

**2 CO forcibly guided contacts relay interface modules, 15.8 mm wide**

**Type 48.12**

- 2 CO 8 A
- Screw terminals
- Relay with forcibly guided contacts according to EN 50205 Type B
- 35 mm rail (EN 60715) mounting
- Cadmium-free contact material

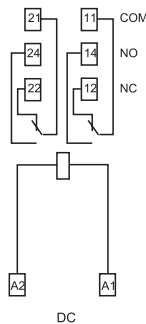
48.12  
Screw terminal



**48.12**



- 2 CO 8 A
- Forcibly guided contacts relay
- Screw terminals



According to EN 50205 only 1 NO and 1 NC (11-14 and 21-22 or 11-12 and 21-24) shall be used as forcibly guided contacts.

For outline drawing see page 9

**Contact specification**

Contact configuration		2 CO (DPDT)
Rated current/Maximum peak current	A	8/15
Rated voltage/Maximum switching voltage	V AC	250/400
Rated load AC1	VA	2000
Rated load AC15 (230 V AC)	VA	500
Single phase motor rating (230 V AC)	kW	0.37
Breaking capacity DC1: 30/110/220 V	A	8/0.65/0.2
Minimum switching load	mW (V/mA)	500 (10/10)
Standard contact material		AgNi

**Coil specification**

Nominal voltage ( $U_N$ )	V AC (50/60 Hz)	—
	V DC	12 - 24
Rated power AC/DC	VA (50 Hz)/W	—/0.7
Operating range	AC	—
	DC	$(0.75 \dots 1.2)U_N$
Holding voltage	AC/DC	—/0.4 $U_N$
Must drop-out voltage	AC/DC	—/0.1 $U_N$

**Technical data**

Mechanical life AC/DC	cycles	—/10 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	100 · 10 <sup>3</sup>
Operate/release time	ms	10/4
Insulation between coil and contacts (1.2/50 $\mu$ s)	kV	6 (8 mm)
Dielectric strength between open contacts	V AC	1500
Ambient temperature range	°C	-40...+70
Protection category		IP 20

**Approvals relay** (according to type)



1 CO relay interface modules,  
15.8 mm wide  
Ideal interface for PLC and electronic systems

**Type 48.P3**

- 1 CO 10 A
- Push-in terminals

**Type 48.31**

- 1 CO 10 A
- Screw terminals

- AC coils or DC sensitive coils
- Supply status indication and EMC coil suppression module as standard
- Identification label
- UL Listing (certain relay/socket combinations)
- 35 mm rail (EN 60715) mounting
- Cadmium-free contact material

48.P3  
Push-in terminal



48.31  
Screw terminal

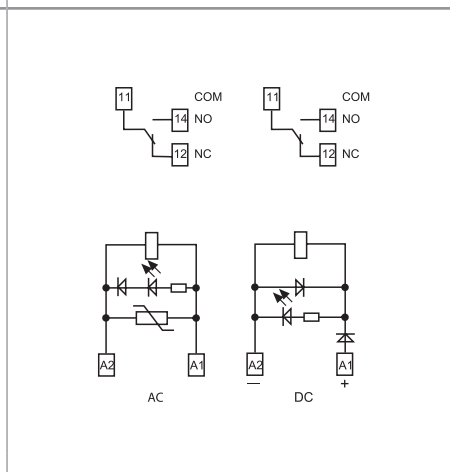
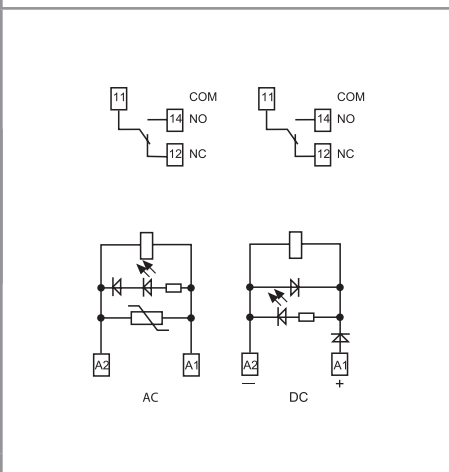


**NEW 48.P3**

- 1 CO 10 A
- Push-in terminals

**48.31**

- 1 CO 10 A
- Screw terminals



For outline drawing see page 9

**Contact specification**

Contact configuration		1 CO (SPDT)	1 CO (SPDT)
Rated current/Maximum peak current	A	10/20	10/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	2500	2500
Rated load AC15 (230 V AC)	VA	500	500
Single phase motor rating (230 V AC)	kW	0.37	0.37
Breaking capacity DC1: 30/110/220 V	A	10/0.3/0.12	10/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi

**Coil specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	12 - 24 - 110 - 120 - 230	12 - 24 - 110 - 120 - 230
	V DC	12 - 24 - 125	12 - 24 - 125
Rated power AC/sens. DC	VA (50 Hz)/W	1.2/0.5	1.2/0.5
Operating range	AC	(0.8...1.1)U <sub>N</sub>	(0.8...1.1)U <sub>N</sub>
	sens. DC	(0.73...1.5)U <sub>N</sub>	(0.73...1.5)U <sub>N</sub>
Holding voltage	AC/DC	0.8 U <sub>N</sub> / 0.4 U <sub>N</sub>	0.8 U <sub>N</sub> / 0.4 U <sub>N</sub>
Must drop-out voltage	AC/DC	0.2 U <sub>N</sub> / 0.1 U <sub>N</sub>	0.2 U <sub>N</sub> / 0.1 U <sub>N</sub>

**Technical data**

Mechanical life	cycles	10 · 10 <sup>6</sup>	10 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	200 · 10 <sup>3</sup>	200 · 10 <sup>3</sup>
Operate/release time	ms	7/4 (AC) - 12/12 (DC)	7/4 (AC) - 12/12 (DC)
Insulation between coil and contacts (1.2/50 μs)	kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+70	-40...+70
Protection category		IP 20	IP 20

**Approvals relay** (according to type)

