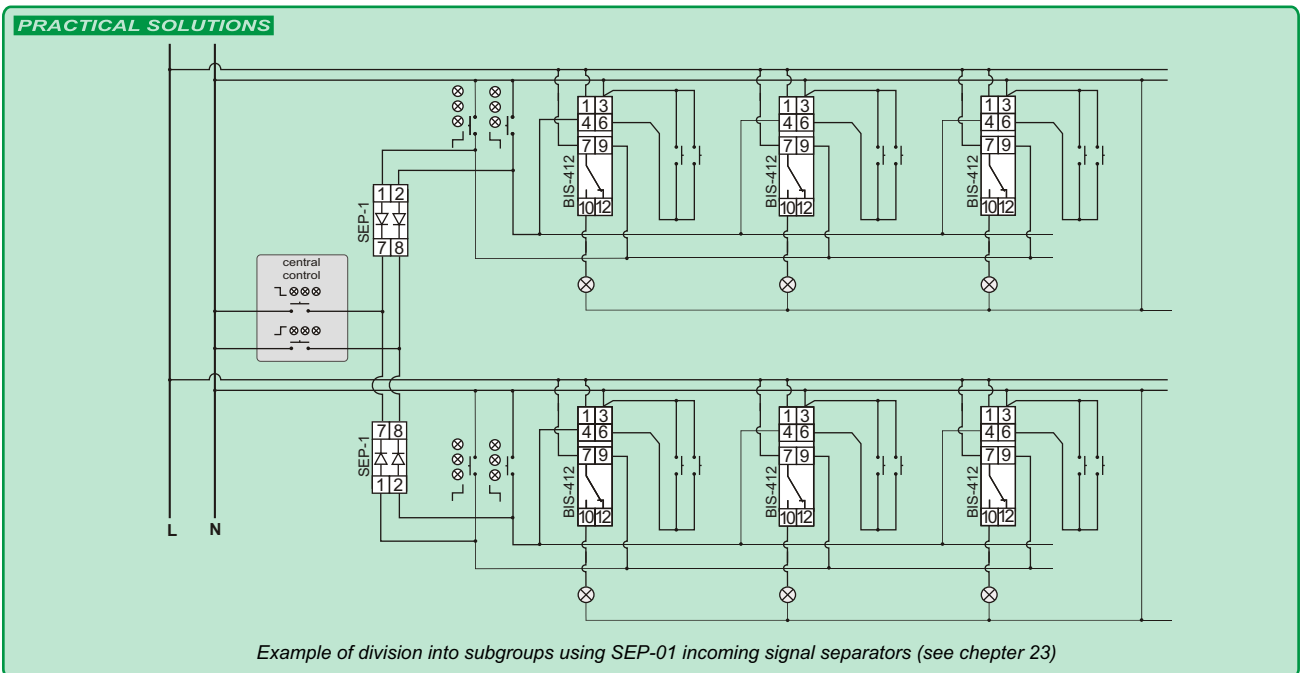
ACTIVATE ALL - after a current pulse triggered by pushing the $\text{J} \otimes \otimes \otimes$ momentary push-button, all receivers will be activated (regardless of their status, i.e. deactivation or activation) that are controlled separately by individual relays. The contact in each relay will be switched to the 7-12 position.



Diagram

ATTENTION!

The BIS-412 230V is compatible with bell pushes equipped with fluorescent lamps.



Example of division into subgroups using SEP-01 incoming signal separators (see chapter 23)