

Bistable relay 8 A



Power
Plants



Panels for
electrical
distribution



Control
panels



Automatic
warehouses



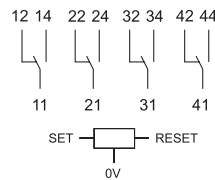
Bistable relay for control and signaling
RB.14 35 mm rail (EN 60715) mount
RB.22 11 pin socket type 90.21 mount

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

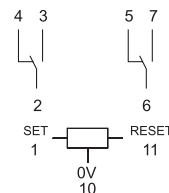
RB.14/22
Screw terminal




RB.14



RB.22



For outline drawings see page 7

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	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 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)			

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

Series

Type

1 = Modular version

No. of poles

4 = 4 CO

Coil version

9 = DC

Coil voltage

024 = 24 V DC

048 = 48 V DC

125 = 110...125 V DC

250 = 220...250 V DC

Options

0000 = Modular version 35 mm rail (EN 60715)

Codes/supply voltages

RB.14.9.024.0000

RB.14.9.048.0000

RB.14.9.125.0000

RB.14.9.250.0000

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

Series

Type

2 = 11 pin socket type 90.21 mount

No. of poles

2 = 2 CO

Coil version

9 = DC

Coil voltage

024 = 24 V DC

125 = 110...125 V DC

250 = 220...250 V DC

Options

9021 = Version plug-in 90.21 socket

0000 = Version relay only

Codes/supply voltages

RB.22.9.024.0000

RB.22.9.024.9021

RB.22.9.125.0000

RB.22.9.125.9021

RB.22.9.250.0000

RB.22.9.250.9021

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

Insulation between coil terminals

Rated impulse voltage (surge) differential mode (according to EN 61000-4-5)	kV(1.2/50 µs)	2
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Other data

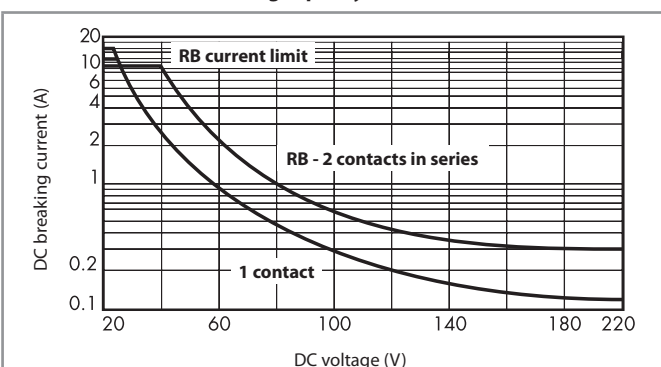
Bounce time: SET (NO) / RESET (NC)	ms	3/6
Vibration resistance (5...55)Hz: NO/NC	g	3/6
Shock resistance	g	15
Max cable length for push-button connection	m	100

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	Coil code	Operating range		Rated coil consumption I at U_N	Rated power
V		U_{min} V	U_{max} V	mA	W
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

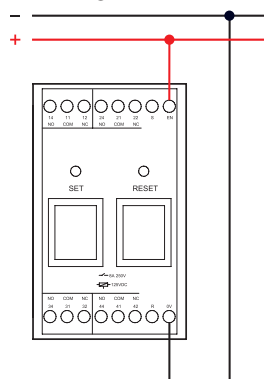
Nominal voltage U_N	Coil code	Operating range		Rated coil consumption I at U_N	Rated power
V		U_{min} V	U_{max} V	mA	W
24	9.024	19.2	26.4	170	4
110...125	9.125	88	137.5	35	4
220...250	9.250	176	275	18	4

Wiring diagrams

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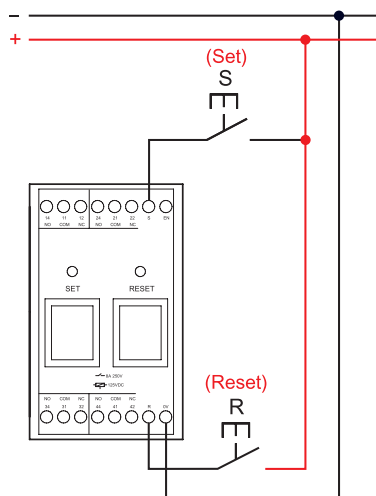
Type RB.14

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



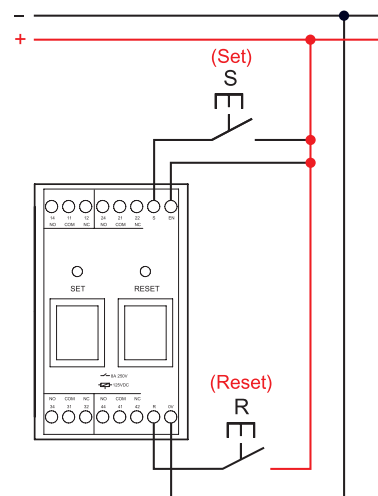
Type RB.14

Connection for remote push-buttons enable



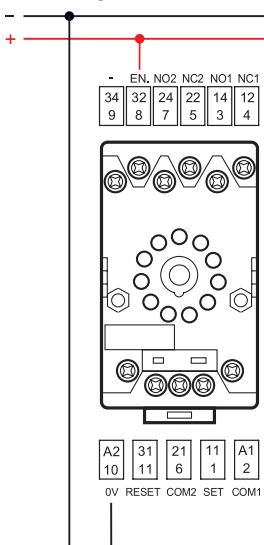
Type RB.14

Connection for local and remote push-buttons enable



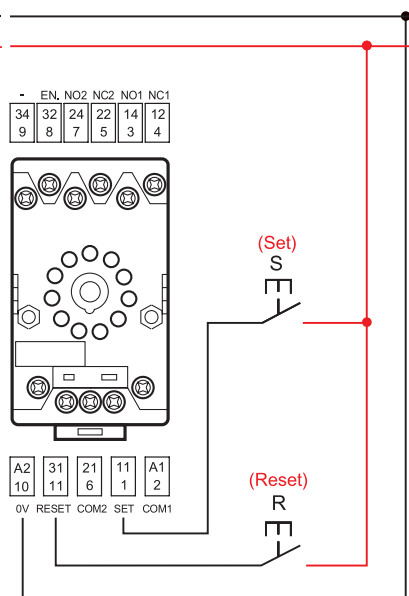
Type RB.22

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



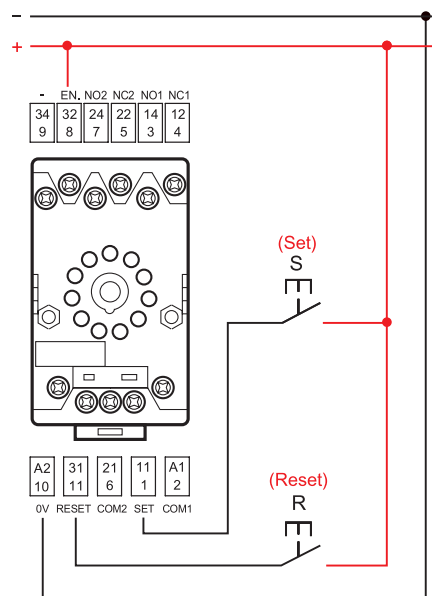
Type RB.22

Connection for remote push-buttons enable

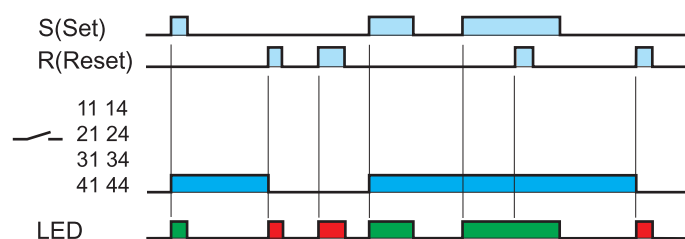


Type RB.22

Connection for local and remote push-buttons enable

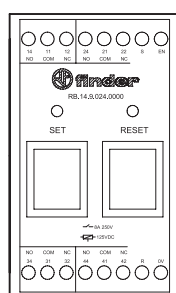
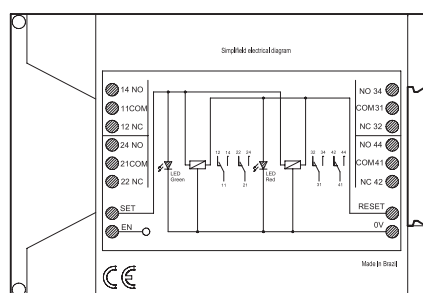
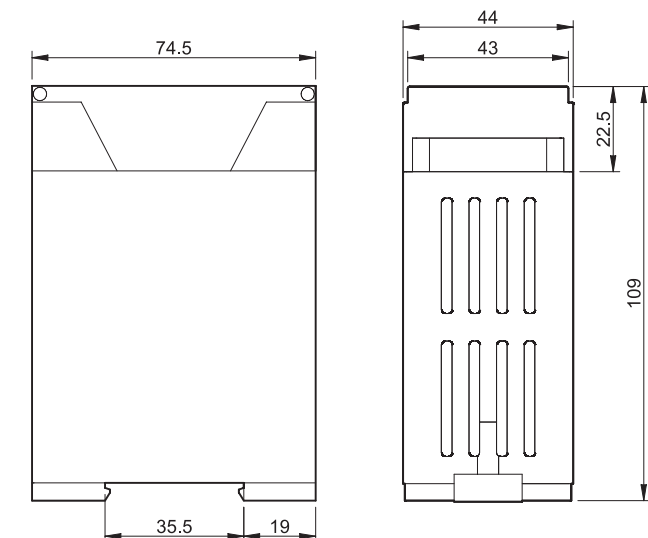


Functions



Outline drawing

Type RB.14
Screw terminal



Type RB.22
Screw terminal

