

2 CO relay interface modules, 15.8 mm wide

Type 48.12

Ideals for safety applications

- 2 CO 8 A
- Screw terminals
- Relay with forcibly guided contacts according to EN 61810-3 Type B (previously EN 50205)

Type 48.32

Ideals for energetic applications

- 2 CO 8 A
- Screw terminals
- Supply status indication EMC coil suppression module as standard

- DC coils
- Identification label
- UL Listing (certain relay / socket combinations)
- 35 mm rail (EN 60715) mounting
- Cadmium-free contact material

48.12/32

Screw terminal



According to EN 61810-3 only 1 NO and 1 NC (11-14 and 21-22 or 11-12 and 21-24) shall be used as forcibly guided contacts (Type 48.12).

For outline drawing see page 11

Contact specification

Contact configuration

2 CO (DPDT)

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 (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

8/0.65/0.4

8/0.65/0.4

Minimum switching load mW (V/mA)

50 (5/5)

50 (5/5)

Standard contact material

AgNi+Au

AgNi+Au

Coil specification

Nominal voltage (U_N) V DC

24

24

Rated power DC W

0.7

0.7

Operating range DC

$(0.75 \dots 1.2) U_N$

$(0.75 \dots 1.2) U_N$

Holding voltage DC

$0.4 U_N$

$0.4 U_N$

Must drop-out voltage DC

$0.1 U_N$

$0.1 U_N$

Technical data

Mechanical life DC cycles

$10 \cdot 10^6$

$10 \cdot 10^6$

Electrical life at rated load AC1 cycles

$100 \cdot 10^3$

$100 \cdot 10^3$

Operate/release time ms

10/4

10/4

Insulation between coil
and contacts (1.2/50 μ s) kV

6 (8 mm)

6 (8 mm)

Dielectric strength
between open contacts V AC

1500

1500

Ambient temperature range °C

$-40 \dots +70$

$-40 \dots +70$

Protection category

IP 20

IP 20

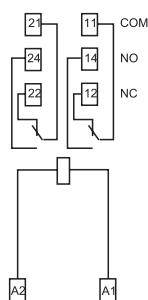
Approvals relay (according to type)



NEW 48.12



- 2 CO 8 A
- Screw terminals

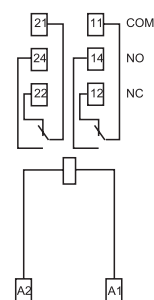


DC

NEW 48.32



- 2 CO 8 A
- Screw terminals



DC

**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

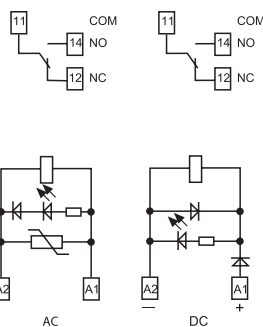
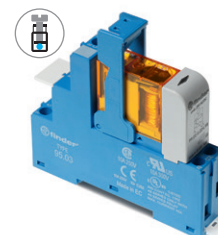
- AC coils or DC sensitive coils
- Supply status indication and EMC coil suppression module as standard
- Identification label
- UL Listing (certain relay/socket combinations)
- 35 mm rail (EN 60715) mounting
- Cadmium-free contact material

48.P3
Push-in terminal

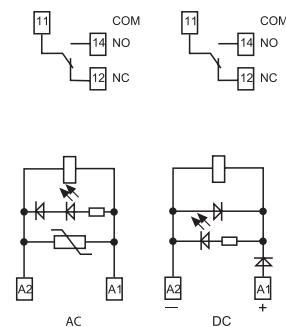
48.31
Screw terminal

48.P3


- 1 CO 10 A
- Push-in terminals


48.31


- 1 CO 10 A
- Screw terminals



For outline drawing see page 11

Contact specification

		1 CO (SPDT)	1 CO (SPDT)
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_N)	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	$(0.8 \dots 1.1) U_N$	$(0.8 \dots 1.1) U_N$
	sens. DC	$(0.73 \dots 1.5) U_N$	$(0.73 \dots 1.5) U_N$
Holding voltage	AC/DC	$0.8 U_N / 0.4 U_N$	$0.8 U_N / 0.4 U_N$
Must drop-out voltage	AC/DC	$0.2 U_N / 0.1 U_N$	$0.2 U_N / 0.1 U_N$

Technical data

Mechanical life	cycles	$10 \cdot 10^6$	$10 \cdot 10^6$
Electrical life at rated load AC1	cycles	$200 \cdot 10^3$	$200 \cdot 10^3$
Operate/release time	ms	7/4 (AC) - 12/12 (DC)	7/4 (AC) - 12/12 (DC)
Insulation between coil and contacts ($1.2/50 \mu s$)	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)
