

Ordering information

Example: 56 series plug-in relay, 2 CO (DPDT), 12 V DC coil, lockable test button and mechanical indicator.

| | | |
|---|--|---|
| <p>Series ——— 5 6 . 3</p> <p>Type ——— 2 . 9 . 0 1 2 . 0 0</p> <p>3 = Plug-in 4 = PCB</p> <p>No. of poles ——— 4</p> <p>2 = 2 pole, 12 A 4 = 4 pole, 12 A</p> <p>Coil version ——— 0</p> <p>8 = AC (50/60 Hz) 9 = DC</p> <p>Coil voltage ——— 0</p> <p>See coil specifications</p> | <p>A: Contact material 0 = Standard AgNi 2 = AgCdO 4 = AgSnO₂</p> <p>B: Contact circuit 0 = CO (nPDT) 3 = NO (nPST), ≥ 1.5 mm contact gap</p> | <p>D: Special versions 0 = Standard 1 = Wash tight (RT III) for 56.42 and 56.44 only 6 = Rear flange mount (4 pole only) 8 = Rear 35 mm rail mount (4 pole only) For other mounting options see page 6</p> <p>C: Options 0 = None 2 = Mechanical indicator 3* = LED (AC) 4 = Lockable test button+mechanical indicator 5* = Lockable test button + LED (AC) 54* = Lockable test button + LED (AC) + mechanical indicator 6* = Double LED (DC non-polarized) 7* = Lockable test button + double LED (DC non-polarized) 74* = Lockable test button + double LED (DC non-polarized) + mechanical indicator 8* = LED + diode (DC, polarity positive to pin 7) for 56.32 only 9* = Lockable test button + LED + diode (DC, polarity positive to pin 7) for 56.32 only 94* = Lockable test button + LED + diode (DC, polarity positive to pin 7) + mechanical indicator for 56.32 only</p> <p>* Options not available for 220 V DC and 400 V AC versions.</p> |
|---|--|---|

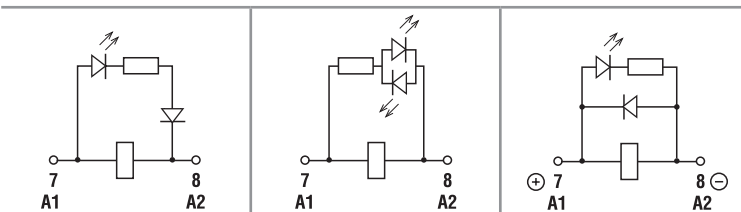
Selecting features and options: only combinations in the same row are possible.

Preferred selections for best availability are shown in **bold**.

| Type | Coil version | A | B | C | D |
|-------|--------------|------------------|----------|----------------------------------|------------------|
| 56.32 | AC | 0 - 2 - 4 | 0 | 0 - 2 - 3 - 4 - 5 | 0 |
| | AC | 0 - 2 - 4 | 0 | 54 | / |
| | AC | 0 - 2 - 4 | 3 | 0 - 3 - 5 | 0 |
| | DC | 0 - 2 - 4 | 0 | 0 - 2 - 4 - 6 - 7 - 8 - 9 | 0 |
| | DC | 0 - 2 - 4 | 0 | 74 - 94 | / |
| 56.34 | AC | 0 - 2 - 4 | 0 | 0 - 2 - 3 - 4 - 5 | 0 - 6 - 8 |
| | AC | 0 - 2 - 4 | 0 | 54 | / |
| | DC | 0 - 2 - 4 | 0 | 0 - 2 - 4 - 6 - 7 | 0 - 6 - 8 |
| | DC | 0 - 2 - 4 | 0 | 74 | / |
| 56.42 | DC | 0 - 2 - 4 | 0 | 0 | 0 - 1 |
| | AC | 0 - 2 - 4 | 0 - 3 | 0 | 0 - 1 |
| 56.44 | AC - DC | 0 - 2 - 4 | 0 | 0 | 0 - 1 |

Special versions for Rail Applications on request

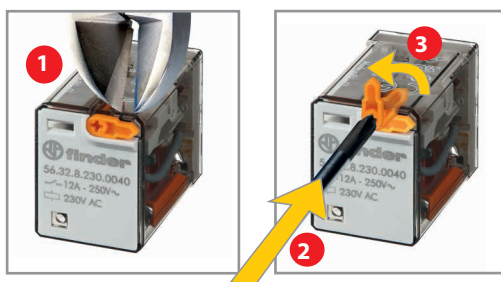
Descriptions: options and special versions



C: Option 3, 5, 54
LED (AC)

C: Option 6, 7, 74
Double LED
(DC non-polarized)

C: Option 8, 9, 94
LED + diode (DC, polarity positive to pin 7) - (56.32 only)



Lockable test button and mechanical flag indicator (0040, 0050, 0054, 0070, 0074, 0090, 0094)

The dual-purpose Finder test button can be used in two ways:

Case 1) The plastic pip (located directly above the test button) remains intact. In this case, when the test button is pushed, the contacts operate. When the test button is released the contacts return to their former state.

Case 2) The plastic pip is broken-off (using an appropriate cutting tool). In this case, (in addition to the above function), when the test button is pushed and rotated, the contacts are latched in the operating state, and remain so until the test button is rotated back to its former position.

In both cases ensure that the test button actuation is swift and decisive.

Technical data

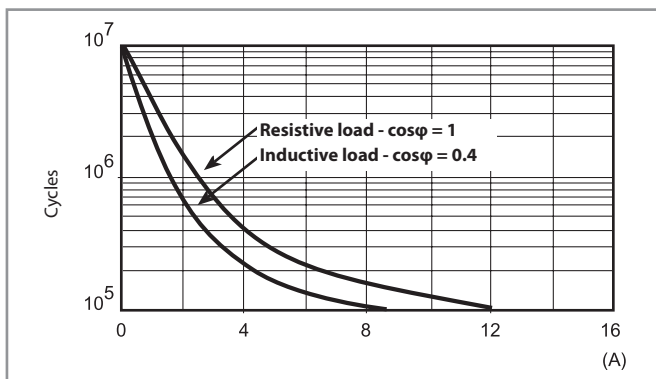
* Only in applications where over voltage category II is permitted. In applications of over voltage category III: Micro-disconnection.

| Insulation according to EN 61810-1 | | 2 CO - 4 CO | | 2 NO | |
|--|-------------------------|---------------------|--------------------|---------------------|--------------------|
| Nominal voltage of supply system | V AC | 230/400 | | 230/400 | |
| Rated insulation voltage | V AC | 250 | 400 | 250 | 400 |
| Pollution degree | | 3 | 2 | 3 | 2 |
| Insulation between coil and contact set | | | | | |
| Type of Insulation | | Basic | | Basic | |
| Overvoltage category | | III | | III | |
| Rated impulse voltage | kV (1.2/50 μs) | 4 | | 4 | |
| Dielectric strength | V AC | 2500 | | 2500 | |
| Insulation between adjacent contacts | | | | | |
| Type of insulation | | Basic | | Basic | |
| Overvoltage category | | III | | III | |
| Rated impulse voltage | kV (1.2/50 μs) | 4 | | 4 | |
| Dielectric strength | V AC | 2500 | | 2500 | |
| Insulation between open contacts | | | | | |
| Type of disconnection | | Micro-disconnection | | Full-disconnection* | |
| Overvoltage category | | — | | II | |
| Rated impulse voltage | kV (1.2/50 μs) | — | | 2.5 | |
| Dielectric strength | V AC/kV (1.2/50 μs) | 1000/1.5 | | 2000/3 | |
| Conducted disturbance immunity | | | | | |
| Burst (5...50)ns, 5 kHz, on A1 - A2 | | EN 61000-4-4 | | level 4 (4 kV) | |
| Surge (1.2/50 μs) on A1 - A2 (differential mode) | | EN 61000-4-5 | | level 4 (4 kV) | |
| Other data | | | | | |
| Bounce time: NO/NC | ms | 1/4 (changeover) | | 3/— (normally open) | |
| Vibration resistance (5...55)Hz: NO/NC | g | 17/14 | | | |
| Shock resistance | g | 20/14 | | | |
| Power lost to the environment | without contact current | W | 1 (56.32, 56.42) | | 1.3 (56.34, 56.44) |
| | with rated current | W | 3.8 (56.32, 56.42) | | 6.9 (56.34, 56.44) |
| Recommended distance between relays mounted on PCB | mm | ≥ 5 | | | |

Contact specification

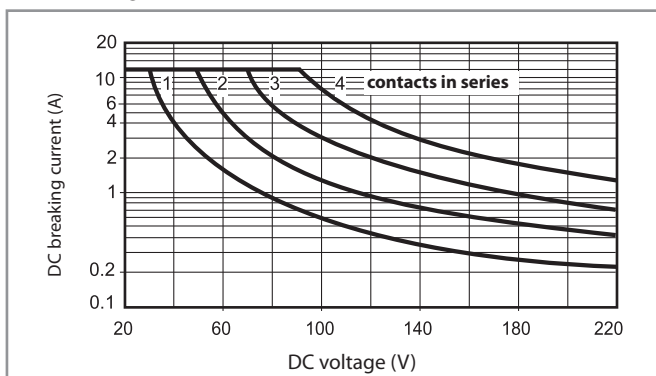
F 56 - Electrical life (AC) v contact current

2 - 4 pole relays



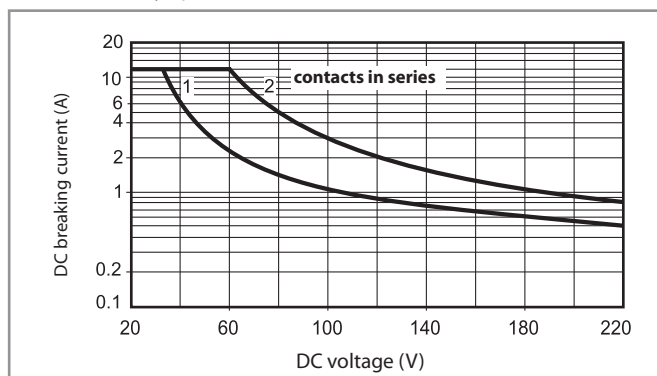
H 56 - Maximum DC1 breaking capacity

Changeover version



H 56 - Maximum DC1 breaking capacity

Normally open version



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.

Note: the release time of the load will be increased.