

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
H	manual release facility
	Current ratings
	0.01...5 A
808 - H - 5 A ordering example	

Preferred types

Preferred types	Standard current ratings (A)										
	0.02	0.05	0.1	0.3	0.4	0.5	0.6	1	2	3	5
808-H-	x	x	x	x	x	x	x	x	x	x	x

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 12 V	0.01...5 A 0.01...5 A



808

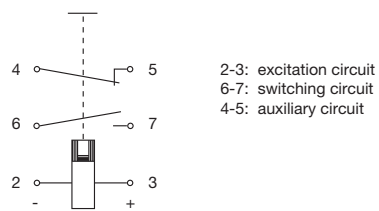
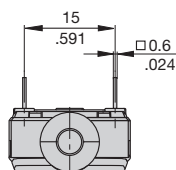
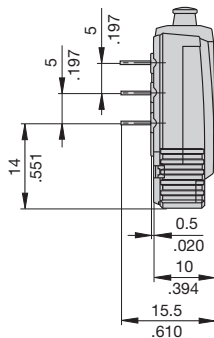
Technical data

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 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 60664-1)	rated impulse withstand voltage 1.5 kV	pollution degree 2
Dielectric strength (UL 1077) operating area excitation to switching circuit excitation to auxiliary circuit	test voltage AC 1,240 V AC 1,240 V 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	

Internal connection diagram

Technical drawing of a 1/2-20 UNF-2A x 1.18 inch female threaded plug. The drawing shows the front and side views of the plug. Key dimensions are labeled:

- Overall length: 1.18
- Threaded section length: 0.295
- Threaded section outer diameter: $\phi 0.93$
- Threaded section inner diameter: $\phi 0.875$
- Threaded section pitch diameter: $\phi 0.866$
- Threaded section minor diameter: $\phi 0.857$
- Threaded section major diameter: $\phi 0.93$
- Threaded section pitch: 20
- Threaded section tolerance: 2.5 ON
- Threaded section tolerance: 7.5 OFF
- Threaded section tolerance: 0.098
- Threaded section tolerance: 0.157



A graph showing the trip time in milliseconds (Y-axis, logarithmic scale from 0.1 to 10,000) versus the times rated current (X-axis, linear scale from 1 to 40). The graph illustrates the inverse relationship between trip time and current magnitude. A shaded region represents the range of trip times, bounded by two curves. The upper curve starts at 100 ms for 1x current and drops to about 2 ms at 30x current. The lower curve starts at 10 ms for 1x current and drops to about 1 ms at 30x current.

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.