

Power relays 1 and 2 pole for direct PCB or socket mount**Type 40.31**

- 1 CO 10 A (3.5 mm pin pitch)

Type 40.51

- 1 CO 10 A (5 mm pin pitch)

Type 40.52

- 2 CO 8 A (5 mm pin pitch)

- DC coils (standard or sensitive) or AC coils
- Cadmium-free contact material
- 8 mm Creepage and Clearance, 6 kV (1.2/50µs) between coil and contact
- 95 series sockets for PCB or 35 mm rail mounting (EN 60715) with Screw, Screwless or Push-in terminals
- Coil Indication and EMC suppression modules 99 series and Timer module 86.30 options
- Environmental protection:
RT II - flux proof (Standard)
RT III - wash tight (Option)

FOR UL RATINGS SEE:

"General technical information" page V

For outline drawing see page 10

Contact specification

Contact configuration

Rated current/Maximum peak current A

Rated voltage/
Maximum switching voltage V AC

Rated load AC1 VA

Rated load AC15 (230 V AC) VA

Single phase motor rating (230 V AC) kW

Breaking capacity DC1: 30/110/220 V A

Minimum switching load mW (V/mA)

Standard contact material

Coil specificationNominal voltage (U_N) V AC (50/60 Hz)
V DC

Rated power AC/DC/sens. DC VA (50 Hz)/W/W

Operating range AC
DC/sens. DC

Holding voltage AC/DC

Must drop-out voltage AC/DC

Technical data

Mechanical life cycles

Electrical life at rated load AC1 cycles

Operate/release time ms

Insulation between coil
and contacts (1.2/50 µs) kVDielectric strength
between open contacts V AC

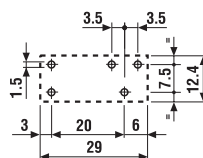
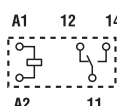
Ambient temperature range °C

Environmental protection

Approvals (according to type)

40.31

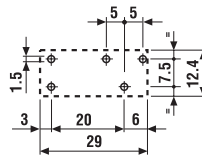
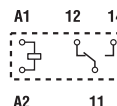
- 1 CO 10 A
- 3.5 mm pin pitch
- PCB or 95 Series socket mount



Copper side view

Pin length 5.3 mm for
PCB or sockets**40.51**

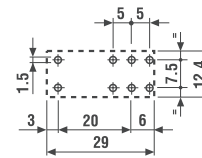
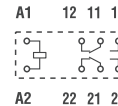
- 1 CO 10 A
- 5.0 mm pin pitch
- PCB or 95 Series socket mount



Copper side view

Pin length 5.3 mm for
PCB or sockets**40.52**

- 2 CO 8 A
- 5.0 mm pin pitch
- PCB or 95 Series socket mount



Copper side view

Pin length 5.3 mm for
PCB or sockets

Power relays 1 and 2 pole for direct PCB or socket mount**Type 40.61**

- 1 CO 16 A (5.0 mm pin pitch)
- DC coils (standard or sensitive) or AC coils

Type 40.xx.6

- Bistable versions of the types 40.31, 40.51, 40.52 and 40.61
- Bistable (single coil) DC or AC coils

- Cadmium-free contact material available
- 8 mm Creepage and Clearance, 6 kV (1.2/50µs) between coil and contact
- 95 series sockets for PCB or 35 mm rail mounting (EN 60715) with Screw, Screwless or Push-in terminals
- Coil Indication and EMC suppression modules 99 series and Timer module 86.30 options
- Environmental protection:
RT II - flux proof (Standard)
RT III - wash tight (Option)

FOR UL RATINGS SEE:

"General technical information" page V

For outline drawing see page 10

Contact specification

Contact configuration		1 CO (SPDT)
Rated current/Maximum peak current	A	16/30*
Rated voltage/ Maximum switching voltage	V AC	250/400
Rated load AC1	VA	4000
Rated load AC15 (230 V AC)	VA	750
Single phase motor rating (230 V AC)	kW	0.55
Breaking capacity DC1: 30/110/220 V	A	16/0.3/0.12
Minimum switching load	mW (V/mA)	500 (10/5)
Standard contact material		AgCdO

Coil specification

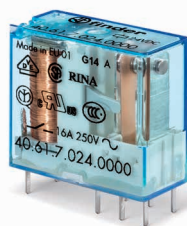
Nominal voltage (U _N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240	5 - 6 - 12 - 24 - 48 - 110
	V DC	***See table	5 - 6 - 12 - 24 - 48 - 110
Rated power AC/DC/sens. DC	VA (50 Hz)/W/W	1.2/0.65/0.5	1.0/1.0/—
Operating range	AC	(0.8...1.1)U _N	(0.8...1.1)U _N
	DC/sens. DC	(0.73...1.5)U _N / (0.8...1.5)U _N	(0.8...1.1)U _N / —
Holding voltage	AC/DC	0.8 U _N / 0.4 U _N	—
Must drop-out voltage	AC/DC	0.2 U _N / 0.1 U _N	—

Technical data

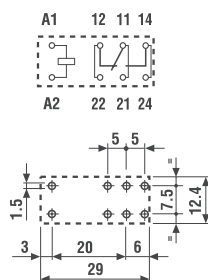
Mechanical life	cycles	10 · 10 ⁶	See relays
Electrical life at rated load AC1	cycles	100 · 10 ³	40.31
Operate/release time	ms	7/3 - (12/4 sensitive)	40.51
Insulation between coil and contacts (1.2/50 µs)	kV	6 (8 mm)	40.52
Dielectric strength between open contacts	V AC	1000	40.61
Ambient temperature range	°C	-40...+85	Min. impulse duration
Environmental protection		RT II**	≥ 20 ms

Approvals (according to type)

** See general technical information "Guidelines for automatic flow solder processes" page II.

40.61

- 1 CO 16 A
- 5.0 mm pin pitch
- PCB or 95 Series socket mount



Copper side view

Pin length 5.3 mm for
PCB or sockets**40.xx.6**

- Bistable (single coil)
- 3.5 or 5.0 mm pin pitch
- PCB or 95 Series socket mount

Bistable version (1 coil) types:

40.31.6...
40.51.6...
40.52.6...
40.61.6...

For wiring diagrams see
page 9Pin length 5.3 mm for
PCB or sockets

* With the AgSnO₂ material
the maximum peak current is
120 A - 5 ms on normally open
contact.

*** Nominal voltage (U_N):
5 - 6 - 7 - 9 - 12 - 14 - 18 - 21 -
24 - 28 - 36 - 48 - 60 - 90 -
110 - 125 V DC