

Description

Miniaturised double pole thermal circuit breaker with push-to-reset, tease-free, trip-free, snap action mechanism (R-type TO CBE to EN 60934). Threadneck panel mounting. Suitable for line and neutral switching - the thermal actuator operating on one pole simultaneously opens both poles under overload conditions. Approved to CBE standard EN 60934 (IEC 60934).

Typical applications

Motors, transformers, solenoids, hand-held machines and appliances.
Especially suited to AC duties where the correct orientation of line/
neutral is not known/cannot be guaranteed.



1140-G15

Ordering information

| | |
|-----------------------------|---|
| Type No. | |
| 1140 | double pole threadneck panel mounting |
| Mounting | |
| G1 | threadneck panel mounting 3/8-27UNS, with hex nut and knurled nut (hardware bulk shipped with 5 pcs plus) |
| Number of poles | |
| 5 | double pole, 1-pole protected |
| Actuator style | |
| 1 | black push button |
| Terminal design | |
| P7 | blade terminals DIN 46244-C (QC 2x.110) |
| Characteristic curve | |
| M1 | medium delay |
| Current ratings | |
| | 0,05...16 A |

1140 - G1 5 1 - P7 M1 - 16 A ordering example

Preferred types

Standard current ratings and typical internal resistance values

| Current rating (A) | Internal resistance (Ω) | Current rating (A) | Internal resistance (Ω) |
|--------------------|----------------------------------|--------------------|----------------------------------|
| 0.05 | 345 | 1.8 | 0.3 |
| 0.06 | 240 | 2 | 0.3 |
| 0.08 | 142 | 2.5 | 0.2 |
| 0.1 | 88 | 3 | 0.1 |
| 0.2 | 24 | 3.5 | 0.08 |
| 0.3 | 9.9 | 4 | 0.07 |
| 0.4 | 5.9 | 5 | 0.05 |
| 0.5 | 3.7 | 6 | 0.04 |
| 0.6 | 2.2 | 7 | < 0.02 |
| 0.7 | 1.9 | 8 | < 0.02 |
| 0.8 | 1.4 | 10 | < 0.02 |
| 1 | 0.9 | 12 | < 0.02 |
| 1.2 | 0.6 | 15 | < 0.02 |
| 1.5 | 0.5 | 16 | < 0.02 |

Technical data

For further details please see chapter: Technical Information

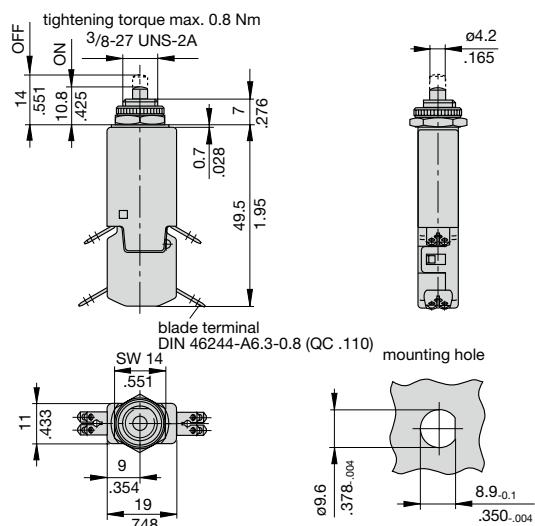
| | | | |
|--|--|--|---|
| Voltage rating | AC 240 V; DC 48 V (UL: AC 250 V; DC 50 V) | | |
| Current ratings | 0.05...16 A | | |
| Typical life | | | |
| AC + DC | 0.05...3 A | 300 operations at $2 \times I_N$, inductive | |
| | 3.5...8 A | 200 operations at $2 \times I_N$, inductive | |
| | 9...16 A | 100 operations at $2 \times I_N$, inductive | |
| Ambient temperature | -20...+60 °C (-4...+140 °F) T 60 | | |
| Insulation co-ordination (IEC 60664 and 606664 A) | rated impulse withstand voltage 2.5 kV | pollution degree 2 | reinforced insulation in operating area |
| Dielectric strength (IEC 60664 and 60664A) operating area pole/pole | test voltage AC 3,000 V AC 1,500 V | | |
| Insulation resistance | > 100 MΩ (DC 500 V) | | |
| Interrupting capacity I_{cn} | 0.05...3 A 3.5...8 A 9...16 A | 6 x I_N 8 x I_N 120 A | |
| Interrupting capacity (UL 1077) | I_N 0.05...16 A 0.05...16 A | U_N DC 50 V AC 250 V | 2,000 A 2,000 A |
| Degree of protection (IEC 60529/DIN 40 050) | operating area IP40 terminal area IP00 | | |
| Vibration | 10 g (57-500 Hz) ± 0.76 mm (10-57 Hz), to IEC 60068-2-6, test Fc, 10 frequency cycles/axis | | |
| Shock | 25 g (11 ms) to IEC 60068-2-27, test Ea | | |
| Corrosion | 96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka | | |
| Humidity | 240 hours at 95 % RH to IEC 60068-2-78, test Cab | | |
| Mass | approx. 13 g | | |

Approvals

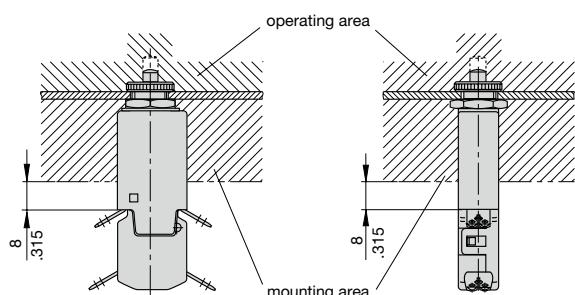
| Authority | Standard | Voltage ratings | Current ratings |
|------------------|-----------------|------------------------|--------------------------------|
| VDE | IEC/EN 60934 | AC 240 V DC 48 V | 0.05 A...16 A 0.05 A...16 A |
| UL | UL 1077 | AC 250 V DC 50 V | 0.05 A...16 A 0.05 A...16 A |
| CSA | C22.2 No 235 | AC 250 V DC 50 V | 0.05 A...16 A 0.05 A...16 A |

Dimensions

1140-G15...

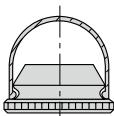


Installation drawing

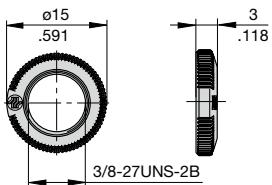


Accessories

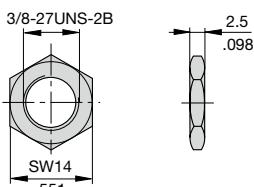
Water splash cover/knurled nut assembly, transparent
X 201 285 01 (IP64)



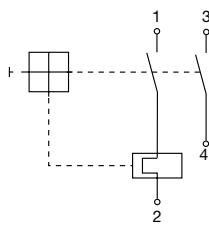
Knurled nut 3/8"
plastic (standard)
Y 307 117 02



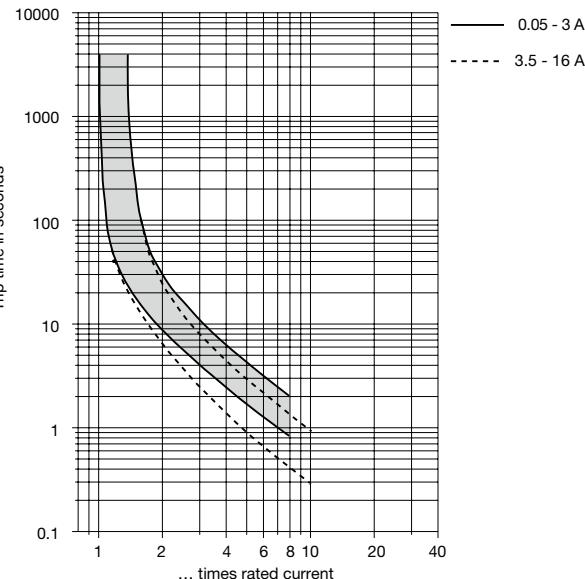
Hex nut 3/8"
nickel-plated brass
Y 300 192 01



Internal connection diagram



Typical time/current characteristics at +23 °C/+73.4 °F



The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section Technical information.

| Ambient temperature °F °C | -4 -20 | +14 -10 | +32 0 | +73.4 +23 | +104 +40 | +122 +50 | +140 +60 |
|------------------------------|-----------|------------|----------|--------------|-------------|-------------|-------------|
| Derating factor | 0.76 | 0.84 | 0.92 | 1 | 1.08 | 1.16 | 1.24 |

This is a metric design and millimeter dimensions take precedence ($\frac{\text{mm}}{\text{inch}}$)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.