

## Features

### 1 Pole relay range

40.31 - 1 Pole 12 A (3.5 mm pin pitch)

40.61 - 1 Pole 16 A (5 mm pin pitch)

- Pin length 3.5 mm for pcb mount
- Pin length 5.3 mm as Plug-in relay
- DC standard (0.65 W) or sensitive (0.5 W) coils available
- Cadmium Free contact material available
- 6 kV (1.2/50 µs) isolation coil-contacts
- 8 mm creepage and clearance distances between coil and contacts
- Meets EN 60335-1 glow wire requirements
- Flux proof: RT II standard or wash tight RT III
- AC inductive load rating (related to AC15 utilisation category) 4 A 250 V approved according to EN 61810-1:2008 (Annex B tables B1, B2, B3)

\* mounted on sockets ≤ 10 A

For outline drawing see page 10

### Contact specification

|                                              |             |             |
|----------------------------------------------|-------------|-------------|
| Contact configuration                        | 1 CO (SPDT) | 1 CO (SPDT) |
| Rated current/Maximum peak current A         | 12*/20      | 16/30       |
| Rated voltage/Maximum switching voltage V AC | 250/400     | 250/400     |
| Rated load AC1 VA                            | 3,000       | 4,000       |
| Rated load AC15 (230 V AC) VA                | 1,000       | 1,000       |
| Single phase motor rating (230 V AC) kW      | 0.55        | 0.55        |
| Breaking capacity DC1: 30/110/220 V A        | 12/0.3/0.12 | 16/0.3/0.12 |
| Minimum switching load mW (V/mA)             | 300 (5/5)   | 500 (10/5)  |
| Standard contact material                    | AgNi        | AgCdO       |

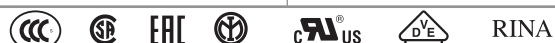
### Coil specification

|                                                   |                                                        |                                                       |
|---------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|
| Nominal voltage (U <sub>N</sub> ) V AC (50/60 Hz) | —                                                      | —                                                     |
| V DC                                              | 12 - 24                                                | 12 - 24                                               |
| Rated power DC/sensitive DC W                     | 0.65/0.5                                               | 0.65/0.5                                              |
| Operating range AC                                | —                                                      | —                                                     |
| DC/sensitive DC                                   | (0.73...1.5)U <sub>N</sub> /(0.73...1.5)U <sub>N</sub> | (0.73...1.5)U <sub>N</sub> /(0.8...1.5)U <sub>N</sub> |
| Holding voltage DC                                | 0.4 U <sub>N</sub>                                     | 0.4 U <sub>N</sub>                                    |
| Must drop-out voltage DC                          | 0.1 U <sub>N</sub>                                     | 0.1 U <sub>N</sub>                                    |

### Technical data

|                                                     |                       |                       |
|-----------------------------------------------------|-----------------------|-----------------------|
| Mechanical life cycles                              | 10 · 10 <sup>6</sup>  | 10 · 10 <sup>6</sup>  |
| Electrical life at rated load AC1 cycles            | 200 · 10 <sup>3</sup> | 100 · 10 <sup>3</sup> |
| Operate/release time ms                             | 7/3 (10/3 sensitive)  | 7/3 (10/3 sensitive)  |
| Insulation between coil and contacts (1.2/50 µs) kV | 6 (8 mm)              | 6 (8 mm)              |
| Dielectric strength between open contacts V AC      | 1,000                 | 1,000                 |
| Ambient temperature range °C                        | -40...+85             | -40...+85             |
| Environmental protection                            | RT II**               | RT II**               |

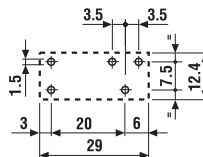
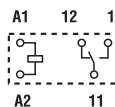
### Approvals (according to type)



## 40.31



- 3.5 mm contact pin pitch
- 1 Pole 12 A (on PCB; 10 A with socket)
- PCB or 95 series sockets



Copper side view

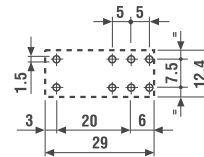
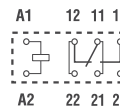
Pin length 3,5 mm for PCB only  
Pin length 5.3 mm for PCB or sockets

See ordering information

## 40.61



- 5 mm contact pin pitch
- 1 Pole 16 A
- PCB or 95 series sockets



Copper side view

Pin length 3,5 mm for PCB only  
Pin length 5.3 mm for PCB or sockets

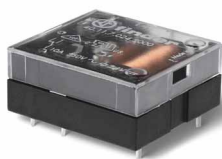
See ordering information

## Features

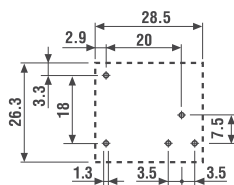
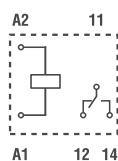
1 Pole relay range  
- 1 Pole 10 A (Flat pack)

- DC coils
- Cadmium Free option available
- 8 mm, 6 kV (1.2/50  $\mu$ s) isolation, coil-contacts

## 40.11



- 1 Pole 10 A
- Flat pack
- PCB mount



Copper side view

Pin length 3.5 mm for PCB only

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         | 10/20       |
| Rated voltage/Maximum switching voltage V AC |           | 250/400     |
| Rated load AC1                               | VA        | 2,500       |
| Rated load AC15 (230 V AC)                   | VA        | 500         |
| Single phase motor rating (230 V AC)         | kW        | 0.37        |
| Breaking capacity DC1: 30/110/220 V          | A         | 10/0.3/0.12 |
| Minimum switching load                       | mW (V/mA) | 300 (5/5)   |
| Standard contact material                    |           | AgCdO       |

## Coil specification

|                            |                 |                         |
|----------------------------|-----------------|-------------------------|
| Nominal voltage ( $U_N$ )  | V AC (50/60 Hz) | —                       |
|                            | V DC            | 6 - 12 - 24 - 48 - 60   |
| Rated power AC/DC/sens. DC | VA (50 Hz)/W/W  | — / — / 0.5             |
| Operating range            | AC              | —                       |
|                            | DC/sens. DC     | — / (0.73...1.75) $U_N$ |
| Holding voltage            | AC/DC           | — / 0.4 $U_N$           |
| Must drop-out voltage      | AC/DC           | — / 0.1 $U_N$           |

## Technical data

|                                                       |        |                  |
|-------------------------------------------------------|--------|------------------|
| Mechanical life                                       | cycles | $20 \cdot 10^6$  |
| Electrical life at rated load AC1                     | cycles | $200 \cdot 10^3$ |
| Operate/release time                                  | ms     | 12/4             |
| Insulation between coil and contacts (1.2/50 $\mu$ s) | kV     | 6 (8 mm)         |
| Dielectric strength between open contacts             | V AC   | 1,000            |
| Ambient temperature range                             | °C     | -40...+70        |
| Environmental protection                              |        | RT I             |

## Approvals (according to type)

