

## 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

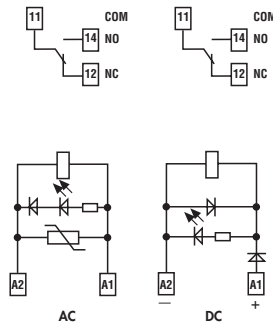
4C.01 / 4C.02  
Screw terminal



### 4C.01



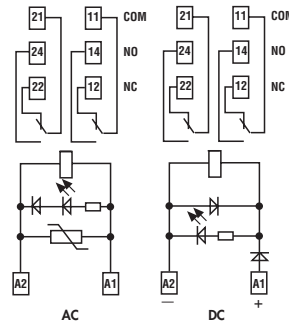
- 1 pole, 16 A
- Screw terminal connection
- 35 mm rail (EN 50022) mounting



### 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

|   |                 | 4C.01  | 4C.02                     |
|---|-----------------|--|---------------------------|
| <b>Contact specification</b>                          |                 |  |                           |
| 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                      |
| <b>Coil specification</b>                             |                 |  |                           |
| 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           | $0.2 U_N / 0.1 U_N$                              | $0.2 U_N / 0.1 U_N$       |
| <b>Technical data</b>                                 |                 |  |                           |
| 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                             | $^{\circ}$ C    | $\leq 12A: -40 \dots +70 / > 12A: -40 \dots +50$ | $-40 \dots +70$           |
| Protection category                                   |                 | IP 20  | IP 20                     |
| <b>Approvals - relay</b> (according to type)          |                 | CE   | UL US VDE                 |

## 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



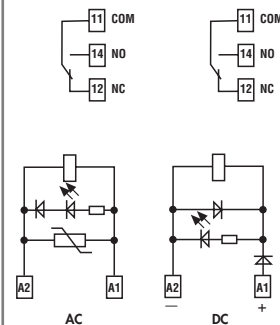
For outline drawing of 4C.51/52 see page 5

| 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                                    |                 |                           |                           |
| 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  |                 |                           |                           |
| 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                             | $^{\circ}$ C    | -25...+70                 | -25...+70                 |
| Protection category                                   |                 | IP 20                     | IP 20                     |
| Approvals - relay (according to type)                 |                 |                           |                           |

**4C.51**



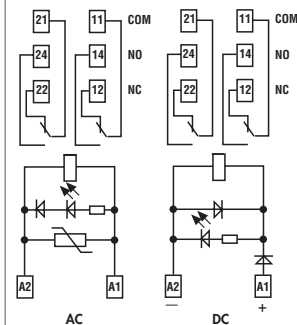
- 1 pole, 10 A
- Screwless terminal connections
- 35 mm rail (EN 50022) mounting



**4C.52**

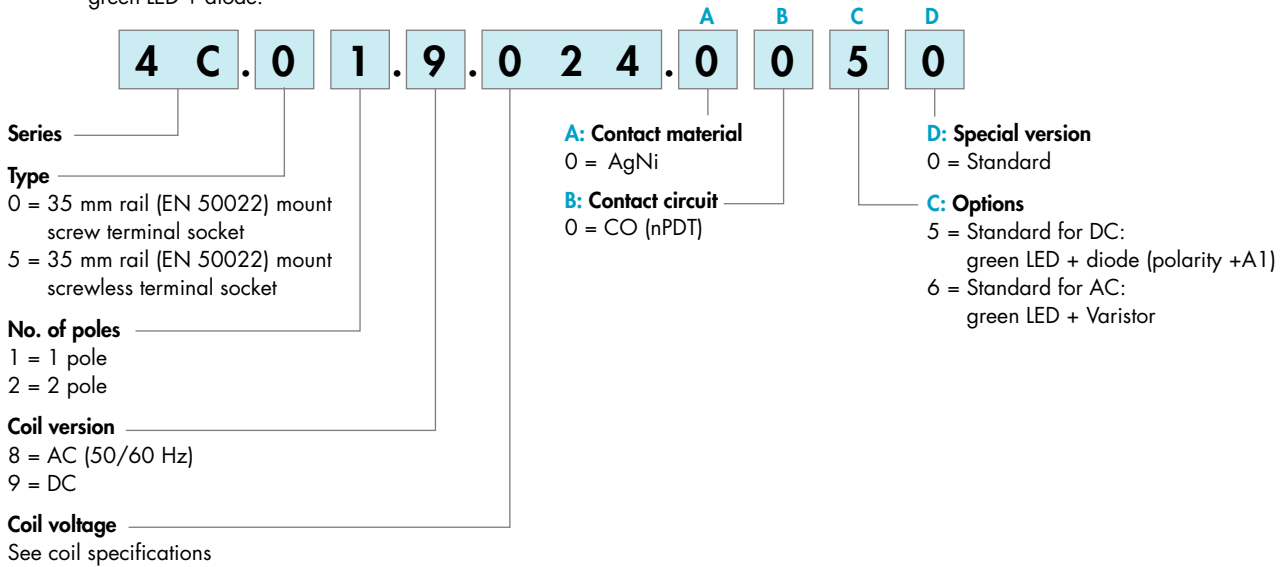


- 2 pole, 8 A
- Screwless terminal connections
- 35 mm rail (EN 50022) mounting



## 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.

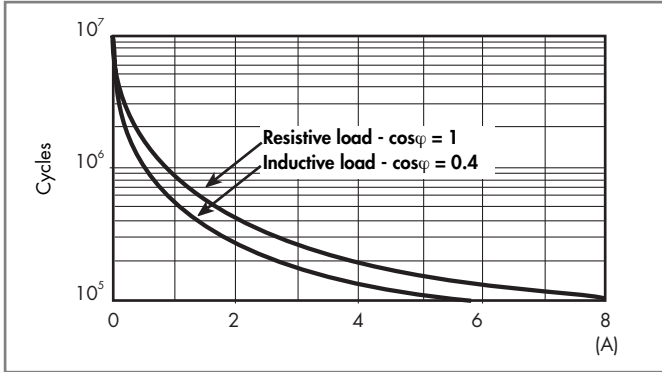


## Technical data

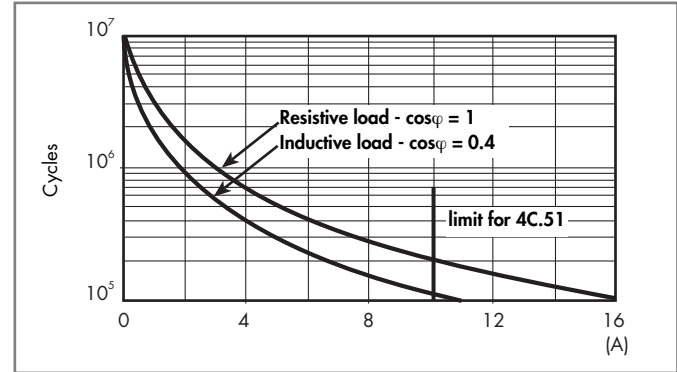
| Insulation                                       |                                 |             |                    |                    |                |
|--|---------------------------------|-------------|--------------------|--------------------|----------------|
| Insulation according to EN 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)       |                |
|  |                                 |             | <b>4C.01/4C.02</b> | <b>4C.51/4C.52</b> |                |
| Wire strip length                                | mm                              |             | 8                  |                    |                |
| Screw torque                                     | Nm                              |             | 0.5                |                    |                |
| Max. wire size                                   |                                 | solid cable | stranded cable     | solid cable        | stranded cable |
|  | mm²                             | 1x6/2x2.5   | 1x4/2x2.5          | 2x(0.2...1.5)      | 2x(0.2...1.5)  |
|  | AWG                             | 1x10/2x14   | 1x12/2x14          | 2x(24...18)        | 2x(24...18)    |

## Contact specification

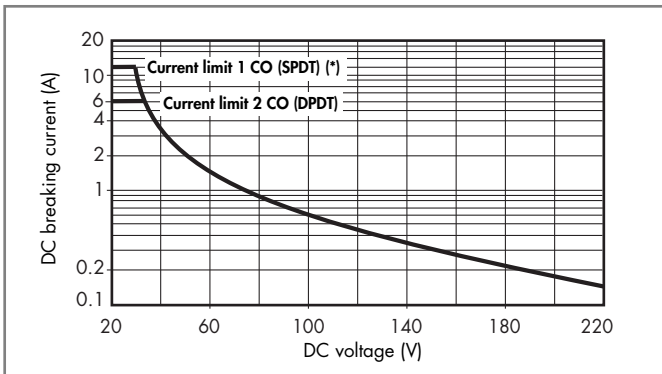
**F 4C - Electrical life (AC) v contact current**  
Types 4C.02/52



**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

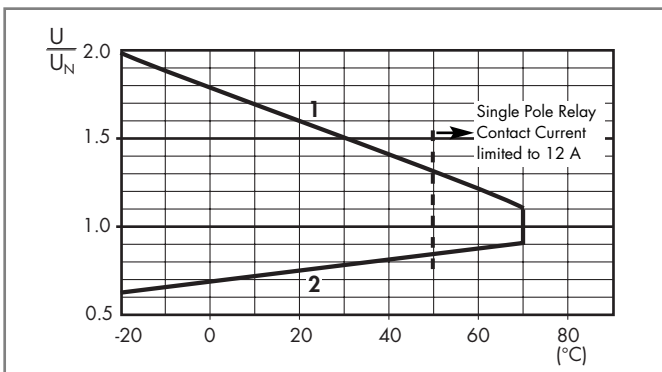
**DC coil data**

| Nominal voltage<br>$U_N$<br>V | Coil code | Operating range |                | Resistance<br>R<br>$\Omega$ | Rated coil consumption<br>I at $U_N$<br>mA |
|-------------------------------|-----------|-----------------|----------------|-----------------------------|--|
|                               |           | $U_{min}$<br>V  | $U_{max}$<br>V |                             |  |
| 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**

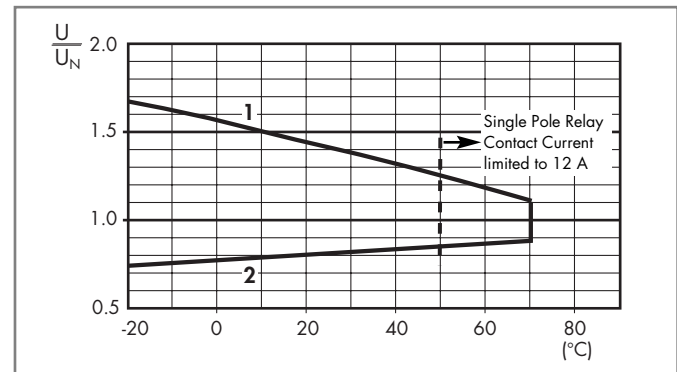
| Nominal voltage<br>$U_N$<br>V | Coil code | Operating range |                | Resistance<br>R<br>$\Omega$ | Rated coil consumption<br>I at $U_N$<br>mA |
|-------------------------------|-----------|-----------------|----------------|-----------------------------|--|
|                               |           | $U_{min}$<br>V  | $U_{max}$<br>V |                             |  |
| 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**



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

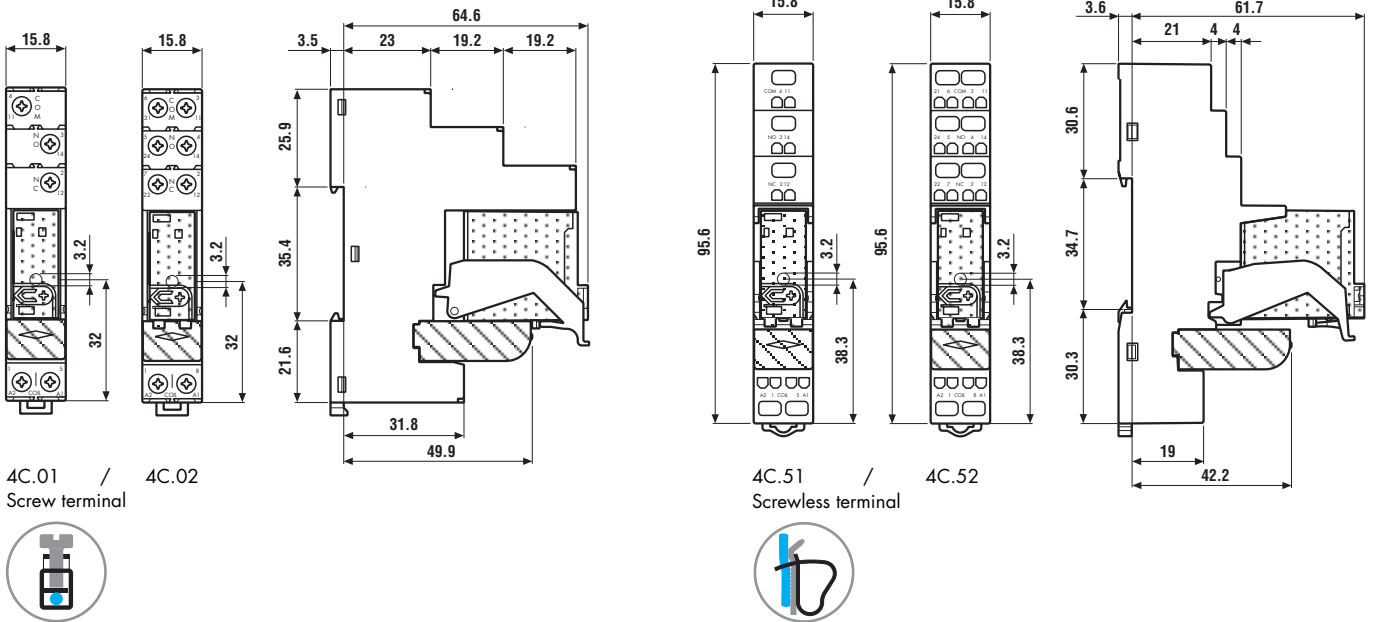
----- Temperature limit for the single pole version under full 16 A contact current.

## 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         |

Certain relay/socket combinations

## Outline drawing



## Accessories



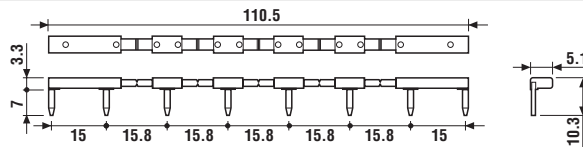
095.18

**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

