

Description

Single pole miniaturised magnetic circuit breakers with unique high-speed operating mechanism and push/pull on/off manual actuation. Fitted with electrically separate excitation and switching circuits, and one pair of auxiliary contacts which close when the main circuit is open. Also suitable for impulse operation. Designed for printed circuit board mounting. Low temperature sensitivity.

Typical applications

Printed circuit boards and components, safety and control systems.

Ordering information

| Type No. | |
|---------------------------------------|----------------------------------|
| 808 | fast-acting |
| | Manual release (optional) |
| | H manual release facility |
| | Current ratings |
| | 0.01...5 A |
| 808 - H - 1 A ordering example | |

Standard current ratings and typical internal resistance values

| Current rating (A) | Internal resistance (Ω) | Current rating (A) | Internal resistance (Ω) |
|--------------------|-------------------------|--------------------|-------------------------|
| 0.01 | 625 | 0.8 | 0.096 |
| 0.02 | 170 | 0.9 | 0.085 |
| 0.03 | 77 | 1 | 0.073 |
| 0.04 | 47 | 1.2 | 0.050 |
| 0.05 | 29.2 | 1.5 | 0.031 |
| 0.08 | 10.3 | 2 | ≤ 0.02 |
| 0.1 | 5.6 | 2.5 | ≤ 0.02 |
| 0.2 | 1.65 | 3 | ≤ 0.02 |
| 0.3 | 0.89 | 3.25 | ≤ 0.02 |
| 0.4 | 0.39 | 4 | ≤ 0.02 |
| 0.5 | 0.28 | 4.5 | ≤ 0.02 |
| 0.6 | 0.198 | 5 | ≤ 0.02 |
| 0.7 | 0.143 | | |

Approvals

| Authority | Voltage ratings | Current ratings |
|-----------|---------------------|--------------------------|
| CSA | AC 120 V; DC 60 V | 0.01...5 A |
| UL | DC 60 V AC 120 V | 0.01...8 A 0.01...5 A |



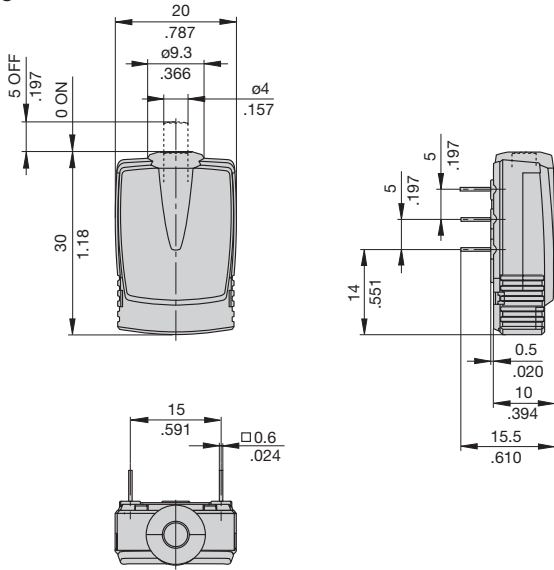
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Technical data

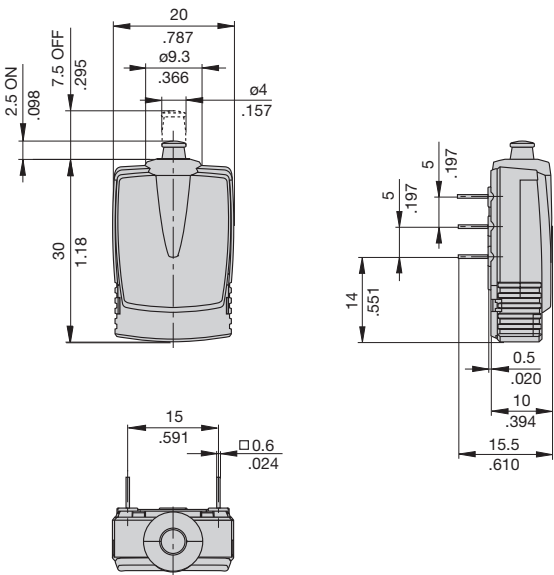
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|---|--|-----------------------|
| Voltage rating | DC 24 V (higher voltages to special order) UL: AC 120 V; DC 60 V | |
| Current ratings | 0.01...5 A (higher current ratings to special order) | |
| Max. continuous load excitation circuit (2-3) | 2.65 × I _N | |
| Max. continuous load switching circuit 6-7 auxiliary circuit 4-5 | 5 A | |
| Typical life | 6,000 operations at 5 A for switching circuit | |
| Ambient temperature | -30...+70 °C (-22...+158 °F) | |
| Insulation co-ordination (IEC 60664-1) | rated impulse withstand voltage 1.5 kV | pollution degree 2 |
| Dielectric strength (UL 1077) | test voltage AC 1,240 V | |
| operating area excitation to switching circuit | AC 1,240 V | |
| excitation to auxiliary circuit | AC 1,240 V | |
| Insulation resistance | > 100 MΩ (DC 500 V) | |
| Interrupting capacity (o-o-o) | 100 A | |
| Interrupting capacity (UL 1077) | 2,000 A AC 120 V 1,000 A DC 60 V | |
| Degree of protection (IEC 60529/DIN 40050) | operating area IP30 terminal area IP00 | |
| Vibration | 3 g (57-500 Hz), ±0.23 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 | 48 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. 10 g | |

Dimensions

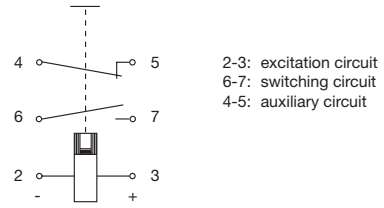
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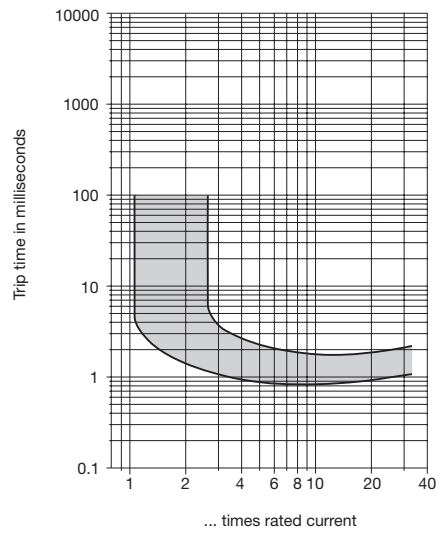
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Internal connection diagram



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



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.