

Features

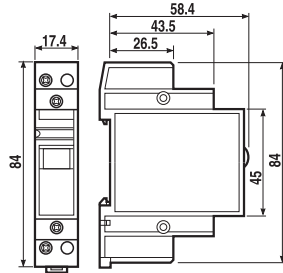
1 or 2 pole, 20 A relay for direct 35 mm rail (EN 60715) mounting

- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

22.21



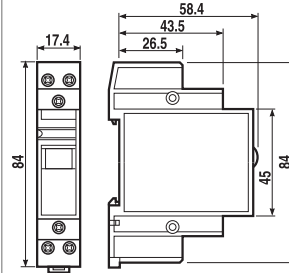
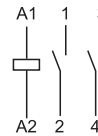
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount



22.22



- Double phase switch 2 NO (DPST-NO)
- 35 mm rail (EN 60715) mount



| Contact specification | | | |
|--|-----------------|--|----------------------------|
| Contact configuration | | 1 NO (SPST-NO) | 2 NO (DPST-NO) |
| Rated current/Maximum peak current | A | 20/30 | 20/30 |
| Rated voltage/Maximum switching voltage | V AC | 250/400 | 250/400 |
| Rated load AC1 | VA | 5,000 | 5,000 |
| Rated load AC15 (230 V AC) | VA | 1,000 | 1,000 |
| Single phase motor rating (230 V AC) | kW | — | — |
| Breaking capacity DC1: 30/110/220 V | A | 20/0.3/0.12 | 20/0.3/0.12 |
| Minimum switching load | mW (V/mA) | 1,000 (10/10) | 1,000 (10/10) |
| Standard contact material | | AgSnO ₂ | AgSnO ₂ |
| Coil specification | | | |
| Nominal voltage (U _N) | V AC (50/60 Hz) | 8 - 12 - 24 - 48 - 110 - 120 - 230 - 240 | |
| | V DC | 12 - 24 - 48 - 110 | 12 - 24 - 48 - 110 |
| Rated power AC/DC | VA (50 Hz)/W | 3/1.25 | 3/1.25 |
| Operating range | AC (50 Hz) | (0.85...1.1)U _N | (0.85...1.1)U _N |
| | DC | (0.9...1.1)U _N | (0.9...1.1)U _N |
| Technical data | | | |
| Mechanical life AC/DC | cycles | 500 · 10 ³ | 500 · 10 ³ |
| Electrical life at rated load in AC1 | cycles | 50 · 10 ³ | 50 · 10 ³ |
| Operate/release time | ms | 15/8 | 15/8 |
| Maximum impulse duration | | continuous | continuous |
| Insulation between coil and contacts (1.2/50 μs) | | 4 | 4 |
| Ambient temperature range | | -40...+40 | -40...+40 |
| Protection category | | IP 20 | IP 20 |
| Approvals (according to type) | | | |

Features

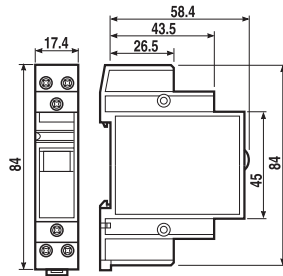
1 or 2 pole, 20 A relay
for direct 35 mm rail (EN 60715) mounting

- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

22.23



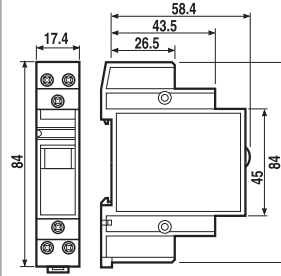
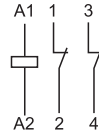
- Double phase switch 1NO+1NC (SPST-NO+SPST-NC)
- 35 mm rail (EN 60715) mount



22.24



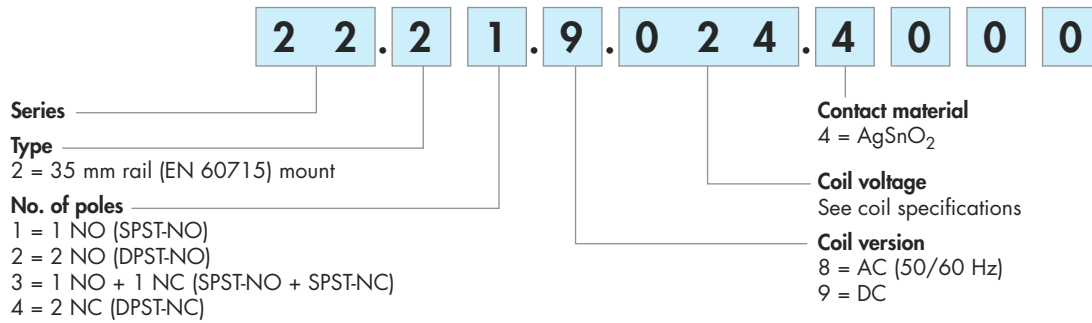
- Double phase switch 2 NC (DPST-NC)
- 35 mm rail (EN 60715) mount



| Contact specification | | | |
|--|-----------------|--|----------------------------|
| Contact configuration | | 1NO+1NC (SPST-NO+SPST-NC) | 2 NC (DPST-NC) |
| Rated current/Maximum peak current | A | 20/30 | 20/30 |
| Rated voltage/Maximum switching voltage | V AC | 250/400 | 250/400 |
| Rated load AC1 | VA | 5,000 | 5,000 |
| Rated load AC15 (230 V AC) | VA | 1,000 | 1,000 |
| Single phase motor rating (230 V AC) | kW | — | — |
| Breaking capacity DC1: 30/110/220 V | A | 20/0.3/0.12 | 20/0.3/0.12 |
| Minimum switching load | mW (V/mA) | 1,000 (10/10) | 1,000 (10/10) |
| Standard contact material | | AgSnO ₂ | AgSnO ₂ |
| Coil specification | | | |
| Nominal voltage (U _N) | V AC (50/60 Hz) | 8 - 12 - 24 - 48 - 110 - 120 - 230 - 240 | |
| | V DC | 12 - 24 - 48 - 110 | 12 - 24 - 48 - 110 |
| Rated power AC/DC | VA (50 Hz)/W | 3/1.25 | 3/1.25 |
| Operating range | AC (50 Hz) | (0.85...1.1)U _N | (0.85...1.1)U _N |
| | DC | (0.9...1.1)U _N | (0.9...1.1)U _N |
| Technical data | | | |
| Mechanical life AC/DC | cycles | 500 · 10 ³ | 500 · 10 ³ |
| Electrical life at rated load in AC1 | cycles | 50 · 10 ³ | 50 · 10 ³ |
| Operate/release time | ms | 15/8 | 15/8 |
| Maximum impulse duration | | continuous | continuous |
| Insulation between coil and contacts (1.2/50 μs) | kV | 4 | 4 |
| Ambient temperature range | °C | -40...+40 | -40...+40 |
| Protection category | | IP 20 | IP 20 |
| Approvals (according to type) | | CE | PG |

Ordering information

Example: 22 series 35 mm rail mount relay, 1 NO (SPST-NO) 20 A contact, coil rated 24 V DC, contact material AgSnO₂.



Technical data

| Contact specifications | | | | | |
|--------------------------------|-----------------|--------------------|--------------------|-------------------|----------------|
| Nominal rate lamps | | | | | |
| incandescent (230V) | W | 1,000 | | | |
| compensated fluorescent (230V) | W | 360 | | | |
| Insulation | | | | | |
| Dielectric strength | | | | | |
| between supply and contacts | V AC | 3,500 | | | |
| between open contacts | V AC | 2,000 | | | |
| between adjacent contacts | V AC | 2,000 | | | |
| Other data | | | | | |
| Bounce time: NO / NC | ms | 5 / 10 | | | |
| Power lost to the environment | | | | | |
| without contact current | W | 1.2 | | | |
| with rated current | W | 3.2 (22.21, 22.23) | 5.2 (22.22, 22.24) | | |
| Screw torque | Nm | 0.8 | | 0.8 | |
| Max. wire size | | Coil terminals | | Contact terminals | |
| | | solid cable | stranded cable | solid cable | stranded cable |
| | mm ² | 1x4 / 2x2.5 | 1x2.5 / 2x2.5 | 1x6 / 2x6 | 1x6 / 2x4 |
| | AWG | 1x12 / 2x14 | 1x14 / 2x14 | 1x10 / 2x10 | 1x10 / 2x12 |

If the coil is operated for a prolonged period of time, adequate ventilation of the relays must be provided - suggested gap of 9 mm between adjacent relays.

Coil specifications

DC version data

| Nominal voltage U _N V | Coil code | Operating range | | Resistance R Ω | Consumption I at U _N mA |
|--|-----------|-----------------------|-----------------------|----------------------|--|
| | | U _{min} V | U _{max} V | | |
| 12 | 9.012 | 10.8 | 13.2 | 115 | 104 |
| 24 | 9.024 | 21.6 | 26.4 | 460 | 52.2 |
| 48 | 9.048 | 43.2 | 52.8 | 1,850 | 25.9 |
| 110 | 9.110 | 99 | 121 | 9,700 | 11.3 |

AC version data

| Nominal voltage U _N V | Coil code | Operating range | | Resistance R Ω | Consumption I at U _N (50 Hz) mA |
|--|-----------|-----------------------|-----------------------|----------------------|---|
| | | U _{min} V | U _{max} V | | |
| 8 | 8.008 | 6.8 | 8.8 | 6.5 | 360 |
| 12 | 8.012 | 10.2 | 13.2 | 13.5 | 245 |
| 24 | 8.024 | 20.4 | 26.4 | 41 | 135 |
| 48 | 8.048 | 40.8 | 52.8 | 186 | 68 |
| 110 | 8.110 | 93.5 | 121 | 970 | 26 |
| 120 | 8.120 | 102 | 132 | 1,380 | 24 |
| 230 | 8.230 | 196 | 253 | 4,200 | 12.5 |
| 240 | 8.240 | 204 | 264 | 4,400 | 12 |

Accessories



020.01

Adaptor for panel mounting, 17.5 mm wide

020.01



020.24

Sheet of marker tags, plastic, 24 tags, 9x17 mm

020.24