

BIR impulse relays

Impulse relays are used:

- Closing of the impulse relay pole(s) is triggered by an impulse on the coil.
- Having two stable mechanical positions, the pole(s) will be opened by the next impulse. Each impulse received by the coil reverses the position of the pole(s).
- Can be controlled by an unlimited number of pushbuttons.
- Zero energy consumption.

IEC/EN 60669-2-2



Impulse relays



BIR

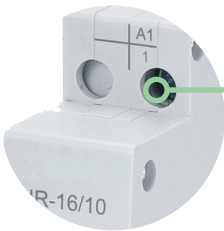
- The impulse relays are used to control, by means of pushbuttons, lighting circuits consisting of:
 - incandescent lamps, low-voltage halogen lamps, etc. (resistive loads)
 - fuorescent lamps, discharge lamps, etc. (inductive loads)

Yellow clip

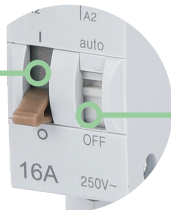
- A simple clip-on system for flexible auxiliaries combination and improved robustness
- For electrical and mechanical connections



- Insulated terminals IP20



- Built-in or optional auxiliary function: state indication, centralised control, latched control, control for illuminated pushbutton, step-by-step control, time delay



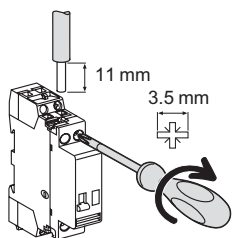
- Disconnection of remote control by selector switch (except for 4P single-piece BIR) for maintenance operation

- Manual controls on front face: direct and priority manual control by O-I toggle
- Mechanical contact position indicator

		Choice impulse relays auxiliaries				
Type		Standard BIR				
Rating	A	16				
Control voltage	V AC	230/240	130	48	24	12
	V DC	110	48	24	12	6

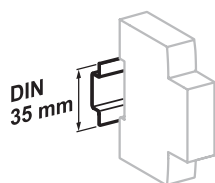
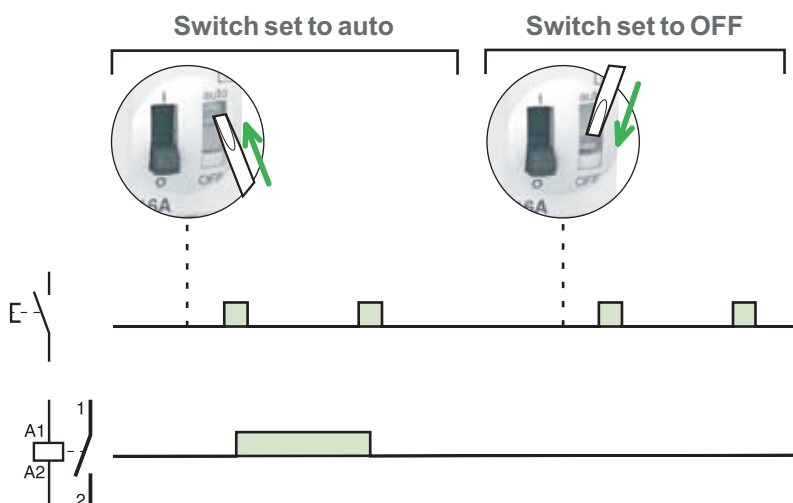
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Connection

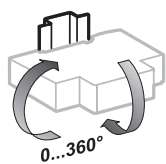


Type	Rating	Circuit	Tightening torque	Copper cables	
				Rigid or ferrule	Flexible or ferrule
BIR	16 A	Control	1 N.m	0.5 to 4 mm ²	1 to 4 mm ²
		Power		1.5 to 4 mm ²	1.5 to 4 mm ²

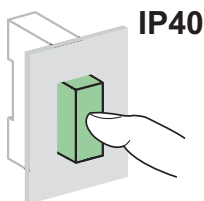
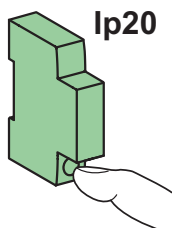
Operation



Clip on DIN rail 35 mm.





Indifferent position of installation.



Technical data

Control circuit		
Dissipated power (during the impulse)	1, 2P:	19 VA
Illuminated PB control		Max. current 3 mA (if > use an ATLz)
Operating threshold		Min. 85 % of Un in conformance with IEC/EN60669-2-2
Duration of the control order		50 ms to 1 s (200 ms recommended)
Response time		50 ms
Power circuit		
Voltage rating (Ue)	1P, 2P	24 ...250 V AC
Frequency		50 Hz or 60 Hz
Maximum number of operations per minute		5
Maximum number of switching operation a day		100
Additional characteristics to IEC/EN 60947-3		
Insulation voltage (Ui)		440 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Endurance (O-C)		
Electrical to IEC/EN 60947-3		200,000 cycles (AC21) 100,000 cycles (AC22)
Overvoltage category		IV
Other characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Operating temperature		-20°C to +50°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)

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Security		
Accessories	Yellow clips	Spacer
		
Function	<ul style="list-style-type: none">• Ensure the mechanical and/or electrical link between impulse relays and their auxiliaries• Required to reduce temperature rise of modular devices installed side by side.• Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors).	
specifications		
Width in 9 mm modules	–	1

Dimensions (mm)

