

# E-T-A® Magnetic Overcurrent Circuit Breaker 808-...

## 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 ...8 A
808 - H - 1 A	ordering example

Packaging quantity: 250 pcs

## Standard current ratings and typical internal resistance values

Current rating (A)	Internal resistance ( $\Omega$ )	Current rating (A)	Internal resistance ( $\Omega$ )
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	$\leq 0.02$
0.1	5.6	2.5	$\leq 0.02$
0.2	1.65	3	$\leq 0.02$
0.3	0.89	3.25	$\leq 0.02$
0.4	0.39	4	$\leq 0.02$
0.5	0.28	4.5	$\leq 0.02$
0.6	0.198	5	$\leq 0.02$
0.7	0.143	8	$\leq 0.02$

## 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



808

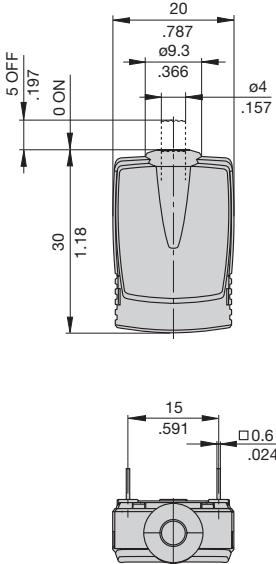
## Technical data

Voltage rating	DC 24 V UL, CSA: AC 120 V, DC 60 V	
Current ratings	0.01...8 A	
Max. continuous load excitation circuit (2-3)	2.65 x $I_N$	
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 and 60664A)	Rated impulse withstand voltage 1.5 kV	Pollution degree 2
Dielectric strength (IEC 60664 and 60664A) excitation to switching circuit excitation to auxiliary circuit	Test voltage AC 840 V AC 1,680 V	
Insulation resistance	> 100 MΩ (DC 500 V)	
Interrupting capacity (o-o-o)	100 A	
Interrupting capacity (UL 1077)	1,000 A AC 120 V 200 A DC 60 V	
Degree of protection (IEC 60529/DIN 40050)	operating area IP 30 terminal area IP 00	
Vibration	3 g (57-500 Hz), $\pm 0.23$ 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	96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka	
Humidity	240 hours at 95 % RH to IEC 60068-2-3, test Ca	
Mass	approx. 10 g	

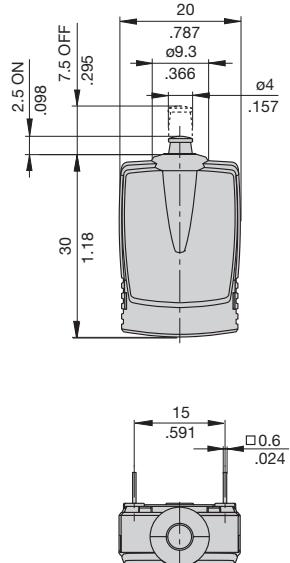
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## Dimensions

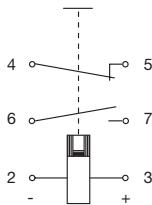
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808-H

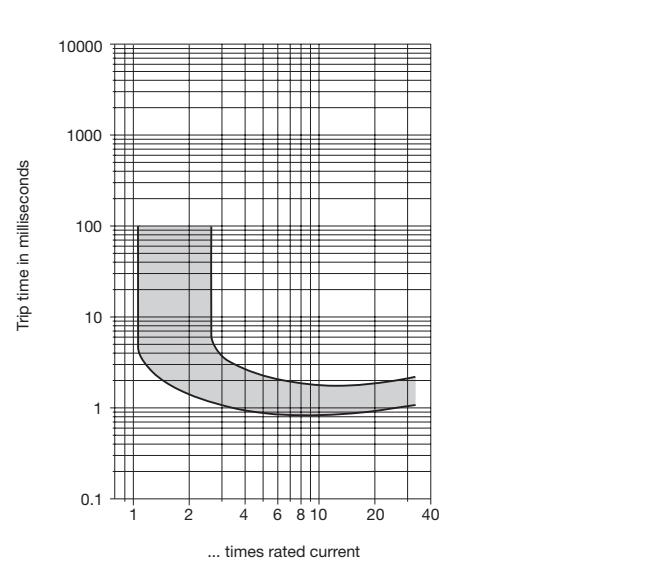


## Internal connection diagram



2-3: excitation circuit  
6-7: switching circuit  
4-5: auxiliary circuit

## 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.