

## Features

1 & 2 pole relay interface modules,  
screw terminal socket, 15.8 mm wide.

Ideal interface for PLC and electronic systems

4C.01 - 1 Pole 16 A

4C.02 - 2 Pole 8 A

- AC coils or DC coils
- Instant ejection of relay using plastic retaining clip
- Supply status indication and coil suppression module as standard
- Identification label
- UL Listing (certain relay/socket combinations)
- 35 mm rail (EN 50022) mounting

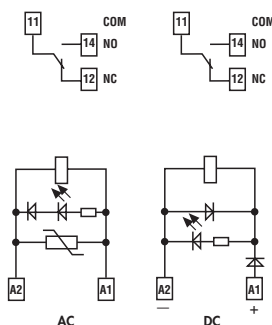
4C.01 / 4C.02  
Screw terminal



### 4C.01



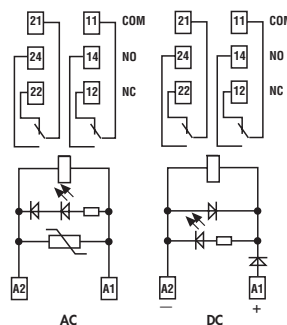
- 1 pole, 16 A
- Screw terminal connection
- 35 mm rail (EN 50022) mounting



### 4C.02



- 2 pole, 8 A
- Screw terminal connection
- 35 mm rail (EN 50022) mounting



For outline drawing of 4C.01/02 see page 5

| Contact specification                                 |                 |                                        |                           |
|-------------------------------------------------------|-----------------|----------------------------------------|---------------------------|
| Contact configuration                                 |                 | 1 CO (SPDT)                            | 2 CO (DPDT)               |
| Rated current/Maximum peak current                    | A               | 16/25                                  | 8/15                      |
| Rated voltage/Maximum switching voltage V AC          |                 | 250/440                                | 250/440                   |
| Rated load AC1                                        | VA              | 4000                                   | 2000                      |
| Rated load AC15 (230 V AC)                            | VA              | 750                                    | 350                       |
| Single phase motor rating (230 V AC)                  | kW              | 0.55                                   | 0.37                      |
| Breaking capacity DC1: 30/110/220V                    | A               | 16/0.5/0.15                            | 6/0.5/0.15                |
| 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/DC                                     | VA (50 Hz)/W    | 1.2/0.5                                | 1.2/0.5                   |
| Operating range                                       | AC              | $(0.8...1.1)U_N$                       | $(0.8...1.1)U_N$          |
|                                                       | DC              | $(0.73...1.1)U_N$                      | $(0.73...1.1)U_N$         |
| 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 AC/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              | 15/5 (AC) - 15/12 (DC)                 | 10/3 (AC) - 10/10 (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              | $\leq 12A: -40...+70 > 12A: -40...+50$ | $-40...+70$               |
| Protection category                                   |                 | IP 20                                  | IP 20                     |
| Approvals - relay (according to type)                 |                 |                                        |                           |

## Features

1 & 2 pole relay interface modules,  
screwless terminal socket, 15.8 mm wide.

Ideal interface for PLC and electronic systems

4C.51 - 1 Pole 10 A

4C.52 - 2 Pole 8 A

- AC coils or DC coils
- Instant ejection of relay using plastic retaining clip
- Supply status indication and coil suppression module as standard
- Identification label
- UL Listing (certain relay/socket combinations)
- 35 mm rail (EN 50022) mounting

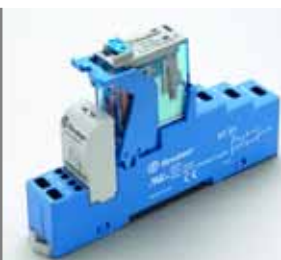
4C.51 / 4C.52  
Screwless terminal



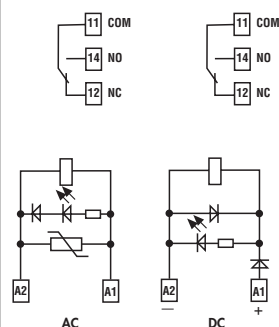
For outline drawing of 4C.51/52 see page 5

| Contact specification                                 |                 | 4C.51                     | 4C.52                     |
|-------------------------------------------------------|-----------------|---------------------------|---------------------------|
| Contact configuration                                 |                 | 1 CO (SPDT)               | 2 CO (DPDT)               |
| Rated current/Maximum peak current                    | A               | 10/20                     | 8/15                      |
| Rated voltage/Maximum switching voltage V AC          |                 | 250/440                   | 250/440                   |
| Rated load AC1                                        | VA              | 2500                      | 2000                      |
| Rated load AC15 (230 V AC)                            | VA              | 750                       | 350                       |
| Single phase motor rating (230 V AC)                  | kW              | 0.55                      | 0.37                      |
| Breaking capacity DC1: 30/110/220V                    | A               | 10/0.5/0.15               | 6/0.5/0.15                |
| Minimum switching load                                | mW (V/mA)       | 300 (5/5)                 | 300 (5/5)                 |
| Standard contact material                             |                 | AgNi                      | AgNi                      |
| Coil specification                                    |                 | 4C.51                     | 4C.52                     |
| 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/DC                                     | VA (50 Hz)/W    | 1.2/0.5                   | 1.2/0.5                   |
| Operating range                                       | AC              | $(0.8 \dots 1.1) U_N$     | $(0.8 \dots 1.1) U_N$     |
|                                                       | DC              | $(0.73 \dots 1.1) U_N$    | $(0.73 \dots 1.1) U_N$    |
| 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                                        |                 | 4C.51                     | 4C.52                     |
| Mechanical life AC/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              | 15/5 (AC) - 15/12 (DC)    | 10/3 (AC) - 10/10 (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              | -25...+70                 | -25...+70                 |
| Protection category                                   |                 | IP 20                     | IP 20                     |
| Approvals - relay (according to type)                 |                 | CE SR PG Y C-UL US VDE    |                           |

4C.51



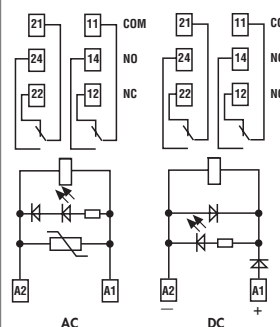
- 1 pole, 10 A
- Screwless terminal connections
- 35 mm rail (EN 50022) mounting



4C.52

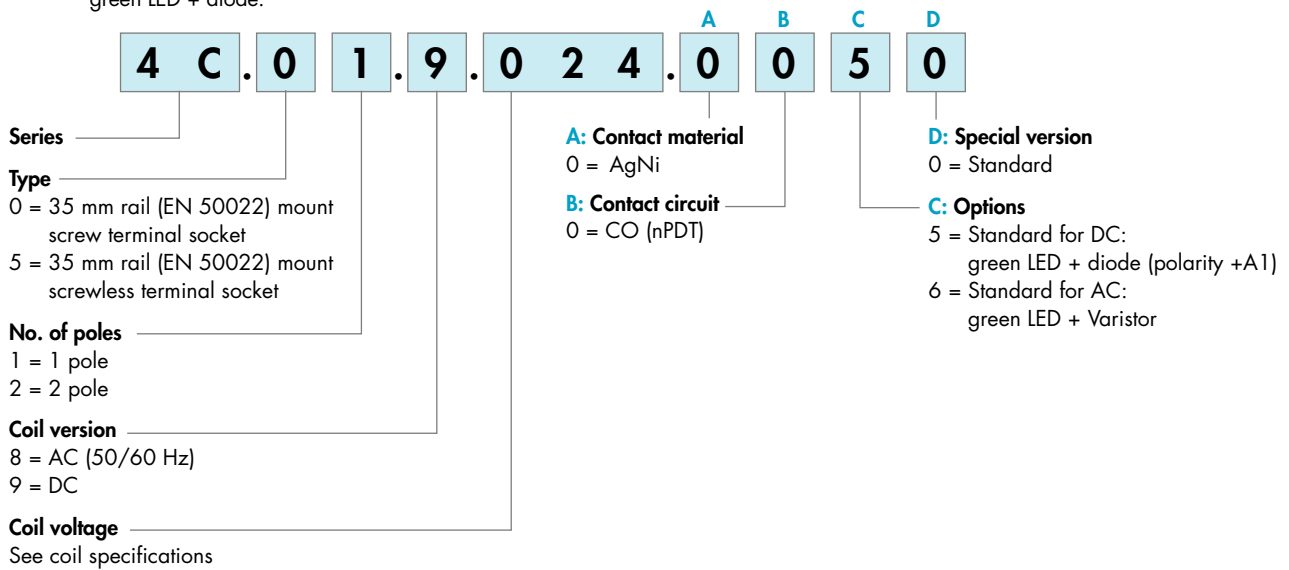


- 2 pole, 8 A
- Screwless terminal connections
- 35 mm rail (EN 50022) mounting



## Ordering information

Example: 4C series, 35 mm rail (EN 50022) mount screw terminal relay interface module, 1 CO (SPDT) 16 A contacts, 24 V DC coil, green LED + diode.

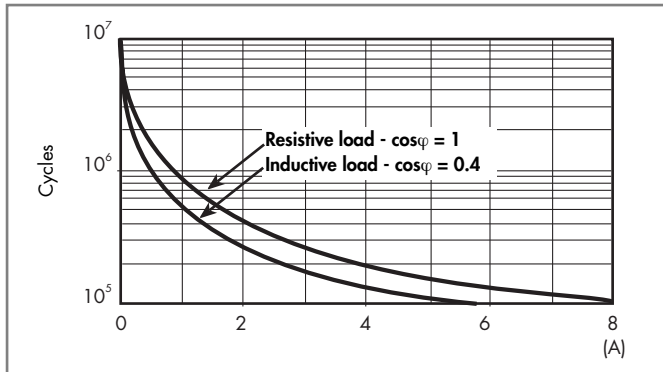


## Technical data

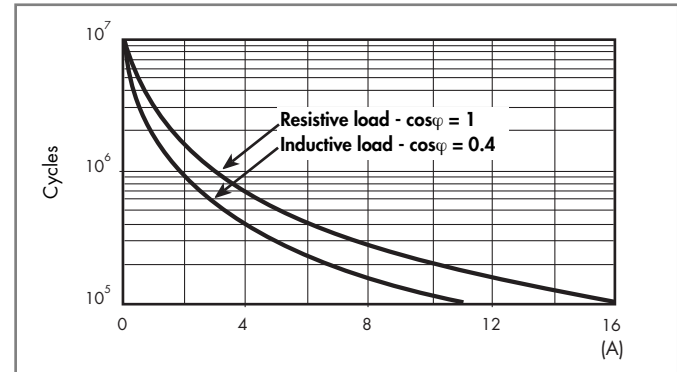
| Insulation                                       |                                 |      |                |                |
|--------------------------------------------------|---------------------------------|------|----------------|----------------|
| Insulation according to EN 61810-1               | insulation rated voltage        | V    | 250            | 440            |
|                                                  | rated impulse withstand voltage | kV   | 4              | 4              |
|                                                  | pollution degree                |      | 3              | 2              |
|                                                  | overvoltage category            |      | III            | III            |
| Insulation between coil and contacts (1.2/50 µs) |                                 | kV   | 6 (8 mm)       |                |
| Dielectric strength between open contacts        |                                 | V AC | 1000           |                |
| Dielectric strength between adjacent contacts    |                                 | V AC | 2000           |                |
| 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: NO/NC                               |                                 | ms   | 2/6 (4C.01/51) | 1/4 (4C.02/52) |
| Vibration resistance (10...150)Hz: NO/NC         |                                 | g    | 20/12          |                |
| Power lost to the environment                    | without contact current         | W    | 0.6            |                |
|                                                  | with rated current              | W    | 1.6 (4C.01/51) | 2 (4C.02/52)   |
|                                                  |                                 |      | 4C.01/4C.02    | 4C.51/4C.52    |
| Wire strip length                                |                                 | mm   | 8              | 8              |
| ⊕ Screw torque                                   |                                 | Nm   | 0.5            | —              |
| Max. wire size                                   |                                 |      | solid cable    | stranded cable |
|                                                  |                                 | mm²  | 1x6/2x2.5      | 1x4/2x2.5      |
|                                                  |                                 | AWG  | 1x10/2x14      | 1x12/2x14      |
|                                                  |                                 |      | solid cable    | stranded cable |
|                                                  |                                 |      | 2x(0.2...1.5)  | 2x(0.2...1.5)  |
|                                                  |                                 |      | 2x(24...18)    | 2x(24...18)    |

## Contact specification

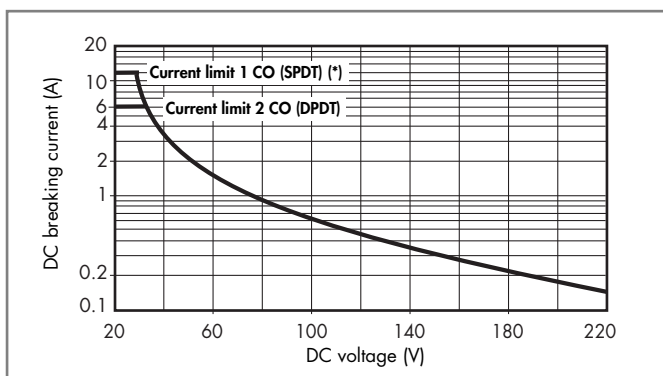
**F 4C - Electrical life (AC) v contact current**  
Types 4C.02/52



**F 4C - Electrical life (AC) v contact current**  
Types 4C.01/51



**H 4C - Maximum DC1 breaking capacity**



(\*) Type 4C.01 = 12 A, Type 4C.51 = 10 A

- 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

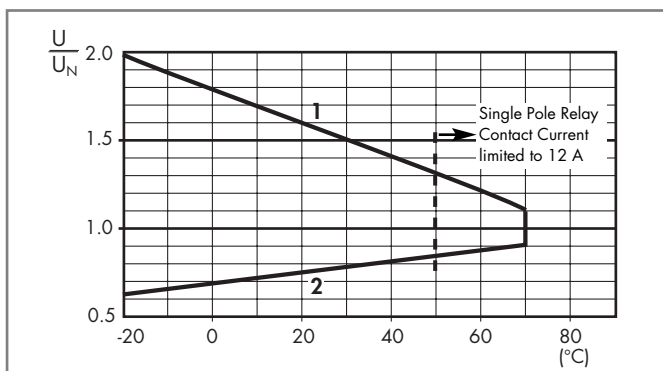
**DC coil data**

| Nominal voltage<br>$U_N$ | Coil code | Operating range |                | Resistance    | Rated coil consumption<br>I at $U_N$ |
|--------------------------|-----------|-----------------|----------------|---------------|--------------------------------------|
| V                        |           | $U_{min}$<br>V  | $U_{max}$<br>V | R<br>$\Omega$ | I<br>mA                              |
| 12                       | 9.012     | 8.8             | 13.2           | 300           | 40                                   |
| 24                       | 9.024     | 17.5            | 26.4           | 1200          | 20                                   |
| 125                      | 9.125     | 91.2            | 137.5          | 32000         | 3.9                                  |

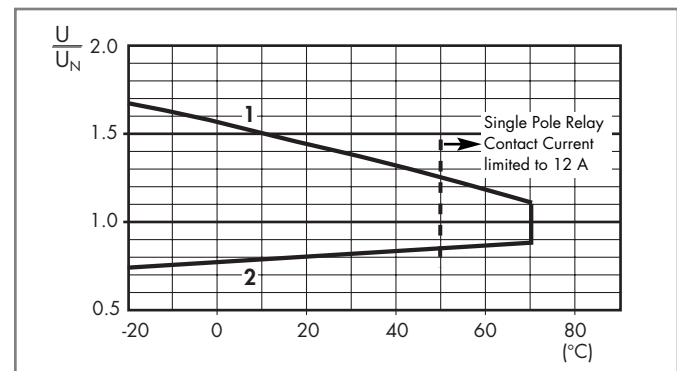
**AC coil data**

| Nominal voltage<br>$U_N$ | Coil code | Operating range |                | Resistance    | Rated coil consumption<br>I at $U_N$ |
|--------------------------|-----------|-----------------|----------------|---------------|--------------------------------------|
| V                        |           | $U_{min}$<br>V  | $U_{max}$<br>V | R<br>$\Omega$ | I<br>mA                              |
| 12                       | 8.012     | 9.6             | 13.2           | 80            | 90                                   |
| 24                       | 8.024     | 19.2            | 26.4           | 320           | 45                                   |
| 110                      | 8.110     | 88              | 121            | 6900          | 9.4                                  |
| 120                      | 8.120     | 96              | 132            | 9000          | 8.4                                  |
| 230                      | 8.230     | 184             | 253            | 28000         | 5                                    |

**R 4C - DC coil operating range v ambient temperature**



**R 4C - AC coil operating range v ambient temperature**



- 1 - Max. permitted coil voltage.  
2 - Min. pick-up voltage with coil at ambient temperature.

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2 - Min. pick-up voltage with coil at ambient temperature.

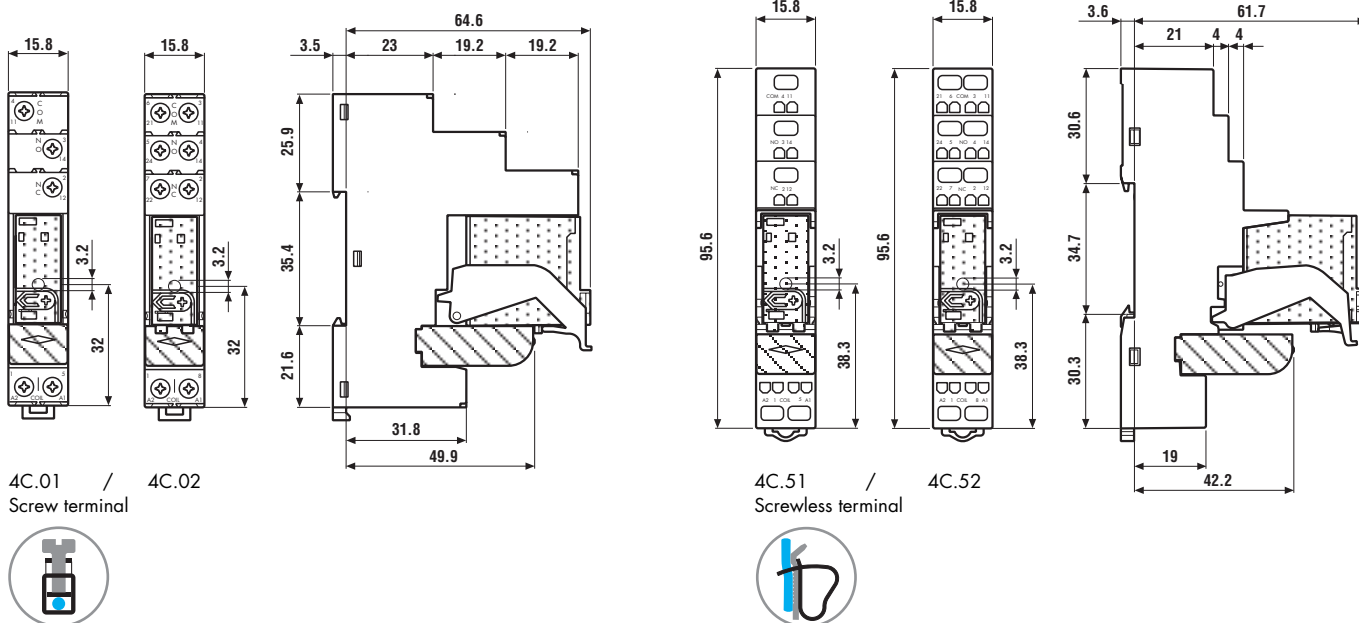
----- Temperature limit for the single pole version under full 16 A contact current.

## Combinations

Certain relay/socket combinations

| Code  | Type of socket | Type of relay | Module | Retaining clip |
|-------|----------------|---------------|--------|----------------|
| 4C.01 | 97.01          | 46.61         | 99.02  | 097.01         |
| 4C.02 | 97.02          | 46.52         | 99.02  | 097.01         |
| 4C.51 | 97.51          | 46.61         | 99.02  | 097.01         |
| 4C.52 | 97.52          | 46.52         | 99.02  | 097.01         |

## Outline drawing



## Accessories



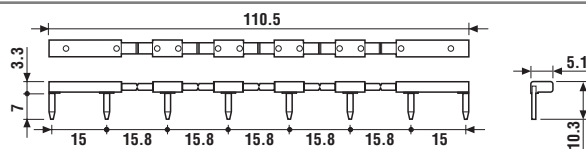
095.18

8-way jumper link for 4C.01 and 4C.02

Rated values

095.18 (blue)

10 A - 250 V



060.72

Sheet of marker tags, plastic, 72 tags, 6x12 mm

060.72

## Packaging code

How to code and identify retaining clip and packaging options for relay interface module.

Example:

4 C . 0 1 . 9 . 0 2 4 . 0 0 5 0 S P A

A Standard packaging  
B Blister packaging

SP Plastic retaining clip

