

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 60715) mounting

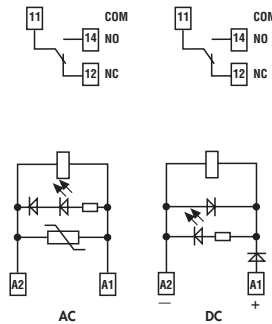
4C.01 / 4C.02
Screw terminal



4C.01



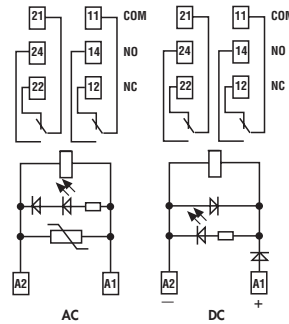
- 1 pole, 16 A
- Screw terminal connection
- 35 mm rail (EN 60715) mounting



4C.02



- 2 pole, 8 A
- Screw terminal connection
- 35 mm rail (EN 60715) 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 μ 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 60715) mounting

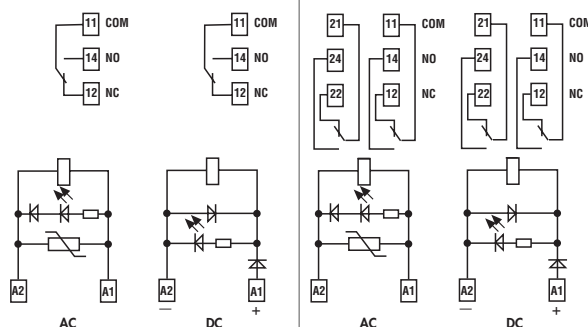
4C.51 / 4C.52
Screwless terminal



- 1 pole, 10 A
- Screwless terminal connections
- 35 mm rail (EN 60715) mounting



- 2 pole, 8 A
- Screwless terminal connections
- 35 mm rail (EN 60715) mounting



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

Contact specification			
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 μ 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)			

Ordering information

Example: 4C series, 35 mm rail (EN 60715) mount screw terminal relay interface module, 1 CO (SPDT) 16 A contacts, 24 V DC coil, green LED + diode.

4

C

0

1

9

0

2

4

0

0

5

0

Series ———

Type ———

0 = 35 mm rail (EN 60715) mount screw terminal socket

5 = 35 mm rail (EN 60715) mount screwless terminal socket

No. of poles ———

1 = 1 pole

2 = 2 pole

Coil version ———

8 = AC (50/60 Hz)

9 = DC

Coil voltage ———

See coil specifications

A: Contact material

0 = AgNi

4 = AgSnO₂

5 = AgNi + Au (5 µm)

B: Contact circuit

0 = CO (nPDT)

D: Special version

0 = Standard

C: Options

5 = Standard for DC:
green LED + diode (polarity +A1)

6 = Standard for AC:
green LED + Varistor

Selecting features and options: only combinations in the same row are possible.
Preferred selections for best availability are shown in **bold**.

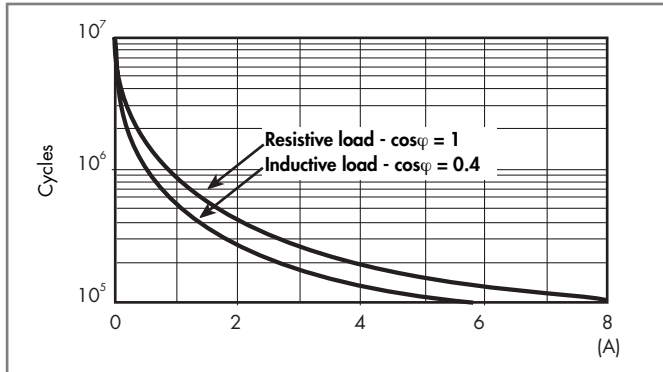
Type	Coil version	A	B	C	D
4C.02	AC	0 - 5	0	6	0
4C.52	DC	0 - 5	0	5	0
4C.01	AC	0 - 4 - 5	0	6	0
4C.51	DC	0 - 4 - 5	0	5	0

Technical data

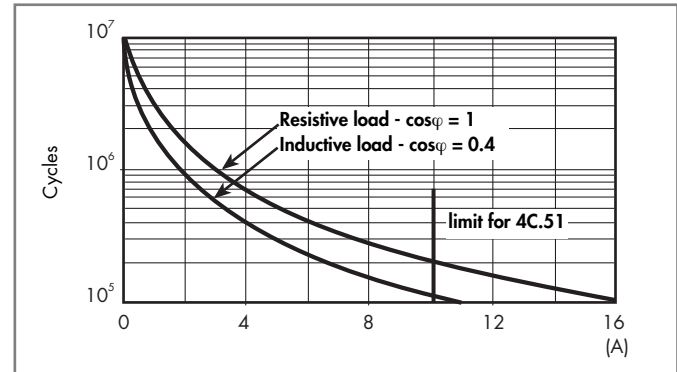
Insulation					
Insulation according to EN 61810-1	insulation rated voltage	V	250	440	
	rated impulse withstand voltage	kV	4	4	
	pollution degree		3	2	
	overvoltage category		III	III	
Insulation between coil and contacts (1.2/50 μs)	kV	6 (8 mm)			
Dielectric strength between open contacts	V AC	1000			
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	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

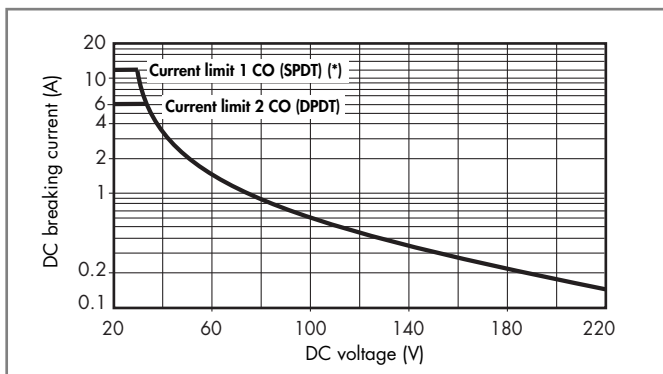
F 4C - Electrical life (AC) v contact current
Types 4C.02/52



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

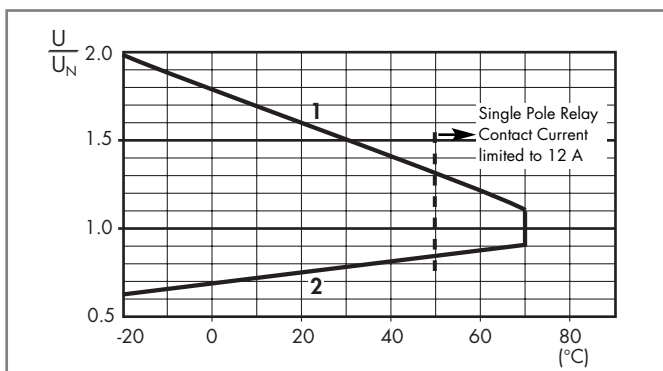
DC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance	Rated coil consumption I at U_N
V		U_{min} V	U_{max} V	R Ω	mA
12	9.012	8.8	13.2	300	40
24	9.024	17.5	26.4	1,200	20
125	9.125	91.2	138	32,000	3.9

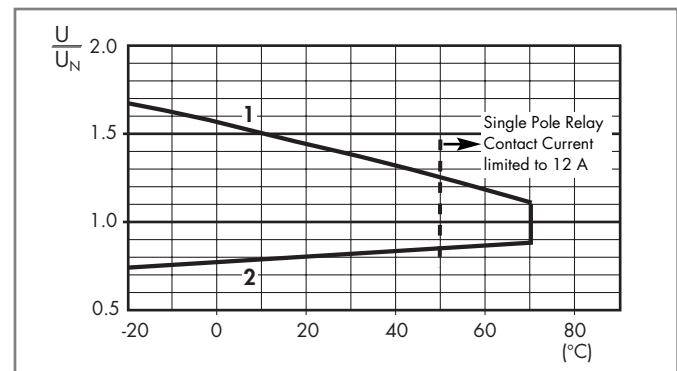
AC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance	Rated coil consumption I at U_N
V		U_{min} V	U_{max} V	R Ω	mA
12	8.012	9.6	13.2	80	90
24	8.024	19.2	26.4	320	45
110	8.110	88	121	6,900	9.4
120	8.120	96	132	9,000	8.4
230	8.230	184	253	28,000	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.

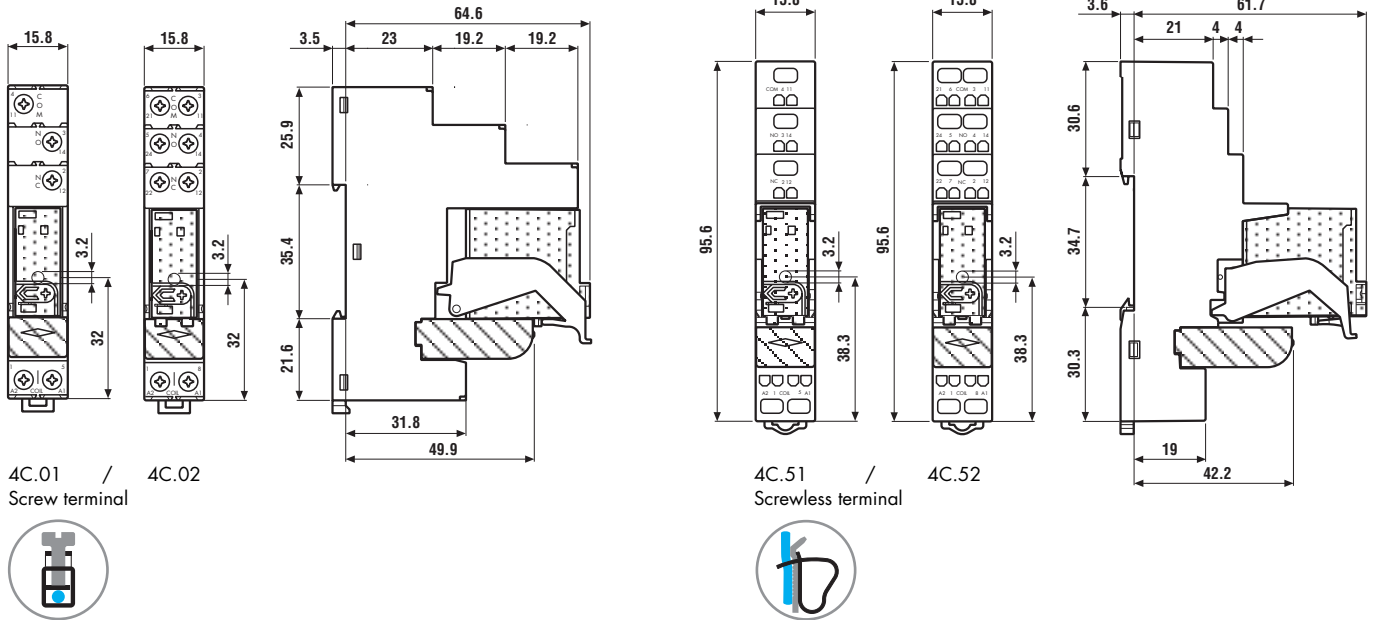
----- Temperature limit for the single pole version under full 16 A contact current.

Combinations

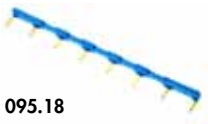
Certain relay/socket combinations

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



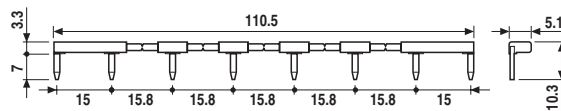
095.18

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

