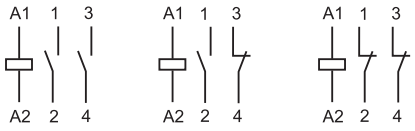
Features

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 $AgSnO_2$ 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

NEW 22.32.0.xxx.1xx0	NEW 22.32.0.xxx.4xx0
	
• AgNi contacts, specifically intended for resistive and slightly inductive loads as well as for motor loads	• $AgSnO_2$ contacts, specifically intended for lamp loads and for high inrush current loads



2 NO (x3x0) | 1 NO + 1 NC (x5x0) | 2 NC (x4x0)

* Contact gap ≥ 3 mm for NO contacts only; NC contacts ≥ 1.5 mm

For outline drawings see page 7

Contact specification			
Contact configuration		2 NO, 3 mm * (or 1 NO + 1 NC or 2 NC)	
Rated current/Maximum peak current	A	25 / 80	25 / 120
Rated voltage	V AC	250 / 440	250 / 440
Rated load AC1 / AC-7a (per pole @ 250 V)	VA	6,250	6,250
Rated current AC3 / AC-7b	A	10	10
Rated load AC15 (per pole @ 230 V)	VA	1,800	1,800
Single-phase motor rating (230 V AC)	kW	1	1
Rated current AC-7c	A	—	10
230 V lamps rating: incandescent or halogen	W	—	2,000
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	25/5/1
Minimum switching load	mW (V/mA)	1,000 (10 / 10)	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	12 - 24 - 48 - 60 - 120 - 230
Rated power AC/DC	VA (50 Hz)/W	2 /2.2	2 / 2.2
Operating range	DC/AC (50/60 Hz)	(0.8 ...1.1) U_N	(0.8 ...1.1) U_N
Holding voltage	DC/AC (50/60 Hz)	0.4 U_N	0.4 U_N
Must drop-out voltage	DC/AC (50/60 Hz)	0.1 U_N	0.1 U_N
Technical data			
Mechanical life AC/DC	cycles	$2 \cdot 10^6$	$2 \cdot 10^6$
Electrical life at rated load AC-7a	cycles	$70 \cdot 10^3$	$30 \cdot 10^3$
Operate/release time	ms	30 / 20	30 / 20
Insulation between coil and contacts (1.2/50 µs)	kV	6	6
Ambient temperature range	°C	–20...+50	–20...+50
Protection category		IP20	IP20
Approvals (according to type)		CE EAC Lloyd's Register RINA cULus	

Features

25 A modular contactor - 4 pole

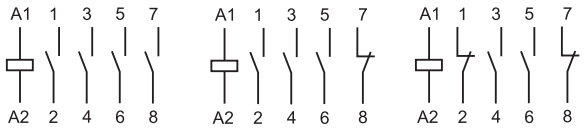
- 35 mm wide
- NO contact gap ≥ 3 mm, double break
- Continuous duty for the coil and contacts
- AC/DC silent coil (with varistor protection)
- Protective separation (reinforced insulation) between coil and contacts
- Mechanical and LED indicators as standard
- Auto-On-Off selector version available
- AgNi and $AgSnO_2$ 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

	22.34.0.xxx.1xx0	22.34.0.xxx.4xx0
		
	• AgNi contacts, specifically intended for resistive and slightly inductive loads as well as for motor loads	• $AgSnO_2$ 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	25 / 120
Rated voltage	V AC	250 / 440	250 / 440
Rated load AC1 / AC-7a (per pole @ 250 V)	VA	6,250	6,250
Rated current AC3 / AC-7b	A	10	10
Rated load AC15 (per pole @ 230 V)	VA	1,800	1,800
Three-phase motor rating (400 - 440 V AC)	kW	4	4
Rated current AC-7c	A	—	10
230 V lamps rating: incandescent or halogen	W	—	2,000
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	25/5/1
Minimum switching load	mW (V/mA)	1,000 (10 / 10)	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	12 - 24 - 48 - 60 - 120 - 230
Rated power AC/DC	VA (50 Hz)/W	2 / 2.2	2 / 2.2
Operating range	DC/AC (50/60 Hz)	(0.8 ...1.1) U_N	(0.8 ...1.1) U_N
Holding voltage	DC/AC (50/60 Hz)	0.4 U_N	0.4 U_N
Must drop-out voltage	DC/AC (50/60 Hz)	0.1 U_N	0.1 U_N
Technical data			
Mechanical life AC/DC	cycles	$2 \cdot 10^6$	$2 \cdot 10^6$
Electrical life at rated load AC-7a	cycles	$150 \cdot 10^3$	$30 \cdot 10^3$
Operate/release time	ms	18 / 40	18 / 40
Insulation between coil and contacts (1.2/50 µs)	kV	6	6
Ambient temperature range	°C	–20...+50	–20...+50
Protection category		IP20	IP20
Approvals (according to type)		CE EAC Lloyd's Register RINA cULus	

Ordering information

Exemple: 22 series, modular contactor 25 A, 4 NO contacts, coil 230 V AC/DC, $AgSnO_2$ contacts, Auto-On-Off selector + mechanical indicator + LED.

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

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

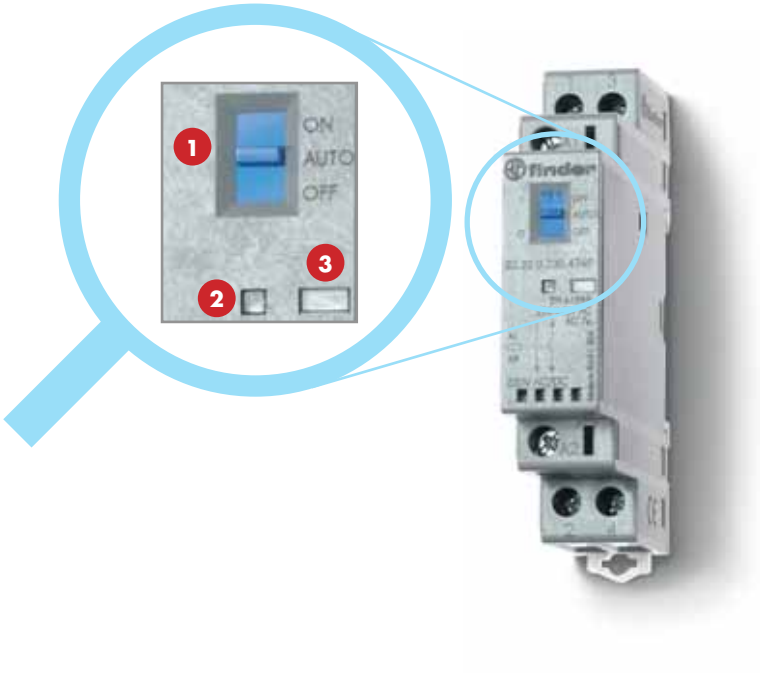
B: Contact circuit
3 = All NO contacts
4 = All NC contacts (22.32 only)
5 = 1 NO + 1 NC
6 = 2 NO + 2 NC
7 = 3 NO + 1 NC

A: Contact material
1 = AgNi
4 = $AgSnO_2$

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

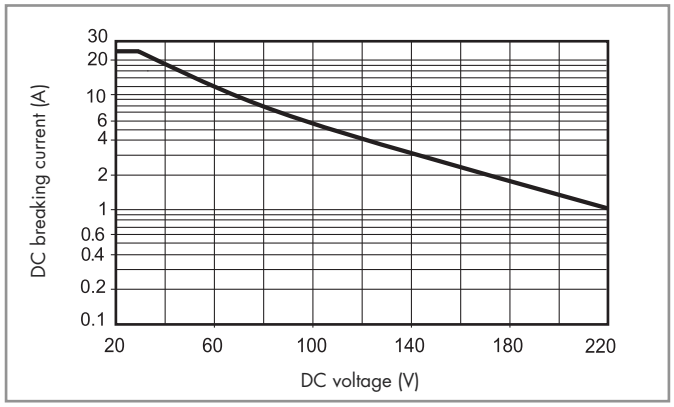
NOTE - It is suggested an air gap of 9 mm between adjacent relays for installations and working conditions close to the limit (that is, ambient temperature > 40 °C, coil operated for a prolonged period of time, all contacts loaded with current > 20 A).

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 φ = 0.8	25	250	440	$70 \cdot 10^3$ (NO) $30 \cdot 10^3$ (NC)	$30 \cdot 10^3$	$150 \cdot 10^3$ (NO) $100 \cdot 10^3$ (NC)	$30 \cdot 10^3$
AC-7b	Motor loads	cos φ = 0.45 $I_{making} = 6\ I_{breaking}$	10	250	440	$30 \cdot 10^3$	$30 \cdot 10^3$	$30 \cdot 10^3$	$30 \cdot 10^3$
AC-7c	Compensated electric discharge lamps	cos φ = 0.9 C = 10 µF/A	10	230	400	—	$30 \cdot 10^3$	—	$30 \cdot 10^3$

H 22 - Maximum DC1 breaking capacity



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ $100 \cdot 10^3$ 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

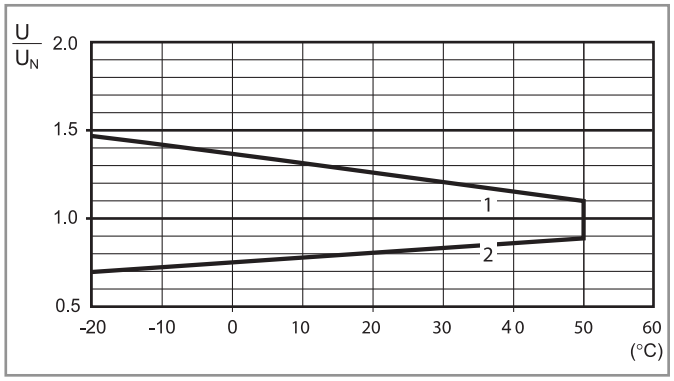
AC/DC version data (type 22.32)

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Rated coil consumption I_N at U_N (AC)
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 (110...125)	**0**.120	88	138	16.5
230 (230...240 AC) (220 DC)	**0**.230	184 (AC) 176 (DC)	264 (AC) 242 (DC)	8.7

AC/DC version data (type 22.34)

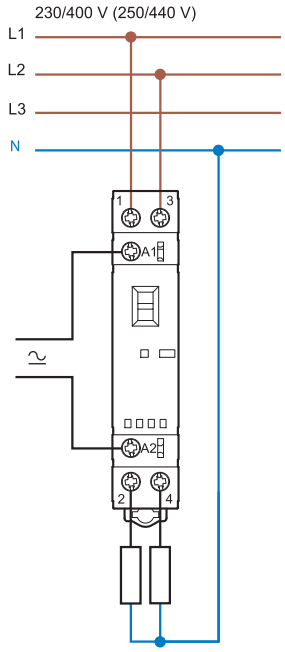
Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Rated coil consumption I_N at U_N (AC)
V		V	V	mA
12	**0**.012	9.6	13.2	165
24	**0**.024	19.2	26.4	83
48	**0**.048	38.4	52.8	42
60	**0**.060	48	66	33
120 (110...125)	**0**.120	88	138	16.5
230 (230...240 AC) (220 DC)	**0**.230	184 (AC) 176 (DC)	264 (AC) 242 (DC)	8.7

R 22 - Coil operating range v ambient temperature



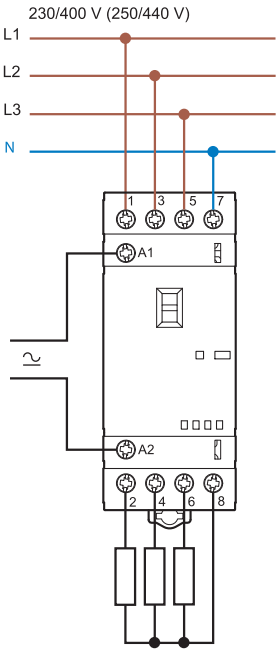
1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

Wiring diagrams



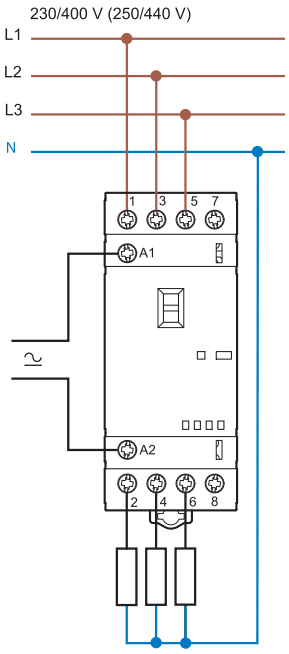
Type 22.32

Line and neutral switched



Type 22.34

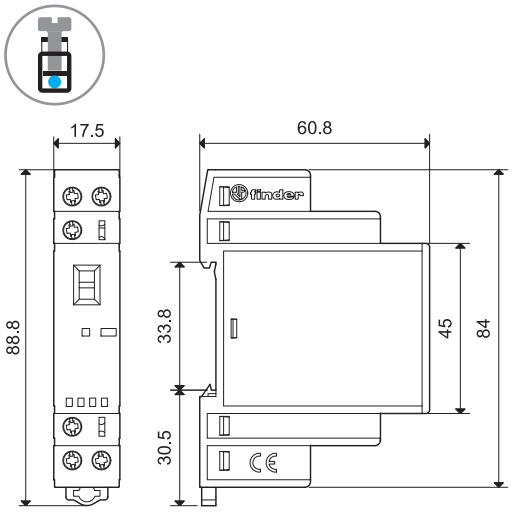
Line only switched



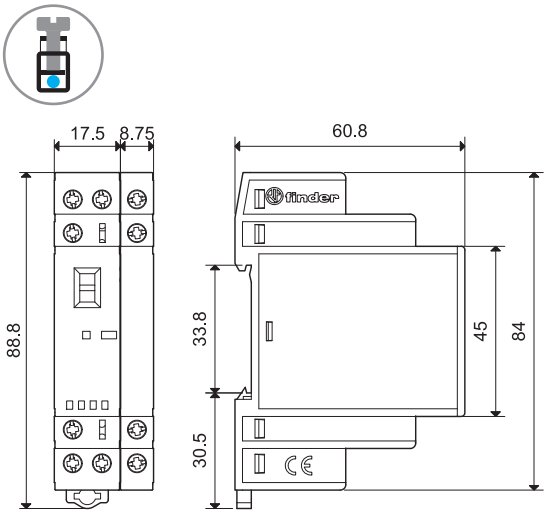
Type 22.34

Outline drawings

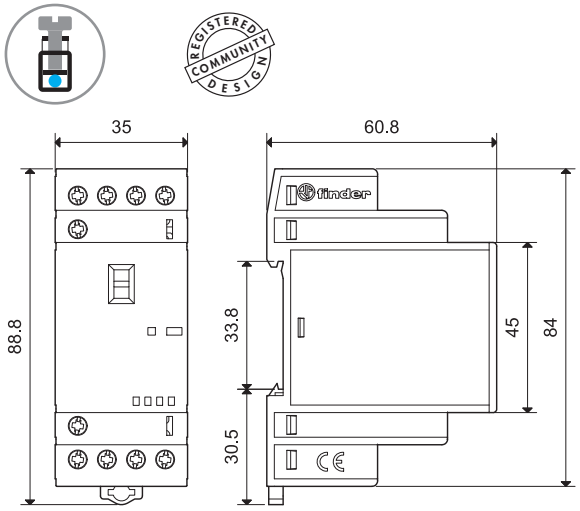
Type 22.32
Screw terminal



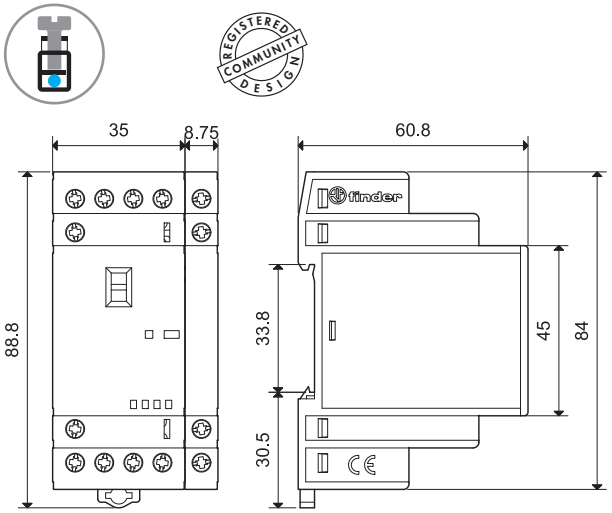
Type 22.32 + 022.33 / 022.35
Screw terminal



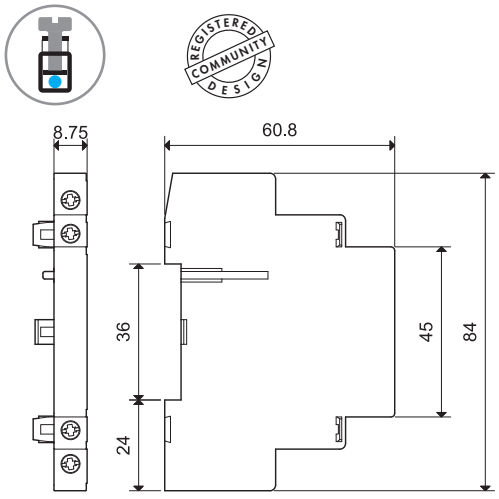
Type 22.34
Screw terminal



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

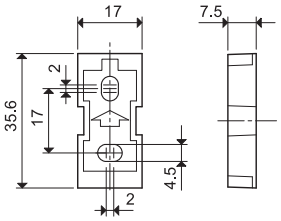
		022.33	022.35
			
			
Contact specification			
Contact configuration		2 NO	1 NO + 1 NC
Conventional free air thermal current I_{th}	A	6	6
Rated current AC15 (230 V)	VA	700	700
Electrical life at rated load	cycles	30 x 10^3	30 x 10^3
Contact material		AgNi	AgNi
Short circuit protection			
Rated conditional 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	
Approvals (according to type)		CE EAC RINA cULus	

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

Accessories

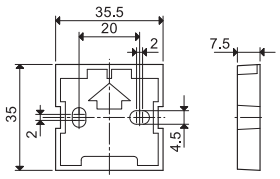
020.01

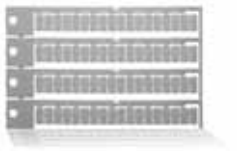
Adaptor for panel mounting (for 22.32 type), plastic, 17.5 mm wide | 020.01



011.01

Adaptor for panel mounting (for 22.34 type), plastic, 35 mm wide | 011.01





060.72

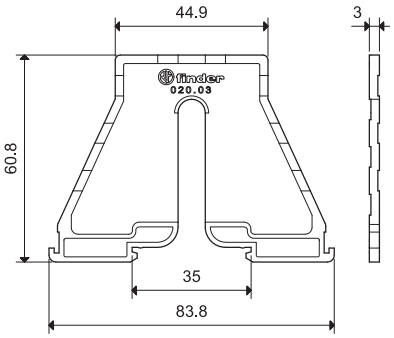
Sheet of marker tags, plastic, 72 tags, 6x12 mm | 060.72

019.01

Identification tag, plastic, 1 tag, 17x25.5 mm | 019.01

020.03

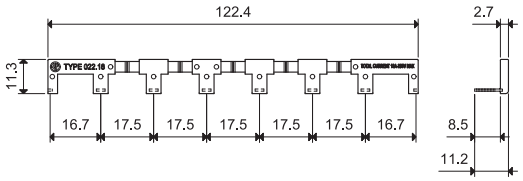
Separator for rail mounting, plastic, 3 mm wide | 020.03

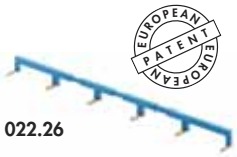


022.18

8-way jumper link for types 22.32, 17.5 mm wide | 022.18 (blue)

Rated values | 10 A - 250 V





022.26

6-way jumper link for types 22.34, 35 mm wide | 022.26 (blue)

Rated values | 10 A - 250 V