



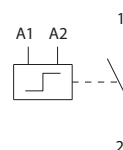
- Bistable relays are used to switch electrical circuits by impulse command, especially for lighting control in ordinary houses, warehouses, production halls and other buildings.
- Faster and easier installation thanks to an unlimited number of buttons, connected in parallel by two wires, which is a practical replacement for AC and cross switches.
- Last but not least, they offer savings in the number of wires used and, in the case of the control circuit, the possibility of using wires with a smaller cross-section, where the power input is minimal compared to the power circuit.
- The state of the Bistable relay changes with a short control pulse. As a result of which the relay in the steady state has zero consumption.
- All relays can be controlled manually using a switch on the relay panel (I-O), which also serves as to signal the status of the contacts.
- For types BR-220 and BR-232, it is possible to disconnect the electrical switch control and as a result the state of the relay can then only be changed manually (service, maintenance).

EAN code
 BR-216-10/230V: 8595188168854
 BR-216-11/230V: 8595188168878
 BR-216-20/230V: 8595188168861
 BR-220-20/230V: 8595188168885
 BR-232-20/230V: 8595188168892

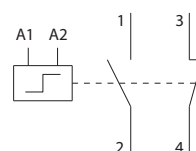
| Technical parameters | BR-216-10/11/20 | BR-220-20 | BR-232-20 |
|---|--|-------------------------|-----------|
| Main circuit (contact) | | | |
| Rated insulation voltage (U _i): | | 440 V | |
| Thermal current (I _{th}): | 16 A | 20 A | 32 A |
| Number of poles: | 1, 2, 2 | 2 | 2 |
| Contact configuration: | 10, 11, 20 | 20 | 20 |
| Operational Power (P _o) | | | |
| AC-1, AC-7a for 230 V, 1 phase: | 3.5 kW | 4.4 kW | 7 kW |
| AC-2 for 230 V, 1 phase: | 1.2 kW | 1.5 kW | 2.4 kW |
| AC-3, AC-7b for 230V, 1 phase: | 0.37 kW | 0.55 kW | 1.1 kW |
| DC-1 (L/R ≤ 1 ms) | | | |
| U _e = 24V (1 contact/2 contacts in series): | 16 A/16 A | 20 A/20 A | 32 A/32 A |
| U _e = 48V (1 contact/2 contacts in series): | 12 A/5 A | 15 A/18 A | 25 A/28 A |
| U _e = 60V (1 contact/2 contacts in series): | 8 A/14 A | 10 A/15 A | 20 A/22 A |
| U _e = 110V (1 contact/2 contacts in series): | 4 A/7 A | 5 A/8 A | 7 A/12 A |
| U _e = 220V (1 contact/2 contacts in series): | 0.4 A/3 A | 0.5 A/4 A | 0.7 A/6 A |
| Load capacity of light sources AC-5a, AC-5b | | | |
| Max. operating frequency (op./hr) | | | |
| without load: | 900 | 900 | 450 |
| AC-1, AC-7a: | 600 | 600 | 450 |
| AC-2: | 120 | 120 | 120 |
| AC-3, AC-7b: | 600 | 600 | 450 |
| AC-5a, AC-5b: | 600 | 600 | 450 |
| DC-1: | | 300 | |
| Electrical endurance: DC-1, DC-3, DC-5, AC-1, AC-7a, AC-2, AC-3, AC-7b, AC-5a / AC-5b (I _e = 10 A): | | 100 000 op. c. | |
| Mechanical lifetime: | | 1 000 000 op. C | |
| Power dissipation per pole: | 1 W | 1.5 W | 3 W |
| Contact reliability: | | >10 V, >100 mA | |
| Max. back-up fuse against short circuit gL/gG (I _v) - coordination type 1: | 16 A | 20 A | 32 A |
| Rated impulse withstand voltage (U _{imp}): | | 4 kV | |
| Overload current withstand capability: 10s: | 48 A | 56 A | 80 A |
| Terminal capacity (solid and stranded): | | 1 to 10 mm ² | |
| Maximum tightening torque: | | 1.2 Nm | |
| Screw head: | | PZ2 | |
| Control circuit (coil) | | | |
| Rated control voltage: | AC 230 V | | AC 120 V |
| Rated frequency: | 50 Hz | | 60 Hz |
| Impulse duration: | | min. 50 ms/max. 1 h | |
| Duration between two impulses (of control voltage): | | min. 150 ms | |
| Maximum load of illuminated buttons (glow lamps, LEDs,...): | | 2,5 mA | |
| Terminal capacity (solid and stranded): | | 1 to 4 mm ² | |
| Maximum tightening torque: | | 0.6 Nm | |
| Screw head: | | PZ1 | |
| General | | | |
| Mounting: | DIN Rail, TH35 (IEC/EN 60715) | | |
| Number of contactors or switches side-by-side: | no limitation under 55 °C (55 .. 70 °C max. 3)/ 131 °F (131 °F .. 158 °F) | | |
| Degree of protection: | IP20 | | |
| Operational temperature: | -25 .. +55 °C (> 55 .. +70 °C at max. pulse length - 1min) (13 .. 131 °F (> 131 .. 158 °C at max. pulse length - 1min)) | | |
| Storing temperature: | -30 .. +80 °C (-22 °F to 176 °F) | | |
| Disconnection of remote control (coil) by switch: | no | yes | yes |
| Standards: | IEC/EN 60669-2-2 | | |

Connection

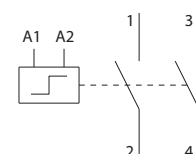
BR-216-10



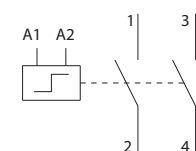
BR-216-11



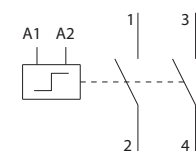
BR-216-20



BR-220-20



BR-232-20



Example of connection BR-216-10

