

Plug-in mount
10 A General purpose relay

Type 60.12

- 2 pole, 10 A

Type 60.13

- 3 pole, 10 A

- 2 & 3 pole changeover contacts
- Cadmium Free contacts (preferred version)
- AC coils & DC coils
- UL Listing (certain relay/socket combinations)
- Contact material options
- Lockable test button with mechanical flag indicator (preferred version)
- 90 series sockets
- Coil EMC suppression
- Timer accessories 86 series
- European Patent

FOR UL RATINGS SEE:

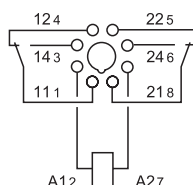
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60.12



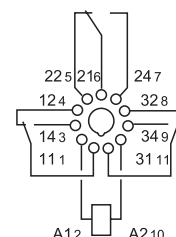
- 2 pole, 10 A
- 8 pin plug-in



60.13



- 3 pole, 10 A
- 11 pin plug-in



Contact specification

Contact configuration		2 CO (DPDT)	3 CO (3PDT)
Rated current/Maximum peak current	A	10/20	10/20
Rated voltage/ Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	2500	2500
Rated load AC15 (230 V AC)	VA	500	500
Single phase motor rating (230 V AC)	kW	0.37	0.37
Breaking capacity DC1: 30/110/220 V	A	10/0.4/0.15	10/0.4/0.15
Minimum switching load	mW (V/mA)	500 (10/5)	500 (10/5)
Standard contact material		AgNi	AgNi

Coil specification

Nominal voltage (U _N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 - 400	
	V DC	6 - 12 - 24 - 48 - 60 - 110 - 125 - 220	
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3	2.2/1.3
Operating range	AC	(0.8...1.1)U _N	(0.8...1.1)U _N
	DC	(0.8...1.1)U _N	(0.8...1.1)U _N
Holding voltage	AC/DC	0.8 U _N / 0.5 U _N	0.8 U _N / 0.5 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	20 · 10 ⁶ / 50 · 10 ⁶	20 · 10 ⁶ / 50 · 10 ⁶
Electrical life at rated load AC1	cycles	200 · 10 ³	200 · 10 ³
Operate/release time	ms	11/4	11/4
Insulation between coil and contacts (1.2/50 μs)	kV	4	3.6
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+70	-40...+70
Environmental protection		RT I	RT I

Approvals (according to type)



Plug-in mount - 6 A**Bifurcated contacts for low level switching****Type 60.12 - 52xx**

- 2 pole, 6 A

Type 60.13 - 52xx

- 3 pole, 6 A

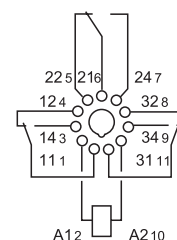
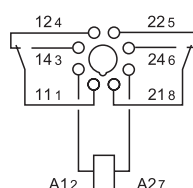
- 2 & 3 pole changeover contacts
- Cadmium Free contacts (Gold plated Silver Nickel)
- AC coils & DC coils
- Lockable test button with mechanical flag indicator (preferred version)
- 90 series sockets
- Coil EMC suppression
- Timer accessories 86 series
- European Patent

60.12 - 52xx

- 2 pole, 6 A
- Bifurcated contacts with AgNi + Au
- 8 pin plug-in

60.13 - 52xx

- 3 pole, 6 A
- Bifurcated contacts with AgNi + Au
- 11 pin plug-in



FOR UL RATINGS SEE:

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For outline drawing see page 8

Contact specification

Contact configuration		2 CO (DPDT)	3 CO (3PDT)
Rated current/Maximum peak current	A	6/10	6/10
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	1500	1500
Rated load AC15 (230 V AC)	VA	250	250
Single phase motor rating (230 V AC)	kW	0.185	0.185
Breaking capacity DC1: 30/110/220 V	A	6/0.3/0.12	6/0.3/0.12
Minimum switching load	mW (V/mA)	50 (5/5)	50 (5/5)
Standard contact material		AgNi + Au	AgNi + Au

Coil specification

Nominal voltage (U _N)	V AC (50/60 Hz)	6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 - 400	
	V DC	6 - 12 - 24 - 48 - 60 - 110 - 125 - 220	
Rated power AC/DC	VA (50 Hz)/W	2.2/1.3	2.2/1.3
Operating range	AC	(0.8...1.1)U _N	(0.8...1.1)U _N
	DC	(0.8...1.1)U _N	(0.8...1.1)U _N
Holding voltage	AC/DC	0.8 U _N / 0.5 U _N	0.8 U _N / 0.5 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	20 · 10 ⁶ / 50 · 10 ⁶	20 · 10 ⁶ / 50 · 10 ⁶
Electrical life at rated load AC1	cycles	250 · 10 ³	250 · 10 ³
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Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+70	-40...+70
Environmental protection		RT I	RT I

Approvals (according to type)