

**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

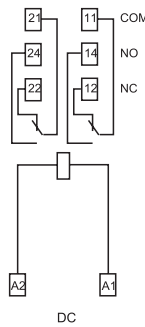
| | | | |
|---|--------------|------------------|------------------|
| Mechanical life DC | cycles | $10 \cdot 10^6$ | $10 \cdot 10^6$ |
| Electrical life at rated load AC1 | cycles | $100 \cdot 10^3$ | $100 \cdot 10^3$ |
| Operate/release time | ms | 10/4 | 10/4 |
| Insulation between coil and contacts (1.2/50 μ s) | kV | 6 (8 mm) | 6 (8 mm) |
| Dielectric strength between open contacts | V AC | 1500 | 1500 |
| Ambient temperature range | $^{\circ}$ C | -40...+70 | -40...+70 |
| Protection category | | IP 20 | IP 20 |

Approvals relay (according to type)

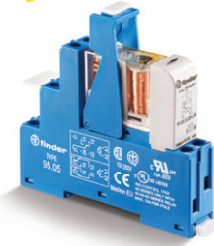
NEW 48.12



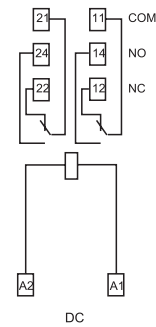
- 2 CO 8 A
- Screw terminals



NEW 48.32



- 2 CO 8 A
- Screw terminals



B

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

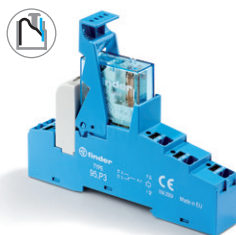
48.P3
Push-in terminal



48.31
Screw terminal

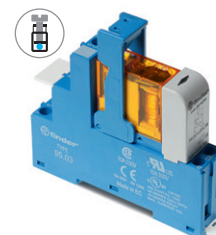


48.P3

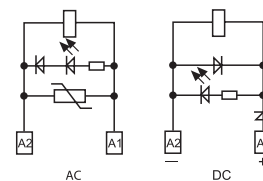
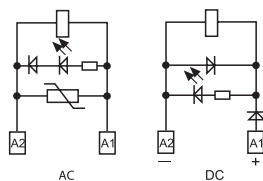
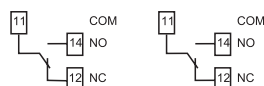


- 1 CO 10 A
- Push-in terminals

48.31



- 1 CO 10 A
- Screw terminals



For outline drawing see page 11

Contact specification

| | | | |
|---|-----------|-------------|-------------|
| 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...1.1)U _N | (0.8...1.1)U _N |
| | sens. DC | (0.73...1.5)U _N | (0.73...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 · 10 ⁶ | 10 · 10 ⁶ |
| Electrical life at rated load AC1 | cycles | 200 · 10 ³ | 200 · 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 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)

