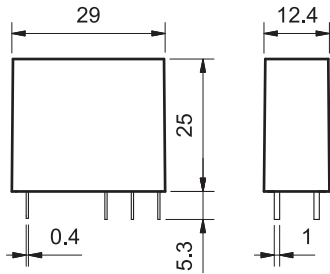


Features

- 1 & 2 Pole relay range**
 40.31 - 1 Pole 10 A (3.5 mm pin pitch)
 40.51 - 1 Pole 10 A (5 mm pin pitch)
 40.52 - 2 Pole 8 A (5 mm pin pitch)

- PCB mount**
 - direct or via PCB socket
35 mm rail mount
 - via screw and screwless sockets

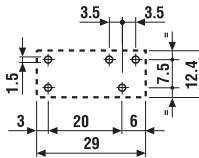
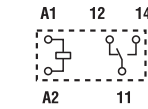
- DC coils (standard or sensitive) & AC coils
- Cadmium Free contact material
- 8 mm, 6 kV (1.2/50 μs) isolation, coil-contacts
- UL Listing (certain relay/socket combinations)
- Flux proof: RT II standard, (RT III option)
- 95 series sockets
- Coil EMC suppression
- Timer accessories 86 series



FOR UL HORSEPOWER AND PILOT DUTY RATINGS
 SEE "General technical information" page V



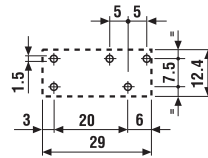
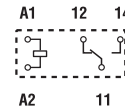
- 3.5 mm contact pin pitch
- 1 Pole 10 A
- PCB or 95 series sockets



Copper side view



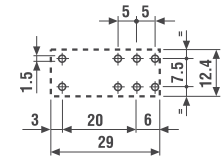
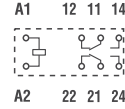
- 5 mm contact pin pitch
- 1 Pole 10 A
- PCB or 95 series sockets



Copper side view



- 5 mm contact pin pitch
- 2 Pole 8 A
- PCB or 95 series sockets



Copper side view

Contact specification		40.31	40.51	40.52
Contact configuration		1 CO (SPDT)	1 CO (SPDT)	2 CO (DPDT)
Rated current/Maximum peak current	A	10/20	10/20	8/15
Rated voltage/Maximum switching voltage V AC		250/400	250/400	250/400
Rated load AC1	VA	2,500	2,500	2,000
Rated load AC15 (230 V AC)	VA	500	500	400
Single phase motor rating (230 V AC)	kW	0.37	0.37	0.3
Breaking capacity DC1: 30/110/220 V	A	10/0.3/0.12	10/0.3/0.12	8/0.3/0.12
Minimum switching load	mW (V/mA)	300 (5/5)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi	AgNi
Coil specification				
Nominal voltage (U _N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240		
	V DC	5 - 6 - 7 - 9 - 12 - 14 - 18 - 21 - 24 - 28 - 36 - 48 - 60 - 90 - 110 - 125		
Rated power AC/DC/sens. DC	VA (50 Hz)/W/W	1.2/0.65/0.5	1.2/0.65/0.5	1.2/0.65/0.5
Operating range	AC	(0.8...1.1)U _N		(0.8...1.1)U _N
	DC/sens. DC	(0.73...1.5)U _N /(0.73...1.75)U _N		(0.73...1.5)U _N /(0.73...1.75)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 · 10 ⁶ / 20 · 10 ⁶		10 · 10 ⁶ / 20 · 10 ⁶
Electrical life at rated load AC1	cycles	200 · 10 ³		100 · 10 ³
Operate/release time	ms	7/3 - (12/4 sensitive)		7/3 - (12/4 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

40.61 - 1 Pole 16 A (5 mm pin pitch)
40.xx.6 - Bistable versions of the 40.31, 40.51, 40.52 & 40.61 relays

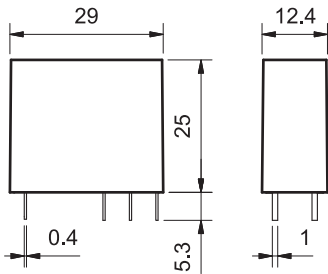
PCB mount

- direct or via PCB socket

35 mm rail mount

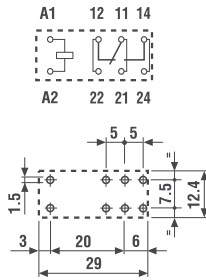
- via screw and screwless sockets

- DC coils & AC coils
- Cadmium Free option available
- 8 mm, 6 kV (1.2/50 μ s) isolation, coil-contacts
- UL Listing (certain 40.61 relay/socket combinations)
- Flux proof: RT II standard, (RT III option)
- 95 series sockets
- Coil EMC suppression
- Timer accessories 86 series



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

- Bistable (single coil) versions of 40.31/51/52/61
- PCB or 95 series sockets



Copper side view

Bistable version (1 coil) types:

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

For wiring diagrams see page 8

FOR UL HORSEPOWER AND PILOT DUTY RATINGS
 SEE "General technical information" page V

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	4,000
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
	V DC	***See table
Rated power AC/DC/sens. DC	VA (50 Hz)/W/W	1.2/0.65/0.5
Operating range	AC	(0.8...1.1) U_N
	DC/sens. DC	(0.73...1.5) U_N /(0.8...1.5) 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 AC/DC	cycles	10 · 10 ⁶ /20 · 10 ⁶
Electrical life at rated load AC1	cycles	100 · 10 ³
Operate/release time	ms	7/3 - (12/4 sensitive)
Insulation between coil and contacts (1.2/50 μ s)	kV	6 (8 mm)
Dielectric strength between open contacts V AC		1,000
Ambient temperature range	°C	-40...+85
Environmental protection		RT II**

See relays
 40.31
 40.51
 40.52
 40.61

* 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

Min. impulse duration
 ≥ 20 ms

Approvals (according to type)

