

Features

25 A modular contactor - 2 pole

- 17.5 mm wide
- NO contact gap ≥ 3 mm, double break
- Continuous duty for the coil and contacts
- AC/DC silent coil (with varistor protection)
- Protective separation (reinforced insulation) between coil and contacts
- Mechanical and LED indicators as standard
- Auto-On-Off selector version available
- AgNi and AgSnO₂ contact versions available
- Compliant with EN 61095: 2009
- Auxiliary contact module available, quick-assembly with the main contactor (1 NO + 1 NC and 2 NO versions)
- 35 mm rail (EN 60715) mount

22.32...1xx0 / 22.32...4xx0
Screw terminal



* Contact gap ≥ 3 mm for NO contacts only;
NC contacts ≥ 1.5 mm
For outline drawings see page 7

NEW 22.32.0.xxx.1xx0

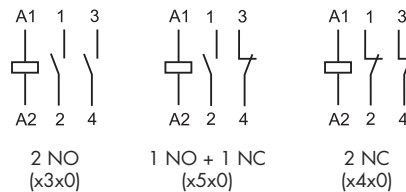


- AgNi contacts, specifically intended for resistive and slightly inductive loads as well as for motor loads

NEW 22.32.0.xxx.4xx0



- AgSnO₂ contacts, specifically intended for lamp loads and for high inrush current loads



Contact specification

| | | |
|--|---------------------------------------|-------------------------------|
| Contact configuration | 2 NO, 3 mm * (or 1 NO + 1 NC or 2 NC) | |
| Rated current/Maximum peak current | A | 25 / 80 |
| Rated voltage | V AC | 250 / 440 |
| Rated load AC1 / AC-7a (per pole @ 250 V) | VA | 6,250 |
| Rated current AC3 / AC-7b | A | 10 |
| Rated load AC15 (per pole @ 230 V) | VA | 1,800 |
| Single-phase motor rating (230 V AC) | kW | 1 |
| Rated current AC-7c | A | — |
| 230 V lamps rating: incandescent or halogen | W | — |
| compact fluorescent (CFL) | W | 2,000 |
| electronic ballast fluorescent tubes | W | 200 |
| electromagnetic ballast compens. fluorescent tubes | W | 800 |
| Breaking capacity DC1: 30/110/220 V | A | 25/5/1 |
| Minimum switching load | mW (V/mA) | 1,000 (10 / 10) |
| Contact material | | AgNi |
| | | AgSnO ₂ |
| Coil specification | | |
| Nominal voltage (U _N) | V DC/AC (50/60 Hz) | 12 - 24 - 48 - 60 - 120 - 230 |
| Rated power AC/DC | VA (50 Hz)/W | 2 / 2.2 |
| Operating range | DC/AC (50/60 Hz) | (0.8 ... 1.1) U _N |
| Holding voltage | DC/AC (50/60 Hz) | 0.4 U _N |
| Must drop-out voltage | DC/AC (50/60 Hz) | 0.1 U _N |
| Technical data | | |
| Mechanical life AC/DC | cycles | 2 · 10 ⁶ |
| Electrical life at rated load AC-7a | cycles | 70 · 10 ³ |
| Operate/release time | ms | 30 / 20 |
| Insulation between coil and contacts (1.2/50 μs) | kV | 6 |
| Ambient temperature range | °C | -20...+50 |
| Protection category | | IP20 |

Approvals (according to type)



Features

25 A modular contactor - 4 pole

- 35 mm wide
- NO contact gap ≥ 3 mm, double break
- Continuous duty for the coil and contacts
- AC/DC silent coil (with varistor protection)
- Protective separation (reinforced insulation) between coil and contacts
- Mechanical and LED indicators as standard
- Auto-On-Off selector version available
- AgNi and AgSnO₂ contact versions available
- Compliant with EN 61095: 2009
- Auxiliary contact module available, quick-assembly with the main contactor (1 NO + 1 NC and 2 NO versions)
- 35 mm rail (EN 60715) mount

22.34...1xx0 / 22.34...4xx0
Screw terminal



* Contact gap ≥ 3 mm for NO contacts only;
NC contacts ≥ 1.5 mm
For outline drawings see page 7

NEW

22.34.0.xxx.1xx0



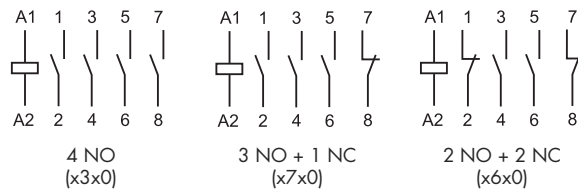
- AgNi contacts, specifically intended for resistive and slightly inductive loads as well as for motor loads

NEW

22.34.0.xxx.4xx0



- AgSnO₂ contacts, specifically intended for lamp loads and for high inrush current loads



Contact specification

| | | |
|--|--|------------------------------|
| Contact configuration | 4 NO, 3 mm * (or 3NO + 1NC or 2NO + 2NC) | |
| Rated current/Maximum peak current | A | 25 / 80 |
| Rated voltage | V AC | 250 / 440 |
| Rated load AC1 / AC-7a (per pole @ 250 V) | VA | 6,250 |
| Rated current AC3 / AC-7b | A | 10 |
| Rated load AC15 (per pole @ 230 V) | VA | 1,800 |
| Three-phase motor rating (400 - 440 V AC) | kW | 4 |
| Rated current AC-7c | A | — |
| 230 V lamps rating: incandescent or halogen | W | — |
| compact fluorescent (CFL) | W | 200 |
| electronic ballast fluorescent tubes | W | 800 |
| electromagnetic ballast compens. fluorescent tubes | W | 500 |
| Breaking capacity DC1: 30/110/220 V | A | 25/5/1 |
| Minimum switching load | mW (V/mA) | 1,000 (10 / 10) |
| Contact material | | AgNi AgSnO ₂ |

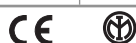
Coil specification

| | | |
|-----------------------------------|--------------------|-------------------------------|
| Nominal voltage (U _N) | V DC/AC (50/60 Hz) | 12 - 24 - 48 - 60 - 120 - 230 |
| Rated power | AC/DC VA (50 Hz)/W | 2 / 2.2 |
| Operating range | DC/AC (50/60 Hz) | (0.8 ... 1.1) U _N |
| Holding voltage | DC/AC (50/60 Hz) | 0.4 U _N |
| Must drop-out voltage | DC/AC (50/60 Hz) | 0.1 U _N |

Technical data

| | | |
|--|--------|-----------------------|
| Mechanical life AC/DC | cycles | 2 · 10 ⁶ |
| Electrical life at rated load AC-7a | cycles | 150 · 10 ³ |
| Operate/release time | ms | 18 / 40 |
| Insulation between coil and contacts (1.2/50 μs) | kV | 6 |
| Ambient temperature range | °C | -20...+50 |
| Protection category | | IP20 |

Approvals (according to type)



Ordering information

Example: 22 series, modular contactor 25 A, 4 NO contacts, coil 230 V AC/DC, AgSnO₂ contacts, Auto-On-Off selector + mechanical indicator + LED.

| | | | | | | | | | | | | | | | | |
|--|----------|----------|---|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 2 | 2 | . | 3 | 4 | . | 0 | . | 2 | 3 | 0 | . | 4 | 3 | 4 | 0 |
| | | | | | A | | | B | C | | | D | | | | |

Series _____

Type
3 = 25 A modular contactor range

Number of contacts
2 = 2 pole
4 = 4 pole

Coil version
0 = AC(50/60 Hz)/DC

Coil rated voltage
See coil specifications

D: Special versions
0 = Standard

C: Options
4 = Auto-On-Off selector + mechanical indicator + LED
2 = mechanical indicator + LED

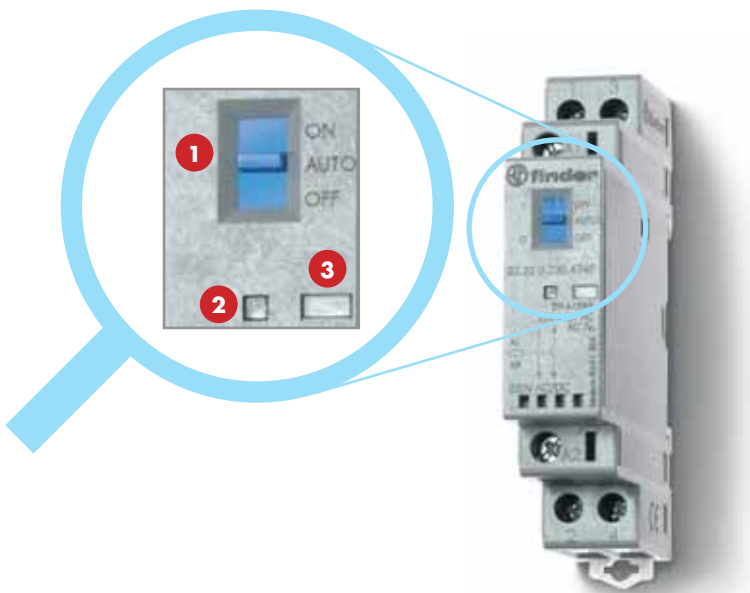
B: Contact circuit
3 = All NO contacts
4 = All NC contacts (22.32 only)
5 = 1 NO + 1 NC
6 = 2 NO + 2 NC
7 = 3 NO + 1 NC

A: Contact material
1 = AgNi
4 = AgSnO₂

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 |
|-------|--------------|--------------|------------------|--------------|---|
| 22.32 | AC/DC | 1 - 4 | 3 - 4 - 5 | 2 - 4 | 0 |
| 22.34 | AC/DC | 1 - 4 | 3 - 6 - 7 | 2 - 4 | 0 |

Auto-On-Off selector + mechanical indicator + LED (xx40 option)



- 1 Selector**
The three-position manual selector has the following functions:
 - **ON position** - the contacts are latched in the operated state (NO contacts - closed and NC contacts - open), the mechanical indicator is visible in its window, the LED is not illuminated.
 - **AUTO position** - the state of contacts, mechanical indicator and LED follow the coil supply voltage.
 - **OFF position** - even if terminals A1 - A2 are supplied with rated voltage, the coil is not energized, and so the contacts remain in the non-operated state, the mechanical indicator is not visible and the LED is not illuminated.
- 2 LED**
- 3 Mechanical indicator**

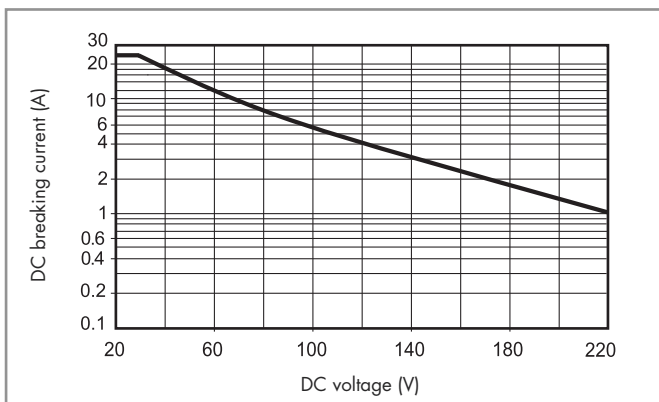
Technical data

| Insulation | | | |
|--|---------------------------|--------------------------|----------------|
| Rated insulation voltage | V AC | 250 | 440 |
| Pollution degree | | 3 * | 2 |
| Insulation between coil and contact set | | | |
| Type of insulation | | Reinforced | |
| Overvoltage category | | III | |
| Rated impulse voltage | kV (1.2/50 µs) | 6 | |
| Dielectric strength | V AC | 4,000 | |
| Insulation between adjacent contacts | | | |
| Type of insulation | | Basic | |
| Overvoltage category | | III | |
| Rated impulse voltage | kV (1.2/50 µs) | 4 | |
| Dielectric strength | V AC | 2,500 | |
| Insulation between open contacts | | NO contact | NC contact |
| Contact gap | mm | 3 | 1.5 |
| Overvoltage category | | III | II |
| Rated impulse voltage | kV (1.2/50 µs) | 4 | 2.5 |
| Dielectric strength | V AC/kV (1.2/50 µs) | 2,500/4 | 2,000/3 |
| * Only for versions without Auto-On-Off selector. For versions with Auto-On-Off selector pollution degree 2 applies. | | | |
| Conducted disturbance immunity | | Reference standard | |
| Fast transients (burst 5/50 ns, 5 kHz) at coil terminals | | EN 61000-4-4 | Level 4 (4 kV) |
| Voltage pulses (surge 1,2/50 µs) at supply terminals (differential mode) | | EN 61000-4-5 | Level 4 (4 kV) |
| Short circuit protection | | | |
| Rated conditional short circuit current | kA | 3 | |
| Back-up fuse | A | 32 (gL/gG type) | |
| Terminals | | Solid and stranded cable | |
| Max. wire size – contact terminals | mm ² | 1 x 6 / 2 x 4 | |
| | AWG | 1 x 10 / 2 x 12 | |
| Max. wire size – coil terminals | mm ² | 1 x 4 / 2 x 2.5 | |
| | AWG | 1 x 12 / 2 x 14 | |
| Min. wire size – contact and coil terminals | mm ² | 1 x 0.2 | |
| | AWG | 1 x 24 | |
|  Screw torque | Nm | 0.8 | |
| Wire strip length | mm | 9 | |
| Power lost to the environment | | 22.32 | 22.34 |
| | without contact current W | 2 | 2 |
| | with rated current W | 4.8 | 6.3 |

Contact specification

| Ratings and utilization categories according to EN 61095 : 2009 | | | | | | | | | |
|---|--------------------------------------|--|-------------------|-------------------------------|----------------|--|---|--|---|
| Utilization category | Typical applications | Load characteristics | Rated current (A) | Rated operational voltage (V) | | Rated electrical life (cycles) | | | |
| | | | | | | 2-pole AgNi contacts (22.32...1xx0) | 2-pole AgSnO ₂ contacts (22.32...4xx0) | 4-pole AgNi contacts (22.34...1xx0) | 4-pole AgSnO ₂ contacts (22.34...4xx0) |
| | | | | across the pole | between phases | | | | |
| AC-7a | Slightly inductive loads | $\cos \varphi = 0.8$ | 25 | 250 | 440 | 70 · 10 ³ (NO) 30 · 10 ³ (NC) | 30 · 10 ³ | 150 · 10 ³ (NO) 100 · 10 ³ (NC) | 30 · 10 ³ |
| AC-7b | Motor loads | $\cos \varphi = 0.45$ $I_{\text{making}} = 6 I_{\text{breaking}}$ | 10 | 250 | 440 | 30 · 10 ³ | 30 · 10 ³ | 30 · 10 ³ | 30 · 10 ³ |
| AC-7c | Compensated electric discharge lamps | $\cos \varphi = 0.9$ $C = 10 \mu\text{F/A}$ | 10 | 230 | 400 | — | 30 · 10 ³ | — | 30 · 10 ³ |

H 22 - Maximum DC1 breaking capacity



- 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 for the load will be increased.

Coil specifications

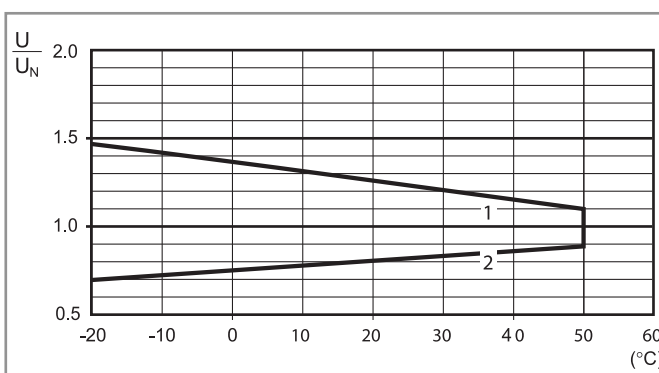
AC/DC version data (type 22.32)

| Nominal voltage U_N | Coil code | Operating range | | Rated coil consumption I_N at U_N (AC) |
|----------------------------|-----------|-----------------|------------|--|
| | | U_{\min} | U_{\max} | |
| V | | V | V | mA |
| 12 | 0.012 | 9.6 | 13.2 | 165 |
| 24 | 0.024 | 19.2 | 26.4 | 83 |
| 48 | 0.048 | 38.4 | 52.8 | 42 |
| 60 | 0.060 | 48 | 66 | 33 |
| 120 | 0.120 | 88 | 138 | 16.5 |
| (110...125) | | | | |
| 230 | 0.230 | 184 (AC) | 264 (AC) | 8.7 |
| (230...240 AC) (220 DC) | | 176 (DC) | 242 (DC) | |

AC/DC version data (type 22.34)

| Nominal voltage U_N | Coil code | Operating range | | Rated coil consumption I_N at U_N (AC) |
|----------------------------|-----------|-----------------|------------|--|
| | | U_{\min} | U_{\max} | |
| V | | V | V | mA |
| 12 | 0.012 | 9.6 | 13.2 | 165 |
| 24 | 0.024 | 19.2 | 26.4 | 83 |
| 48 | 0.048 | 38.4 | 52.8 | 42 |
| 60 | 0.060 | 48 | 66 | 33 |
| 120 | 0.120 | 88 | 132 | 16.5 |
| (110...125) | | | | |
| 230 | 0.230 | 184 (AC) | 264 (AC) | 8.7 |
| (230...240 AC) (220 DC) | | 176 (DC) | 242 (DC) | |

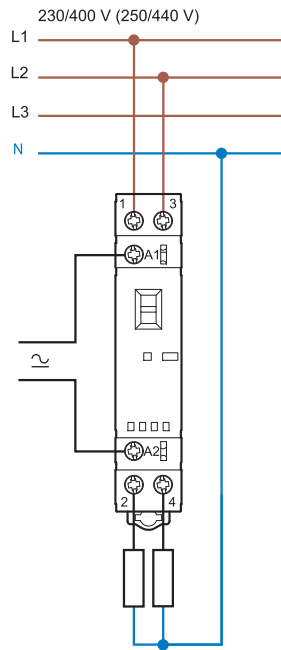
R 22 - Coil operating range v ambient temperature



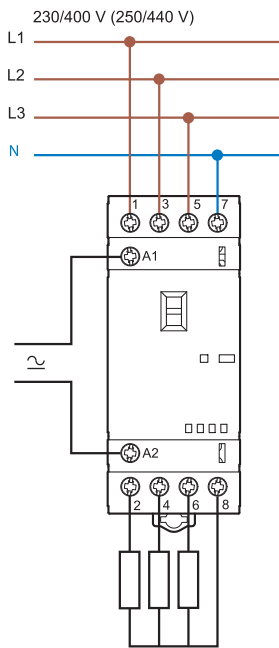
- 1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

NOTE - It is suggested an air gap of 9 mm between adjacent relays for installations and working conditions close to the limit (that is, ambient temperature $> 40 \text{ }^\circ\text{C}$, coil operated for a prolonged period of time, all contacts loaded with current $> 20 \text{ A}$).

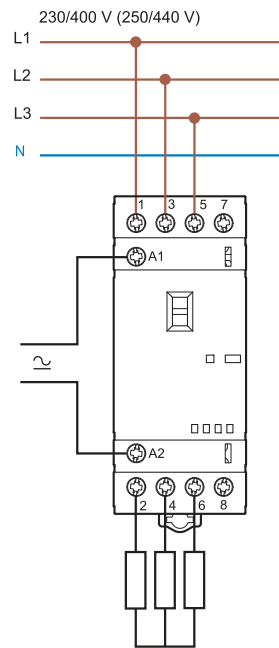
Wiring diagrams



Type 22.32



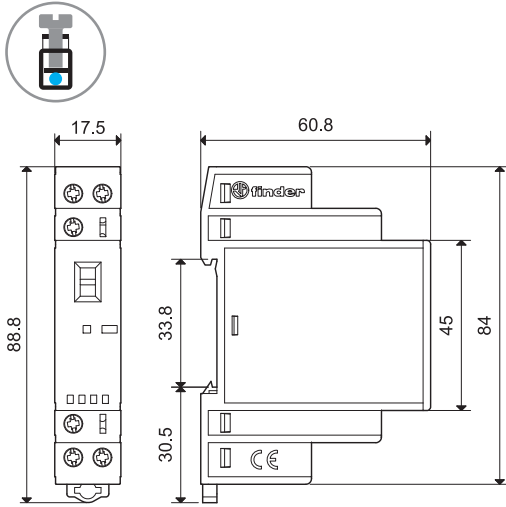
Type 22.34



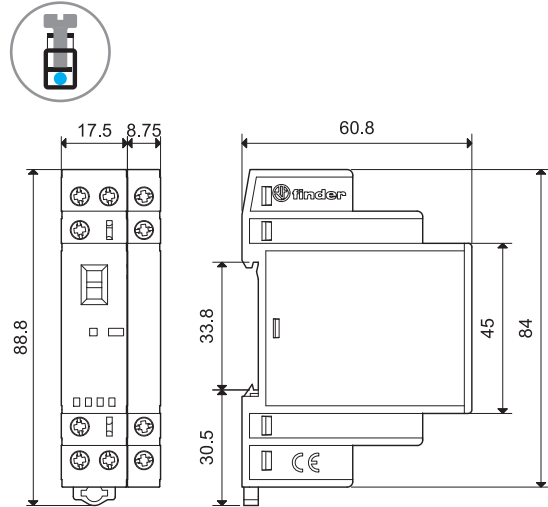
Type 22.34

Outline drawings

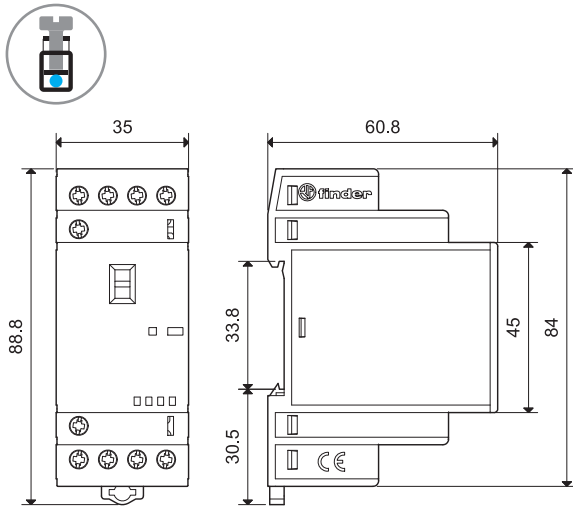
Type 22.32
Screw terminal



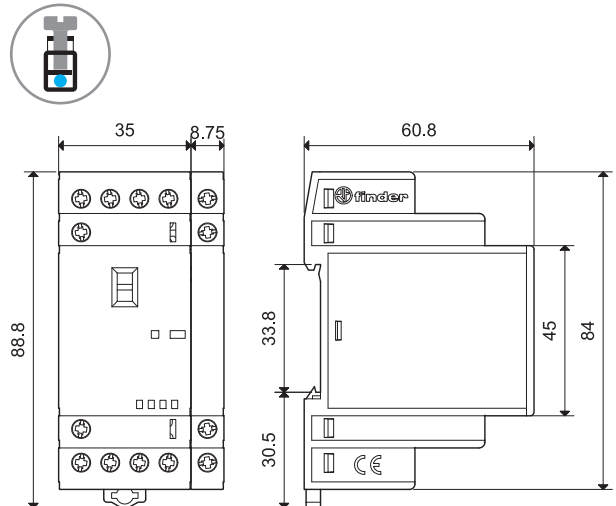
Type 22.32 + 022.33 / 022.35
Screw terminal



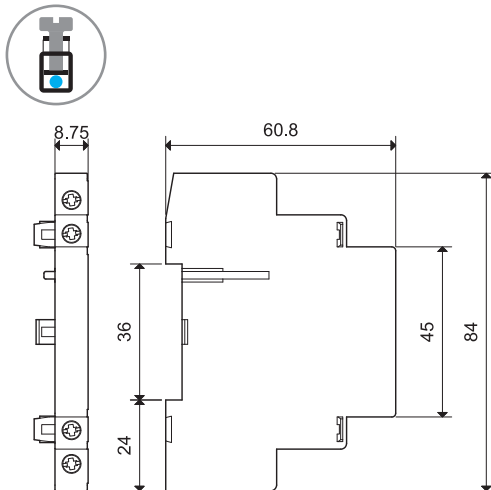
Type 22.34
Screw terminal



Type 22.34 + 022.33 / 022.35
Screw terminal



Type 022.33 / 022.35
Screw terminal



Auxiliary module 022.33 / 022.35



22.32 + 022.33 / 022.35



22.34 + 022.33 / 022.35

022.33



022.35



| Contact specification | | | |
|--|-----------------|--------------------------|------------------|
| Contact configuration | | 2 NO | 1 NO + 1 NC |
| Conventional free air thermal current I_{th} | A | 6 | 6 |
| Rated current AC15 (230 V) | VA | 700 | 700 |
| Electrical life at rated load | cycles | 30×10^3 | 30×10^3 |
| Contact material | | AgNi | AgNi |
| Short circuit protection | | | |
| Rated conditional short circuit current | kA | 1 | |
| Back-up fuse | A | 6 (gL/gG type) | |
| Terminals | | Solid and stranded cable | |
| Max. wire size | mm ² | 1 x 4 / 2 x 2.5 | |
| | AWG | 1 x 12 / 2 x 14 | |
| Min. wire size | mm ² | 1 x 0.2 | |
| | AWG | 1 x 24 | |
| Screw torque | Nm | 0.8 | |
| Wire strip length | mm | 9 | |
| Power lost to the environment | | | |
| without contact current | W | — | |
| with rated current | W | 0.5 | |

NOTE: it is not possible to assembly the auxiliary module on 22.32.0.xxx.x4x0 (2 NC versions).

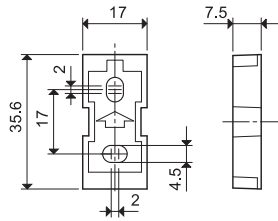
Accessories



020.01

Adaptor for panel mounting (for 22.32 type), plastic, 17.5 mm wide

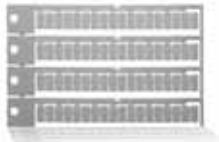
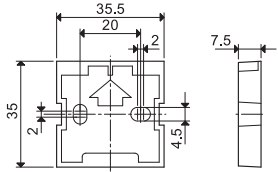
020.01



011.01

Adaptor for panel mounting (for 22.34 type), plastic, 35 mm wide

011.01



060.72

Sheet of marker tags, plastic, 72 tags, 6x12 mm

060.72



019.01

Identification tag, plastic, 1 tag, 17x25.5 mm

019.01



020.03

Separator for panel mounting, plastic, 3 mm wide

020.03

