# CSIR 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**

### CSIR

- 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 fexible auxiliaries combination and improved robustness
- For electrical and mechanical connections


- Insulated terminals IP20
- Large circuit labeling area
- 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 CSIR) 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 CSIR** | | | | |
| Rating | A | 16 | | | | |
| Control voltage | V AC | 230/240 | 130 | 48 | 24 | 12 |
| | V DC | 110 | 48 | 24 | 12 | 6 |

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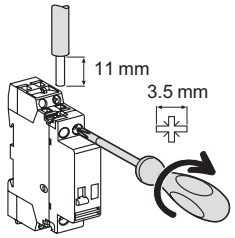
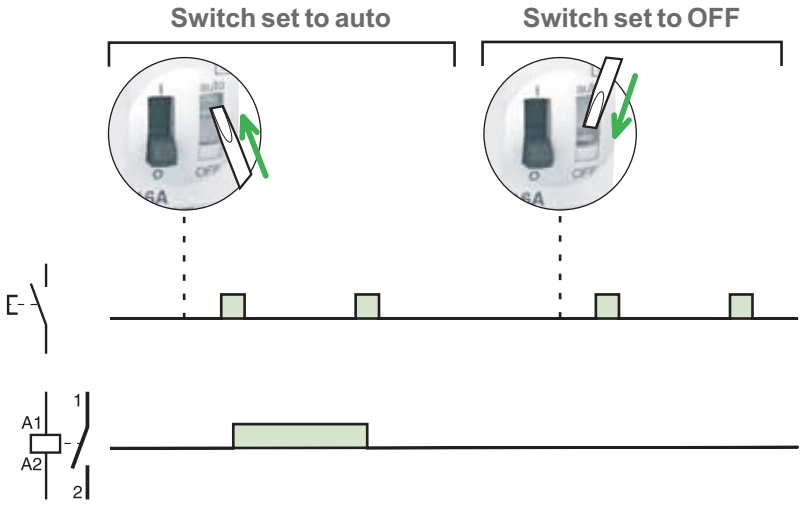
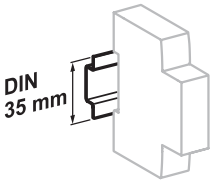
## Connection



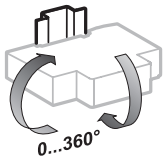

| Type | Rating | Circuit | Tightening torque | Copper cables | |
|---|---|---|---|---|---|
| | | | DB122945 | Rigid or ferrule | Flexible or ferrule |
| CSIR | 16 A | Control | 1 N.m | 0.5 to 4 mm² | 1 to 4 mm² |
| | | Power | | 1.5 to 4 mm² | 1.5 to 4 mm² |

## Operation

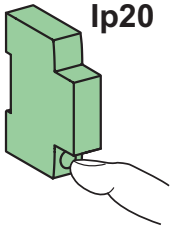


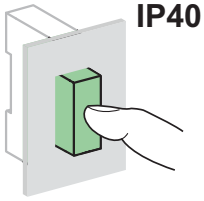




Clip on DIN rail 35 mm.




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<br>Insulation class II |
| 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) |

| | Security | |
|---|---|---|
| **Accessories** | **Yellow clips** | **Spacer** |
| |  |  |
| **Function** | | |
| | • 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.<br>• Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors). |
| **specifcations** | | |
| Width in 9 mm modules | – | 1 |

## Dimensions (mm)