


# BIR

## Impulse relay

### Application

- 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.

### 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)
  - fluorescent lamps, discharge lamps, etc. (inductive loads)
- Standard: IEC/EN 60669-2-2

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**Yellow clip**

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



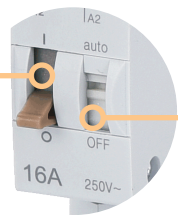
• Insulated terminals IP20



• Built-in or optional auxiliary function: state indication, centralized 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



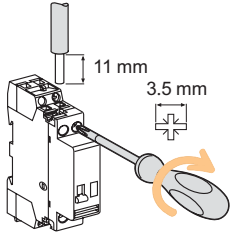
• Manual controls on front face: direct and priority manual control by O-I toggle  
 • Mechanical contact position indicator



		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
Contact		1NO, 2NO, 1NO+1NC				

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## Impulse relay

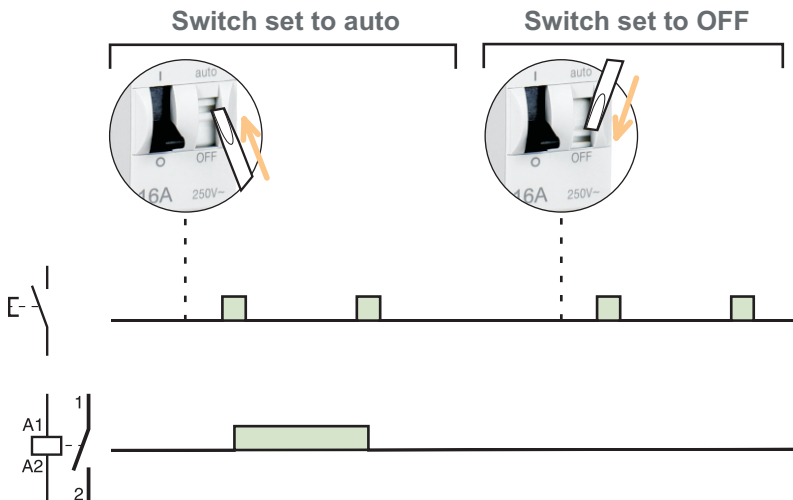
### Connection



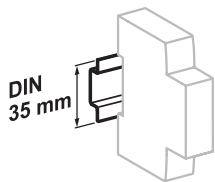
Type	Rating	Circuit	Tightening torque	Copper cables	
				Rigid or ferrule	Flexible or ferrule
BIR	16 A	Control	1 N.m		
		Power		0.5 to 4 mm <sup>2</sup>	1 to 4 mm <sup>2</sup>
				1.5 to 4 mm <sup>2</sup>	1.5 to 4 mm <sup>2</sup>

### Operation

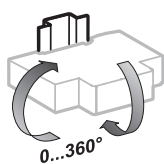
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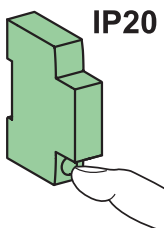
### Technical data



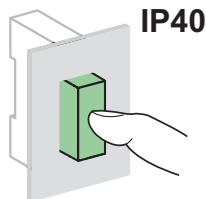
Clip on DIN rail 35 mm



Indifferent position of installation.



IP20



IP40

#### 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		Insulation class II
Storage temperature		-20°C to +50°C
Tropicalization (IEC 60068-1)		-40°C to +70°C
		Treatment 2 (relative humidity 95 % at 55°C)

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## Impulse relay

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

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### Dimensions (mm)

