

E-T-A® Thermal-Magnetic Circuit Breaker 201/-WA

Description

Single pole thermal-magnetic circuit breaker with tease-free, trip-free, snap action mechanism and two button operation (M-type TM CBE to EN 60934). Featuring a narrow profile housing, recessed terminals, standard EN rail mounting, and precision CBE performance. Complies with CBE standard EN 60934 (IEC 934)

Typical applications

Process control systems, instrumentation.

Accessories

| | |
|--------------|--|
| X 200 409 01 | Mounting adapter for asymmetric rail (G-profile). |
| X 210 589 01 | 50-way 2.5 mm ² cable links with prefitted connection lugs, black |
| X 210 589 02 | As above but with 1.5 mm ² cable links, brown |
| X 221 497 00 | Bus bar |
| X 221 498 00 | Bus bar |
| X 221 496 00 | Supply terminal for bus bar |

Ordering information

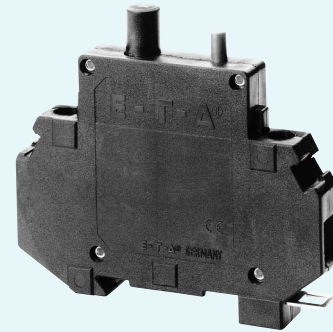
| Type No. | |
|-----------------|-----------------------------------|
| 201 | single pole, rail mounted version |
| 201-WA | low-resistance version |
| Option | |
| 2705 | fitted with adapter X 200 409 01 |
| Current ratings | |
| | 0.05...16 A (type 201) |
| | 0.05...10 A (type 201-WA) |

201-WA - [] - 10 A ordering example

The exact part number required can be built up from the table of choices shown above. Ordering references for optional features should be omitted if not required.

Standard current ratings and typical internal resistance values

| Current rating (A) | Internal resistance (Ω) | | Current rating (A) | Internal resistance (Ω) | |
|--------------------|-------------------------|--------|--------------------|-------------------------|--------|
| | 201 | 201-WA | | 201 | 201-WA |
| 0.05 | 447 | 211 | 3 | 0.19 | 0.054 |
| 0.1 | 131 | 48 | 4 | 0.090 | 0.035 |
| 0.2 | 40 | 12.4 | 5 | 0.061 | 0.025 |
| 0.3 | 19.3 | 5.7 | 6 | 0.041 | < 0.02 |
| 0.4 | 10.4 | 3.1 | 7 | 0.034 | < 0.02 |
| 0.5 | 7.1 | 2.0 | 8 | < 0.02 | < 0.02 |
| 0.6 | 4.3 | 1.32 | 10 | < 0.02 | < 0.02 |
| 0.8 | 2.5 | 0.76 | 12 | < 0.02 | |
| 1 | 1.67 | 0.49 | 14 | < 0.02 | |
| 1.5 | 0.61 | 0.21 | 15 | < 0.02 | |
| 2 | 0.38 | 0.101 | 16 | < 0.02 | |
| 2.5 | 0.24 | 0.078 | | | |



201-...
standard type

201-WA-...
low-resistance type

Technical data

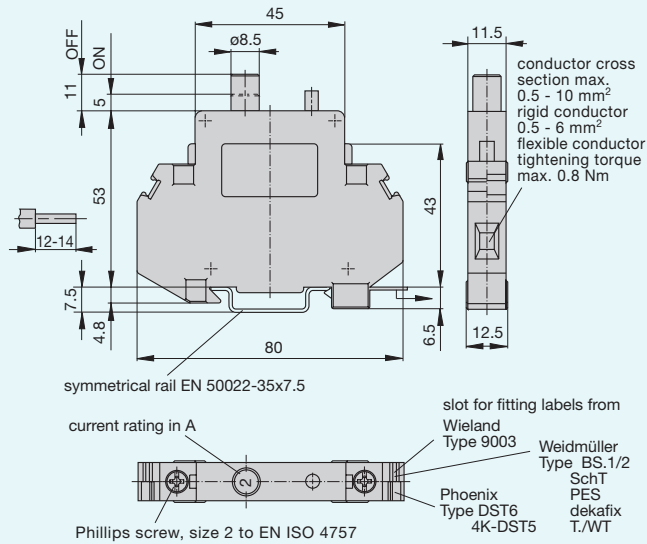
| | | | |
|---|---|---|---|
| Voltage rating | AC 250 V, 50/60 Hz; DC 65 V (DC 80 V UL/CSA) | | |
| Current rating range | 201: 0.05 ... 16 A 201-WA: 0.05...10 A | | |
| Typical life | 5,000 operations at 2xI _N | | |
| Ambient temperature | -30...+60 °C | | |
| Insulation co-ordination (IEC 664 and 664 A) | Rated impulse withstand voltage 2.5 kV | Pollution degree 2 | reinforced insulation in operating area |
| Dielectric strength (IEC 664 and 664A) operating area | Test voltage AC 3000 V | | |
| Insulation resistance | > 100 MΩ (DC 500 V) | | |
| Interrupting capacity I _{cn} | 201 | 201-WA | |
| | 0.05...0.8 A 1...2 A 2.5...16 A | 0.05...0.2 A 0.3...2 A 2.5...10 A | self-limiting 200 A 400 A |
| Interrupting capacity (UL 1077) | I _N | U _N | |
| | 0.05...16 A 0.05...16 A | AC 250 V DC 80 V | 1000 A 1000 A |
| Degree of protection (IEC 529/DIN 40050) | operating area IP 40 terminal area IP 20 | | |
| Vibration | 5 g (57-500 Hz), ±0.38 mm (10-57 Hz) to IEC 68-2-6, Test Fc 10 frequency cycles/axis | | |
| Shock | 25 g (11 ms) to IEC 68-2-27, Test Ea | | |
| Corrosion | 96 hours at 5 % salt mist, to IEC 68-2-11, Test Ka | | |
| Humidity | 240 hours at 95 % RH to IEC 68-2-3, Test Ca | | |
| Mass | approx. 60 g | | |

Approvals

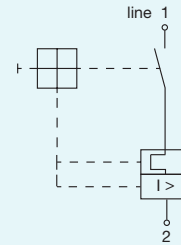
| Authority | Voltage ratings | Current ratings |
|-------------|-------------------|-----------------|
| VDE, Demko, | AC 250 V, DC 65 V | 0.05...16 A |
| CSA, UL | AC 250 V, DC 80 V | 0.05...16 A |
| LRoS | AC 250 V, DC 65 V | 0.3...16 A |

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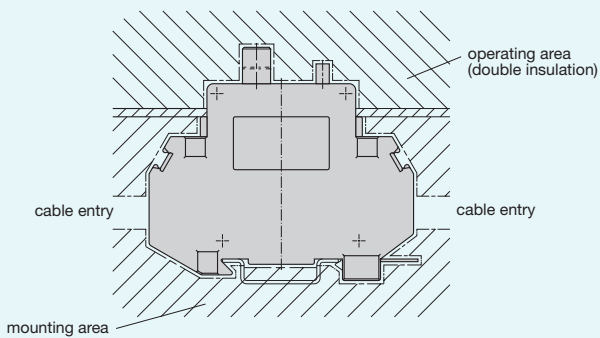
Dimensions



Internal connection diagram



Installation drawing for protection class II (IEC 730-1)

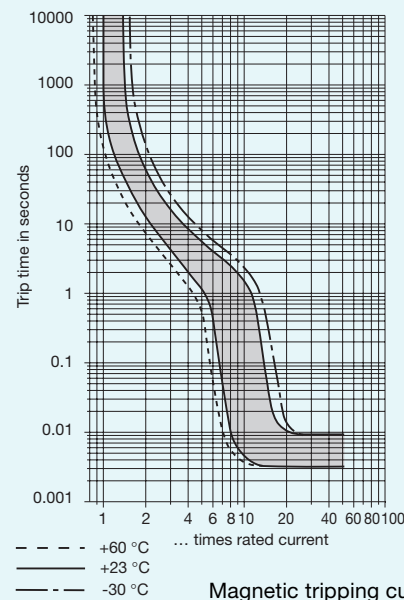


Time/current characteristics are calibrated at 23°C (see page 8). For operation at other temperatures please apply the factors below to determine the circuit breaker rating required.

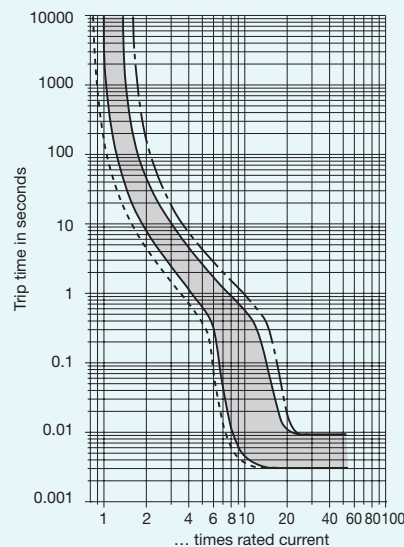
| Ambient temperature °C | -20 | -10 | 0 | +23 | +40 | +50 | +60 |
|------------------------|------|------|------|-----|------|------|------|
| Multiplication factor | 0.76 | 0.84 | 0.92 | 1 | 1.08 | 1.16 | 1.24 |

Typical time/current characteristics

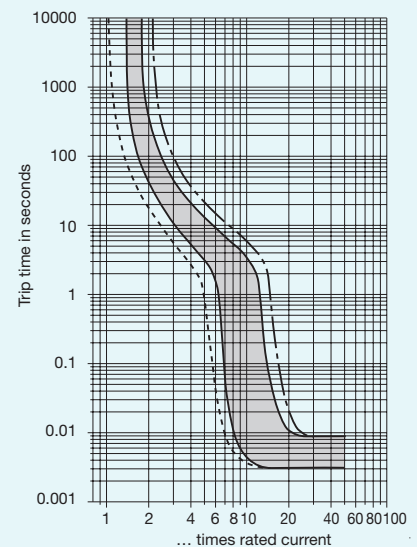
Type 201 0.05...7 A AC



Type 201 8...16 A AC



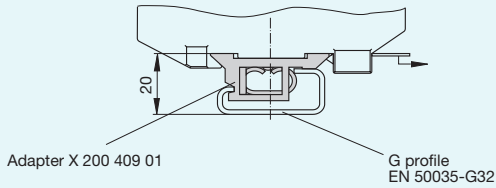
Type 201-WA 0.05...10 A DC



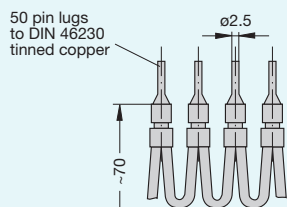
Magnetic tripping currents are decreased by 20% on AC supplies.

Accessories

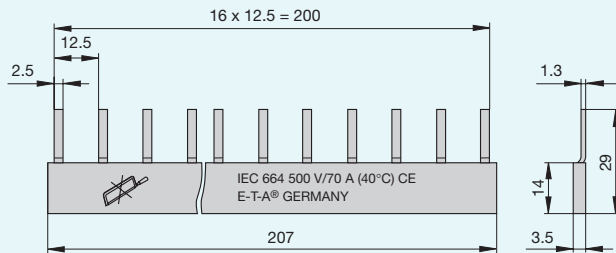
Adapter for EN rail 50035-G32 specified as a separate item
X 200 409 01



Connector bus links -K10
X 210 589 01/2.5 mm² (black)
X 210 589 02/1.5 mm² (brown)



Bus bar
X 221 498 01



Supply terminal for bus bar
X 221 496 01

