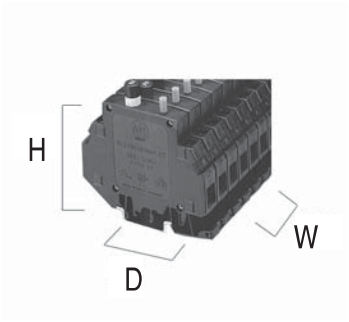
1492-GH/-GS Specifications

	1492-GH	1492-GS		
	1-Pole	1-Pole	2-Pole	3-Pole
UL/CSA	200 A (Not to exceed 100 x rated A)	0.2…16 A	5 kA C1 (2 kA C1 for 65V DC — 1-pole)	
		18…25 A	2 kA C1	
IEC/EN 60934 (CBE)	—	0.2…5 A	400 A	
		6…25 A	800 A	
Maximum voltage ratings	250V AC 50/60 Hz 65V DC	480Y/277V AC 50/60 Hz 65V DC		
Temperature range	-40...+149 °F (-40...+65 °C) non-condensing			
Operating life	6000 operations @ rated current			
Housing material	Glass-filled Polyamide 6.6			
Shock	25 G, 11 ms duration			
Vibration	5 G (10...500 Hz)			
Dielectric strength	1500V AC	1600V AC		
Insulation resistance	100 M Ω @ 500V DC			
Terminal type	Tubular screw with self-lifting box lug			
Wire size	#22...10 AWG			
Recommended wire strip length	0.44 in. (11.2 mm)	Main terminal — 0.51 in. (13 mm) aux terminal — 0.41 in. (10.4 mm)		
Terminal torque	1.3...1.4 N•m (10...12 lb•in)	0.656 N•m (5 lb•in)		
N.O. auxiliary contact rating	—	1.0 A AC or DC (resistive load)		

Approximate Dimensions

Note: Dimensions are shown in inches (mm). Dimensions are not intended for manufacturing purposes.



	1492-GH	1492-GS		
	1-Pole	1-Pole	2-Pole	3-Pole
Height	3.15 in. (80 mm)	3.15 in. (80 mm)		
Depth	2.89 in. (73.4 mm)	3.48 in. (88.5 mm)		
Width	0.49 in. (12.4 mm)	0.49 in. (12.5 mm)	0.98 in. (25 mm)	1.47 in. (37.5 mm)

Application Information

UL 1077, CSA C22.2 #235

In North America, miniature circuit breakers are recognized as supplementary protectors and are intended for use as overcurrent protection within an appliance or other electrical equipment where branch circuit protection is already provided or not required. Internationally, these products are rated to IEC standards as circuit breakers for equipment (CBE).

Selection Information

High-density supplementary protector/miniature circuit breaker applications include, but are not limited to, the protection of test equipment, control instrumentation, solenoids, and power supplies. The wide range of current values and the use of a thermal magnetic trip system allows for a variety of applications where a very accurate and compact breaker is required.

To select a miniature circuit breaker, use the following procedure:

1. Determine the inrush correction factor from the following table.

Inrush Ratio Correction Table

Inrush Ratio	1:1 to 1:4	1:5	1:6	1:7	1:8
Factor	1.3	1.4	1.5	1.6	1.7

Note: For resistive loads use an inrush correction factor of 1.0.

2. Determine the temperature correction factor from the following table.

Ambient Temperature Correction Table

Ambient Temperature	70 °F (21.1 °C)	100 °F (37.8 °C)	120 °F (48.9 °C)	140 °F (60 °C)	160 °F (71.1 °C)	180 °F (82.2 °C)	200 °F (93.3 °C)
Factor	1.0	1.1	1.2	1.3	1.4	1.5	1.6

3. Determine the sealed current of the load being protected.

4. Multiply the sealed current by the two correction factors and select the closest higher ampere rating.

Example — For a solenoid with sealed current of 0.5 A, an inrush ratio of 1:8, and an ambient temperature of +110 °F, (0.5 x 1.7 x 1.15 = 0.9775), select the 1.0 A miniature circuit breaker. Tripping time of the miniature circuit breaker is determined from the table below. Divide the miniature circuit breaker value by the temperature correction factor from the Ambient Temperature Correction Table to determine the actual rated current referenced in the table below.

Tripping Times in Seconds at 70 °F (21.1 °C)

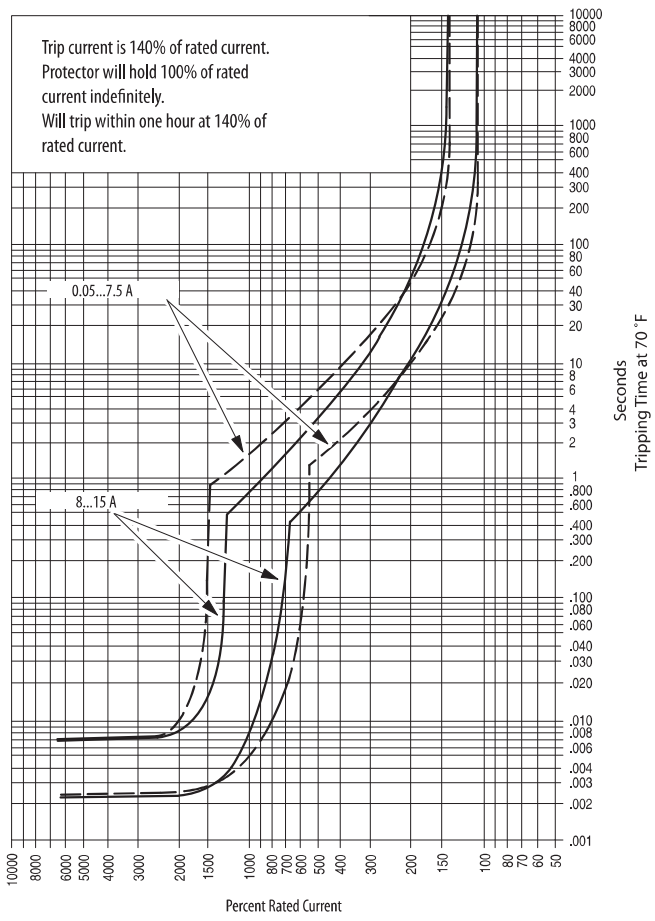
Percent Rated Current	100%	200%	300%	400%	500%	600%	1000%	2000% Greater
Tripping Times (Seconds)	No Trip	10…40	3…18	1.5…9	0.8…6	0.003 …4	0.009 …2	Max. 0.02

Note: When several breakers are rail mounted adjacent to each other, the no-trip current will be 80% of rated current at 70 °F (21.1 °C).

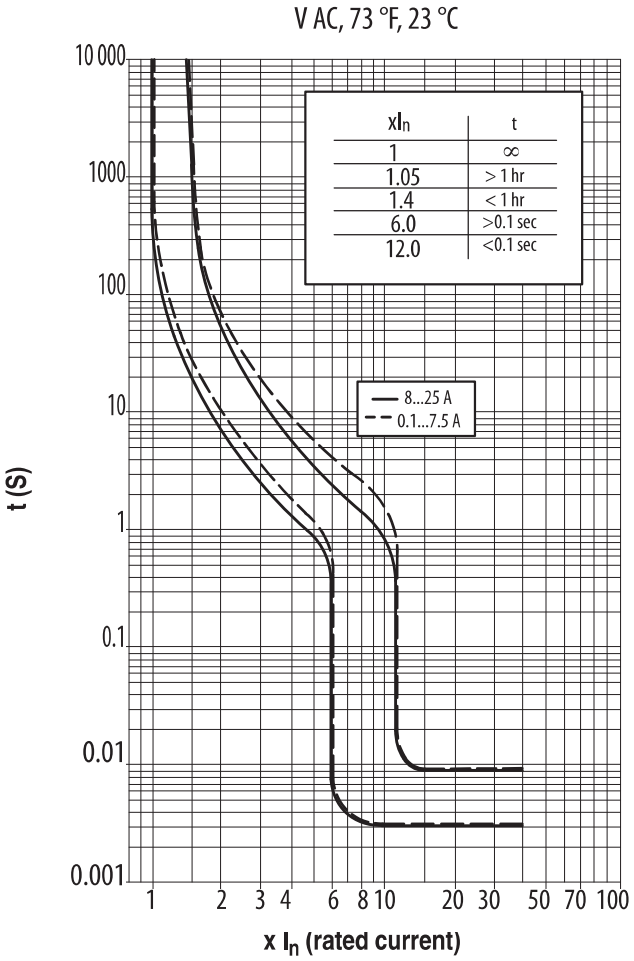
Using selection tables, select Bulletin 1492-GH/GS that allows full load current nearest without exceeding application current. Also, check that inrush current is less than trip range of 6…10 *I*n.

Tripping Characteristics

Time Current Curve –1492-GH



Time Current Curve –1492-GS



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