

**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)

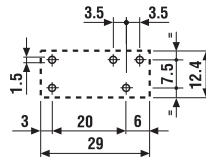
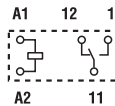
\* mounted on sockets ≤ 10 A

For outline drawing see page 10

**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

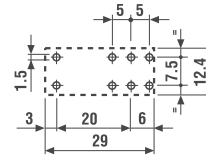
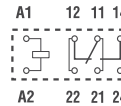
Pin length 3,5 mm for PCB only  
Pin length 5.3 mm for PCB or sockets

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

**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

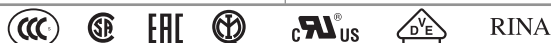
**Coil specification**

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)**



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

**Features**

A

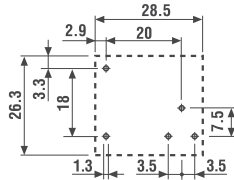
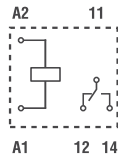
**1 Pole relay range  
- 1 Pole 10 A (Flat pack)**

- DC coils
- Cadmium Free option available
- 8 mm, 6 kV (1.2/50 µs) 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 <sub>N</sub> )	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 <sub>N</sub>
Holding voltage	AC/DC	—/0.4 U <sub>N</sub>
Must drop-out voltage	AC/DC	—/0.1 U <sub>N</sub>
Technical data		
Mechanical life	cycles	20 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	200 · 10 <sup>3</sup>
Operate/release time	ms	12/4
Insulation between coil and contacts (1.2/50 µs)	kV	6 (8 mm)
Dielectric strength between open contacts	V AC	1,000
Ambient temperature range	°C	−40...+70
Environmental protection		RT I
<b>Approvals</b> (according to type)		