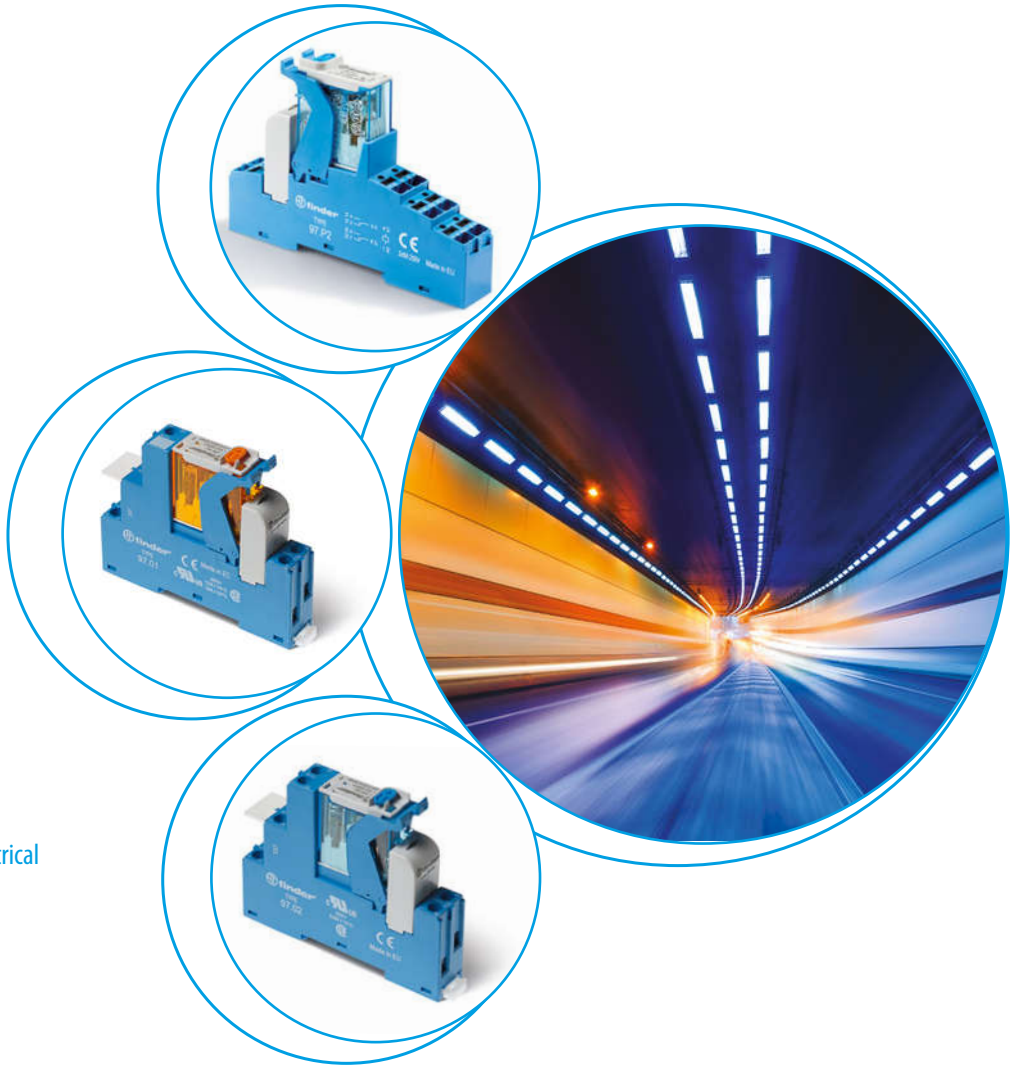
finder®
SWITCH TO THE FUTURE

4C
SERIES

Relay interface modules 8 - 10 - 16 A

- Escalators
- Road / tunnel lighting
- Hoists and cranes
- Carousel warehouses
- Control panels
- Panels for electrical distribution



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1 & 2 CO relay interface modules, 15.8 mm wide with Push-in terminal

Ideal interface for PLC and electronic systems

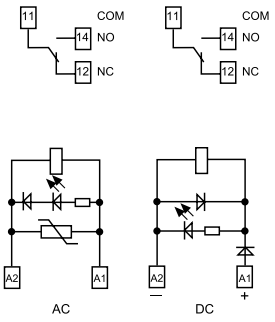
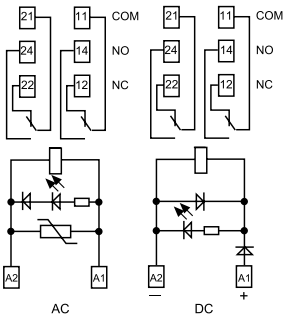
Type 4C.P1
- 1 CO 10 A

Type 4C.P2
- 2 CO 8 A

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

4C.P1 / 4C.P2
Push-in terminals



	4C.P1	4C.P2
		
	• 1 CO 10 A • Push-in terminals	• 2 CO 8 A • Push-in terminals
		

For outline drawing see page 7

Contact specification			
Contact configuration		1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current	A	10/25	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: 30/110/220 V	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	$(0.8…1.1)U_N$	$(0.8…1.1)U_N$
	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 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)			

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B

1 & 2 CO relay interface modules, 15.8 mm wide with screw terminal

Ideal interface for PLC and electronic systems

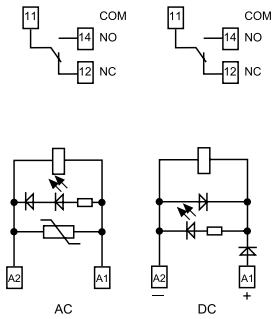
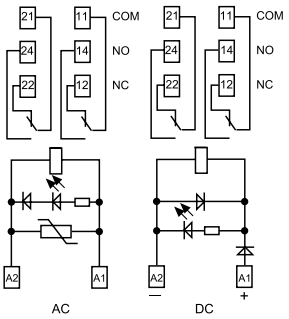
Type 4C.01
- 1 CO 16 A

Type 4C.02
- 2 CO 8 A

- AC coils or DC coils
- 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 terminals



	4C.01	4C.02
		
	• 1 CO 16 A • Screw terminals	• 2 CO 8 A • Screw terminals
		
For outline drawing see page 7		
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: 30/110/220 V 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 µs) kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts V AC	1000	1000
Ambient temperature range °C	≤ 12 A: –40…+70/>12 A: –40…+50	–40…+70
Protection category	IP 20	IP 20
Approvals relay (according to type)		

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Ordering information

Example: 4C series, 35 mm rail (EN 60715) mount, Push-in terminal relay interface module, 1 CO 10 A contacts, 24 V DC coil, green LED + diode.

												A	B	C	D		
4	C	.	P	1	.	9	.	0	2	4	.	0	0	5	0		

Series

Type
0 = 35 mm rail (EN 60715) mount
screw terminal socket
P = 35 mm rail (EN 60715) mount
Push-in terminal socket

No. of poles
1 = 1 pole, 10/16 A
2 = 2 pole, 8 A

Coil version
8 = AC (50/60 Hz)
9 = DC

Coil voltage
See coil specifications

A: Contact material
0 = AgNi
4 = $AgSnO_2$
5 = AgNi + Au

B: Contact circuit
0 = CO (nPDT)

D: Special versions
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.P2	DC	**0** - 5	**0**	**5**	**0**
4C.01	AC	**0** - 4 - 5	**0**	**6**	**0**
4C.P1	DC	**0** - 4 - 5	**0**	**5**	**0**

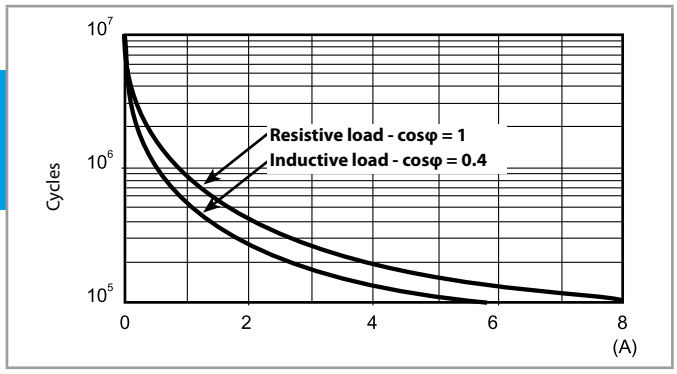
Technical data

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			
Insulation between coil terminals						
Rated impulse voltage (surge) differential mode (according to EN 61000-4-5)		kV (1.2/50 µs)	2			
Other data						
Bounce time: NO/NC		ms	2/6 (4C.01/P1)		1/4 (4C.02/P2)	
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/P1)		2 (4C.02/P2)	
Terminals			**4C.01/4C.02**		**4C.P1/4C.P2**	
Wire strip length		mm	8		8	
Screw torque		Nm	0.8		—	
Min. wire size			solid cable	stranded cable	solid cable	stranded cable
		mm^2	0.5	0.5	0.5	0.5
		AWG	21	21	21	21
Max. wire size			solid cable	stranded cable	solid cable	stranded cable
		mm^2	1 x 6 / 2 x 2.5	1 x 4 / 2 x 2.5	2 x 1.5 / 1 x 2.5	2 x 1.5 / 1 x 2.5
		AWG	1 x 10 / 2 x 14	1 x 12 / 2 x 14	2 x 16 / 1 x 14	2 x 16 / 1 x 14

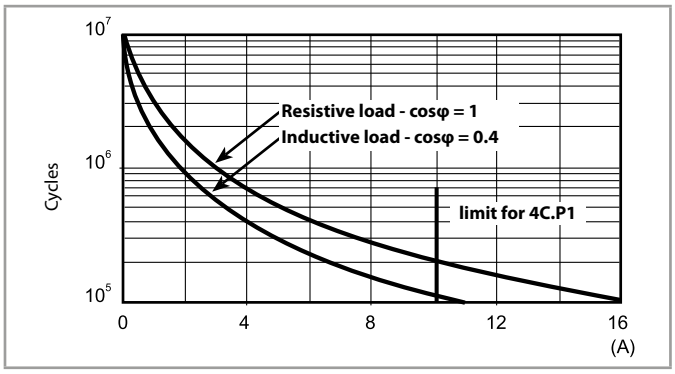
B

Contact specification

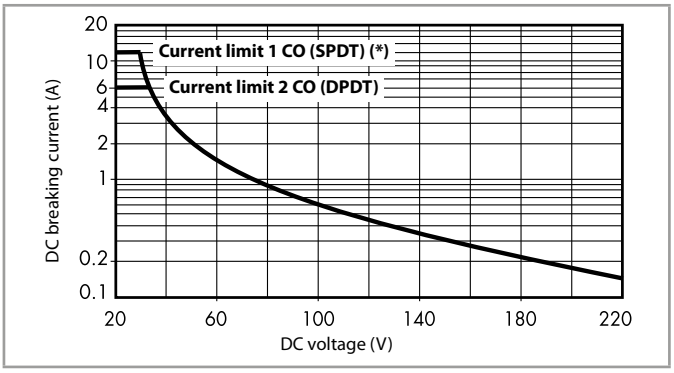
F 4C - Electrical life (AC) v contact current
Types 4C.02/P2



F 4C - Electrical life (AC) v contact current
Types 4C.01/P1



H 4C - Maximum DC1 breaking capacity



(*) Type 4C.01 = 12 A, Type 4C.P1 = 10 A

- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 100 · 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

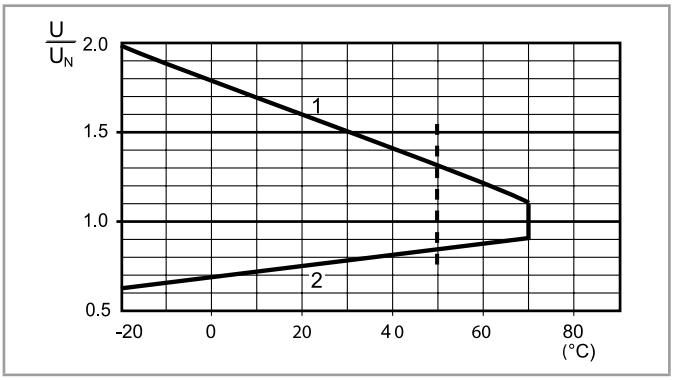
DC coil data

Nominal voltage	Coil code	Operating range		Resistance	Rated coil consumption
U_N		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**9**.012	8.8	13.2	300	40
24	**9**.024	17.5	26.4	1200	20
125	**9**.125	91.2	138	32000	3.9

AC coil data

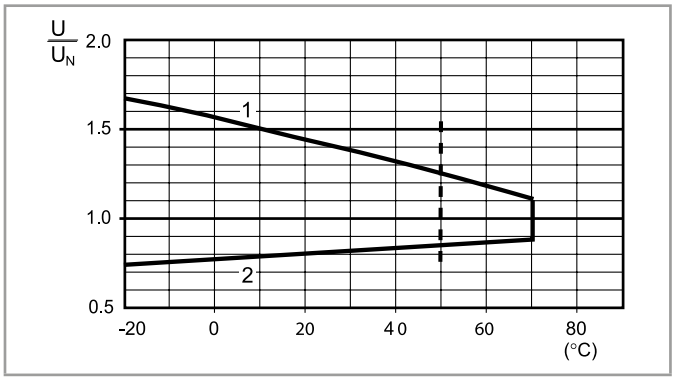
Nominal voltage	Coil code	Operating range		Resistance	Rated coil consumption
U_N		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**8**.012	9.6	13.2	80	90
24	**8**.024	19.2	26.4	320	45
110	**8**.110	88	121	6900	9.4
120	**8**.120	96	132	9000	8.4
230	**8**.230	184	253	28000	5

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 4C.01 with 16 A contact current.

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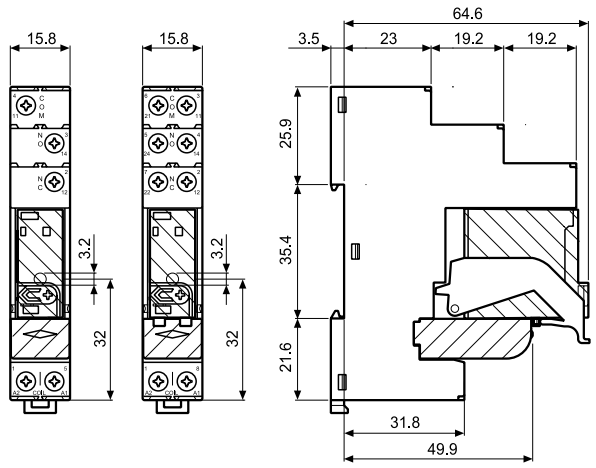
Combinations

Certain relay/socket combinations

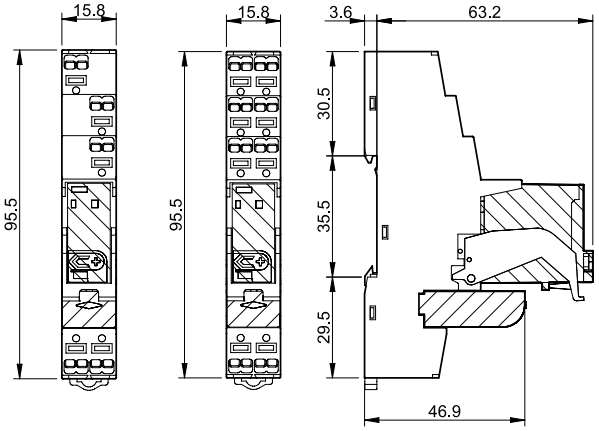
Code	Type of socket	Type of relay	Module	Retaining clip
4C.P1	97.P1	46.61	99.02	097.01
4C.P2	97.P2	46.52	99.02	097.01
4C.01	97.01	46.61	99.02	097.01
4C.02	97.02	46.52	99.02	097.01

Outline drawings



Types 4C.01 / 4C.02
Screw terminals





Types 4C.P1 / 4C.P2
Push-in terminals

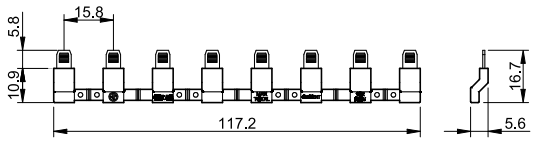


Accessories



097.58

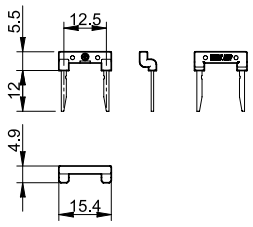
8-way jumper link for type 4C.P1 and 4C.P2	097.58
Rated values	10 A - 250 V





097.52

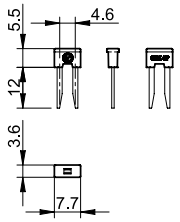
2-way jumper link for type 4C.P1 and 4C.P2	097.52
Rated values	10 A - 250 V





097.42

2-way jumper link for type 4C.P1 and 4C.P2	097.42
Rated values	10 A - 250 V



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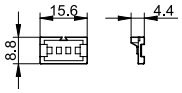
Accessories



097.00

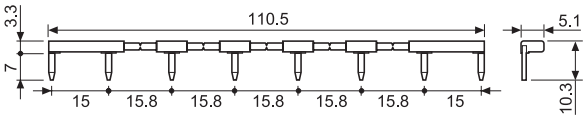
Marker tag holder for type 4C.P1/P2/01/02	097.00

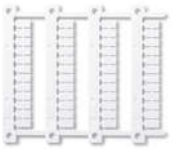




095.18

8-way jumper link for 4C.01 and 4C.02	095.18 (blue)
Rated values	10 A - 250 V





060.48

Sheet of marker tags (CEMBRE Thermal transfer printers), marker tag holder 097.00 or on the relay 46 series, plastic, 48 tags, 6 x 12 mm	060.48

Packaging codes

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

Example:

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

A Standard packaging
B Blister packaging

SP Plastic retaining clip

Please see general technical information

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