

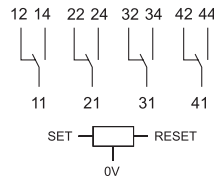
Bistable relay for control and signaling
RB.14 35 mm rail (EN 60715) mount
RB.22 11 pin socket type 90.21 mount

- 2 or 4 pole changeover contact
- DC voltage
- 2 coil type
- SET and RESET signals
- LED command status indication
- Cadmium Free contact material

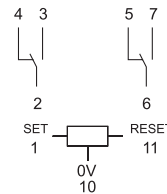
RB.14/22
Screw terminal



RB.14



RB.22



For outline drawings see page 5

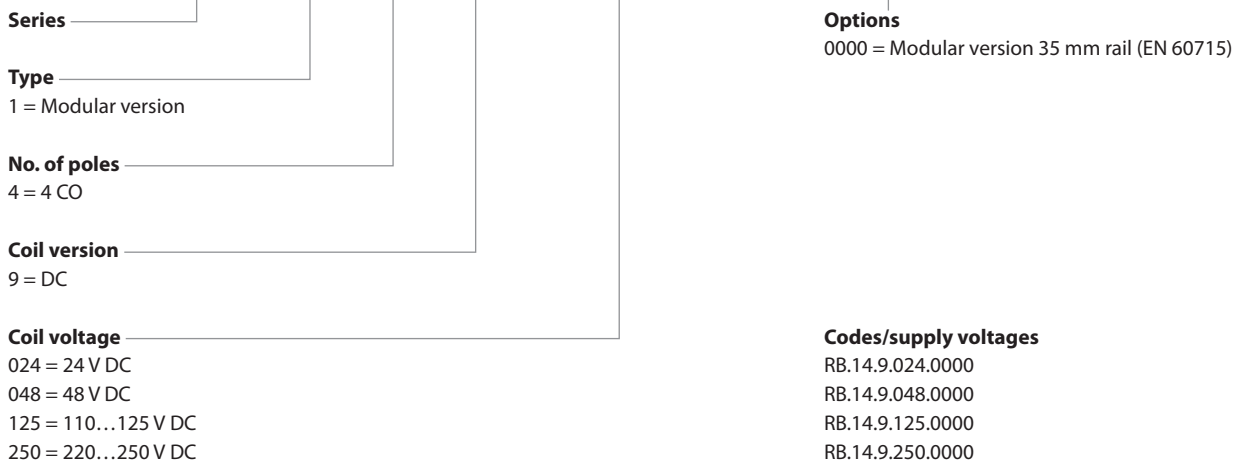
| Contact specification | | | |
|---|-----------------|---------------------------------|----------------------------|
| Contact configuration | | 4 CO (4PDT) | 2 CO (DPDT) |
| Rated current/Maximum peak current | A | 8/15 | 8/15 |
| Rated voltage/ Maximum switching voltage | V AC (50/60 Hz) | 250/400 | 250/400 |
| Rated load AC1 | VA | 2000 | 2000 |
| Rated load AC15 | VA | 350 | 350 |
| Single phase motor rating (230 V AC) | kW | 0.37 | 0.37 |
| Breaking capacity DC1: 30/110/220 V | A | 8/0.3/0.12 | 8/0.3/0.12 |
| Minimum switching load | mW (V/mA) | 300 (5/5) | 300 (5/5) |
| Standard contact material | | AgSnO ₂ | AgSnO ₂ |
| Coil specification | | | |
| Nominal voltage (U _N) | V DC | 24 - 48 - 110...125 - 220...250 | 24 - 110...125 - 220...250 |
| Rated power DC | W | 7 | 4 |
| Operating range | V DC | (0.8...1.1)U _N | (0.8...1.1)U _N |
| Technical data | | | |
| Mechanical life AC/DC | cycles | 2 · 10 ⁶ | 2 · 10 ⁶ |
| Electrical life at rated load AC1 | cycles | 100 · 10 ³ | 100 · 10 ³ |
| Operate/release time SET/RESET | ms | 10/5 | 10/5 |
| Insulation between coil and contacts (1.2/50 μs) | kV | 6 (8 mm) | 4 (8 mm) |
| Dielectric strength between open contacts | V AC | 1000 | 1000 |
| Ambient temperature range | °C | -40...+55 | -40...+55 |
| Protection category | | IP 20 | IP 20 |
| Approvals relay (according to type) | | CE EAC | |

Ordering information

Example: RB series, bistable relay, 4 CO, 125 V DC coil, 35 mm rail (EN 60715) mount.

A

R B . 1 4 . 9 . 1 2 5 . 0 0 0 0



Example: RB series, bistable relay, 2 CO, 125 V DC coil, 11 pin socket type 90.21 mount.

R B . 2 2 . 9 . 1 2 5 . 9 0 2 1

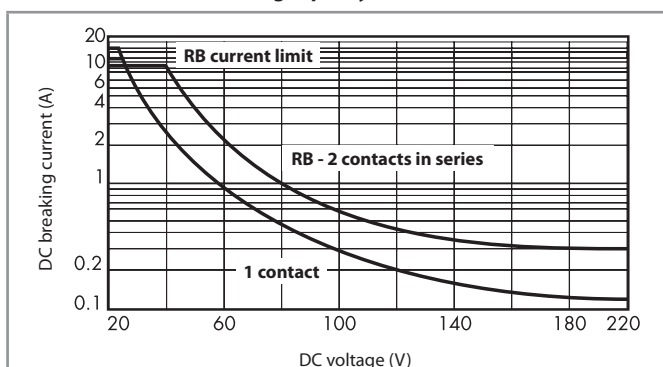


Technical data

| Insulation according to EN 61810-1 | | |
|--|---------------------------------|---------------------|
| | 2 CO | 4 CO |
| Nominal voltage of supply system | V AC 230/400 | 230/400 |
| Rated insulation voltage | V AC 250 | 250 |
| Pollution degree | 2 | 2 |
| Insulation between coil and contact set | | |
| Type of insulation | Reinforced (8 mm) | Reinforced (8 mm) |
| Overvoltage category | III | III |
| Rated impulse voltage | kV (1.2/50 μs) 4 | 6 |
| Dielectric strength | V AC 2000 | 3000 |
| Insulation between adjacent contacts | | |
| Type of insulation | Basic | Basic |
| Overvoltage category | III | III |
| Rated impulse voltage | kV (1.2/50 μs) 4 | 4 |
| Dielectric strength | V AC 2000 | 2500 |
| Insulation between open contacts | | |
| Type of disconnection | Micro-disconnection | Micro-disconnection |
| Dielectric strength | V AC/kV (1.2/50 μs) 1000/1.5 | 1000/1.5 |
| Conducted disturbance immunity | | |
| Burst (5...50)ns, 5 kHz, on A1 - A2 | EN 61000-4-4 | level 4 (4 kV) |
| Surge (1.2/50 μs) on A1 - A2 (differential mode) | EN 61000-4-5 | level 3 (2 kV) |
| Other data | | |
| Bounce time: SET (NO) / RESET (NC) | ms | 3/6 |
| Vibration resistance (5...55)Hz: NO/NC | g | 3/6 |
| Shock resistance | g | 15 |
| Max cable length for push-button connection | m | 100 |
| Terminals | | |
| | Screw terminal | |
| | Solid and stranded cable | |
| Max. wire size | mm ² | 1 x 2.5 / 2 x 1.5 |
| | AWG | 1 x 14 / 2 x 16 |

Contact specification

RB - Maximum DC1 breaking capacity



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
Note: the release time for the load will be increased.

Coil specifications - Type RB.14

DC coil data

| Nominal voltage U_N V | Coil code | Operating range | | Rated coil consumption I at U_N mA | Rated power W |
|-------------------------------|--------------|-----------------|----------------|--|------------------|
| | | U_{min} V | U_{max} V | | |
| 24 | 9.024 | 19.2 | 26.4 | 290 | 7 |
| 48 | 9.048 | 38.4 | 52.8 | 150 | 7 |
| 110...125 | 9.125 | 88 | 137.5 | 60 | 7 |
| 220...250 | 9.250 | 176 | 275 | 30 | 7 |

Coil specifications - Type RB.22

DC coil data

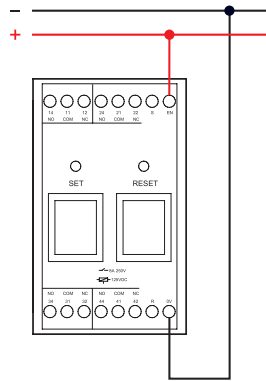
| Nominal voltage U_N V | Coil code | Operating range | | Rated coil consumption I at U_N mA | Rated power W |
|-------------------------------|--------------|-----------------|----------------|--|------------------|
| | | U_{min} V | U_{max} V | | |
| 24 | 9.024 | 19.2 | 26.4 | 170 | 4 |
| 110...125 | 9.125 | 88 | 137.5 | 35 | 4 |
| 220...250 | 9.250 | 176 | 275 | 18 | 4 |

Wiring diagrams

A

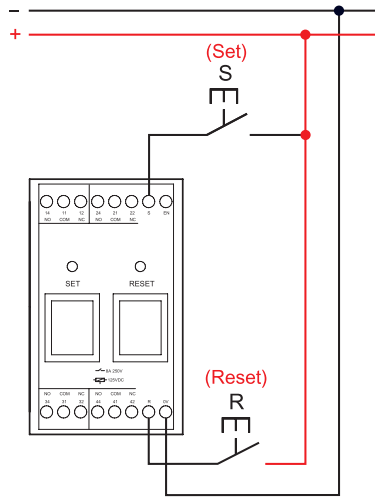
Type RB.14

Connection for only local push-buttons enable
EN = Enable - Positive voltage
0V = Negative voltage



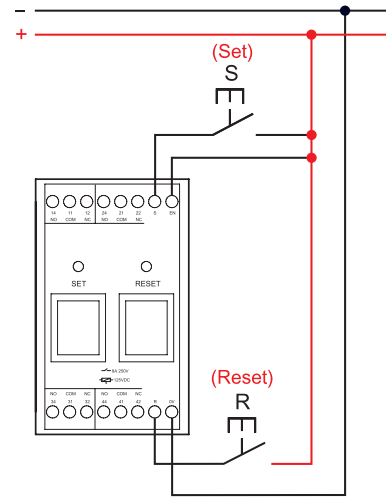
Type RB.14

Connection for remote push-buttons enable



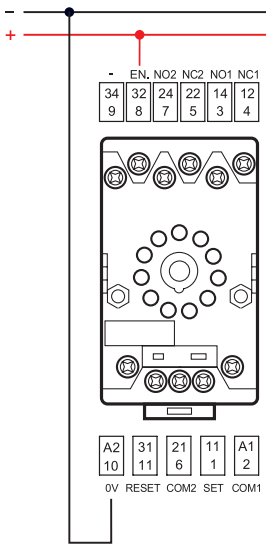
Type RB.14

Connection for local and remote push-buttons enable



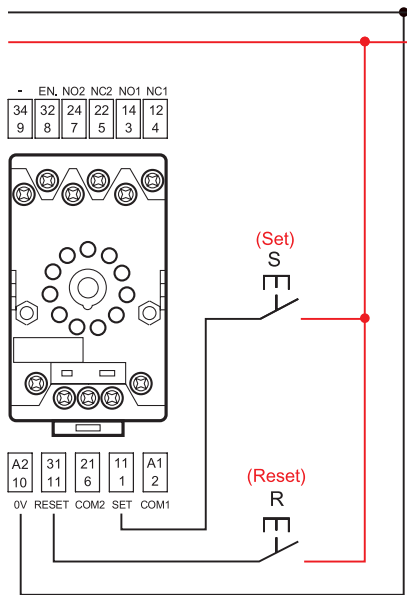
Type RB.22

Connection for only local push-buttons enable
EN = Enable - Positive voltage
0V = Negative voltage



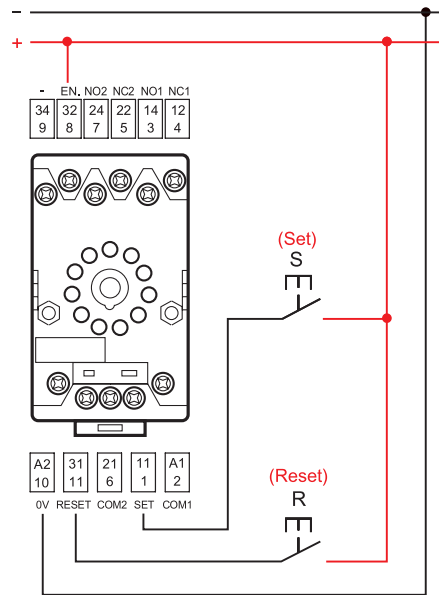
Type RB.22

Connection for remote push-buttons enable

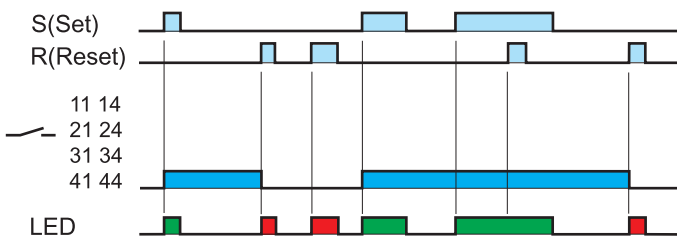


Type RB.22

Connection for local and remote push-buttons enable

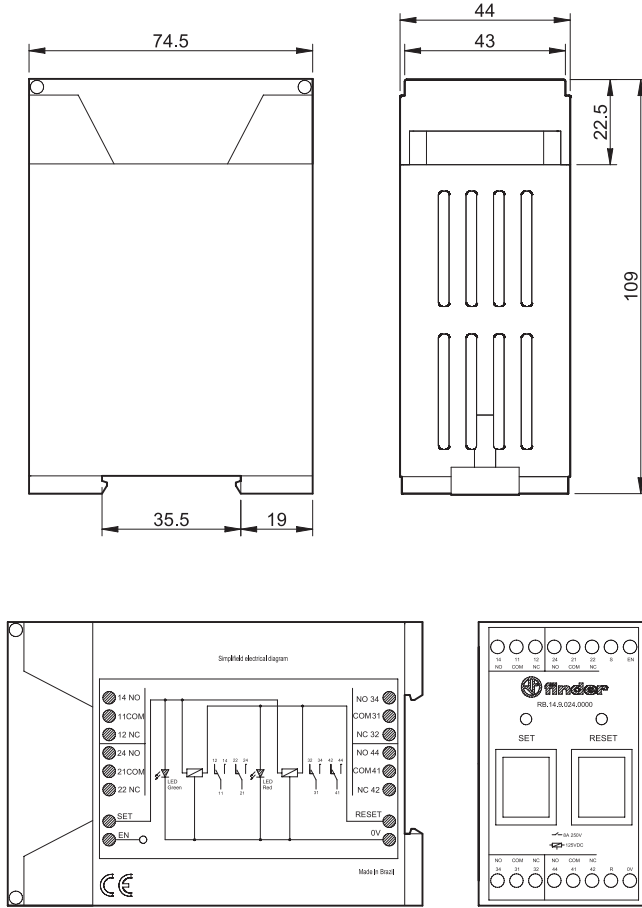


Functions



Outline drawing

RB.14
Screw terminal



RB.22
Screw terminal

