

## General purpose relays For printed circuit mounting

### Type 55.12

- 2 CO 10 A

### Type 55.13

- 3 CO 10 A

### Type 55.14

- 4 CO 7 A

- AC & DC coils
- Cadmium Free contacts
- Contact material options
- RT III (wash tight) option available

## 55.12



- 2 CO 10 A
- PCB mount

## 55.13



- 3 CO 10 A
- PCB mount

## 55.14

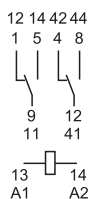


- 4 CO 7 A
- PCB mount

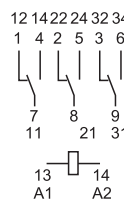
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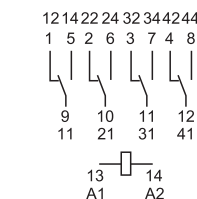
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Copper side view



Copper side view



Copper side view

## Contact specification

|                                             |           |             |             |             |
|---------------------------------------------|-----------|-------------|-------------|-------------|
| Contact configuration                       |           | 2 CO (DPDT) | 3 CO (3PDT) | 4 CO (4PDT) |
| Rated current/Maximum peak current          | A         | 10/20       | 10/20       | 7/15        |
| Rated voltage/<br>Maximum switching voltage | V AC      | 250/400     | 250/400     | 250/250     |
| Rated load AC1                              | VA        | 2500        | 2500        | 1750        |
| Rated load AC15 (230 V AC)                  | VA        | 500         | 500         | 350         |
| Single phase motor rating (230 V AC)        | kW        | 0.37        | 0.37        | 0.125       |
| Breaking capacity DC1: 30/110/220 V         | A         | 10/0.5/0.25 | 10/0.5/0.25 | 7/0.5/0.25  |
| 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 <sub>N</sub> ) | V AC (50/60 Hz) | 6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 |                                         |                                         |
|                                   | V DC            | 6 - 12 - 24 - 48 - 60 - 110 - 125 - 220       |                                         |                                         |
| Rated power AC/DC                 | VA (50 Hz)/W    | 1.5/1                                         | 1.5/1                                   | 1.5/1                                   |
| Operating range                   | AC              | (0.8...1.1)U <sub>N</sub>                     | (0.8...1.1)U <sub>N</sub>               | (0.8...1.1)U <sub>N</sub>               |
|                                   | DC              | (0.8...1.1)U <sub>N</sub>                     | (0.8...1.1)U <sub>N</sub>               | (0.8...1.1)U <sub>N</sub>               |
| Holding voltage                   | AC/DC           | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub>       | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub> | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub> |
| Must drop-out voltage             | AC/DC           | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub>       | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub> | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub> |

## Technical data

|                                                     |        |                                             |                                             |                                             |
|-----------------------------------------------------|--------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Mechanical life AC/DC                               | cycles | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> |
| Electrical life at rated load AC1                   | cycles | 200 · 10 <sup>3</sup>                       | 200 · 10 <sup>3</sup>                       | 150 · 10 <sup>3</sup>                       |
| Operate/release time                                | ms     | 10/5                                        | 9/5                                         | 9/5                                         |
| Insulation between coil<br>and contacts (1.2/50 µs) | kV     | 4                                           | 4                                           | 4                                           |
| Dielectric strength<br>between open contacts        | V AC   | 1000                                        | 1000                                        | 1000                                        |
| Ambient temperature range                           | °C     | -40...+85                                   | -40...+85                                   | -40...+85                                   |
| Environmental protection                            |        | RT I                                        | RT I                                        | RT I                                        |

## Approvals (according to type)



**General purpose relays**  
**For socket mounting****Type 55.32**

- 2 CO 10 A

**Type 55.33**

- 3 CO 10 A

**Type 55.34**

- 4 CO 7 A

- AC & DC coils
- Lockable test button and mechanical flag indicator as standard on 2 & 4 pole types
- Integral LED and coil suppression options
- 94 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
- Optional alternative mounting adaptors
- UL Listing (certain relay/socket combinations)
- Cadmium Free contacts
- Contact material options
- European Patent

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**Contact specification**

| Contact configuration                   |           | 2 CO (DPDT) | 3 CO (3PDT) | 4 CO (4PDT) |
|-----------------------------------------|-----------|-------------|-------------|-------------|
| Rated current/Maximum peak current      | A         | 10/20       | 10/20       | 7/15        |
| Rated voltage/Maximum switching voltage | V AC      | 250/400     | 250/400     | 250/250     |
| Rated load AC1                          | VA        | 2500        | 2500        | 1750        |
| Rated load AC15 (230 V AC)              | VA        | 500         | 500         | 350         |
| Single phase motor rating (230 V AC)    | kW        | 0.37        | 0.37        | 0.125       |
| Breaking capacity DC1: 30/110/220 V     | A         | 10/0.5/0.25 | 10/0.5/0.25 | 7/0.5/0.25  |
| Minimum switching load                  | mW (V/mA) | 300 (5/5)   | 300 (5/5)   | 300 (5/5)   |
| Standard contact material               |           | AgNi        | AgNi        | AgNi        |

**Coil specification**

|                                   |                 |                                               |                                         |                                         |
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| Nominal voltage (U <sub>N</sub> ) | V AC (50/60 Hz) | 6 - 12 - 24 - 48 - 60 - 110 - 120 - 230 - 240 |                                         |                                         |
|                                   | V DC            | 6 - 12 - 24 - 48 - 60 - 110 - 125 - 220       |                                         |                                         |
| Rated power AC/DC                 | VA (50 Hz)/W    | 1.5/1                                         | 1.5/1                                   | 1.5/1                                   |
| Operating range                   | AC              | (0.8...1.1)U <sub>N</sub>                     | (0.8...1.1)U <sub>N</sub>               | (0.8...1.1)U <sub>N</sub>               |
|                                   | DC              | (0.8...1.1)U <sub>N</sub>                     | (0.8...1.1)U <sub>N</sub>               | (0.8...1.1)U <sub>N</sub>               |
| Holding voltage                   | AC/DC           | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub>       | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub> | 0.8 U <sub>N</sub> / 0.5 U <sub>N</sub> |
| Must drop-out voltage             | AC/DC           | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub>       | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub> | 0.2 U <sub>N</sub> / 0.1 U <sub>N</sub> |

**Technical data**

|                                                  |        |                                             |                                             |                                             |
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| Mechanical life AC/DC                            | cycles | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> | 20 · 10 <sup>6</sup> / 50 · 10 <sup>6</sup> |
| Electrical life at rated load AC1                | cycles | 200 · 10 <sup>3</sup>                       | 200 · 10 <sup>3</sup>                       | 150 · 10 <sup>3</sup>                       |
| Operate/release time                             | ms     | 10/5                                        | 9/5                                         | 9/5                                         |
| Insulation between coil and contacts (1.2/50 µs) | kV     | 4                                           | 4                                           | 4                                           |
| Dielectric strength between open contacts        | V AC   | 1000                                        | 1000                                        | 1000                                        |
| Ambient temperature range                        | °C     | -40...+85                                   | -40...+85                                   | -40...+85                                   |
| Environmental protection                         |        | RT I                                        | RT I                                        | RT I                                        |

**Approvals** (according to type)