

Catalog Number Explanation

Examples that are given in this section are not intended to be used for product selection. Not all combinations generate a valid catalog number. Use ProposalWorks™ software to configure the PC. ProposalWorks software is available from rok.auto/systemtools.

1492-GH Supplementary Protectors

1492 - **GH** **002**
a b

a		b	
Poles		Rated Current (I_n)	
Code	Description	Code	Current [A]
GH	1-Pole	002	0.2
		005	0.5
		008	0.8
		010	1
		012	1.2
		015	1.5
		020	2
		025	2.5
		030	3
		040	4
		050	5
		070	7
		100	10
		150	15

1492-GS Supplementary Protectors

1492 - **GS1G** **002** **H1**
a b c

a		b		c	
Poles		Rated Current (I_n)		Auxiliary Contact	
Code	Description	Code	Current [A]	Code	Description
GS1G	1-Pole	002	0.2		Can be left blank
GS2G	2-Pole	005	0.5		
GS3G	3-Pole	008	0.8	H1	With 1 N.O. integrated auxiliary contact (only 1 may be added per device)
		010	1		
		012	1.2		
		015	1.5		
		020	2		
		025	2.5		
		030	3		
		040	4		
		050	5		
		060	6		
		070	7		
		080	8		
		100	10		
		120	12		
		150	15		
		160	16		
		200	20		
		250	25		

Product Selection

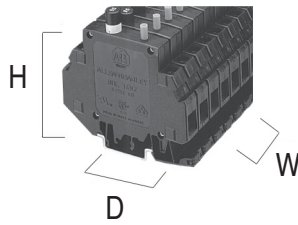
Amperage [A]	1492-GH	1492-GS		
	1-Pole	1-Pole	2-Pole	3-Pole
	Cat. No.	Cat. No.	Cat. No.	Cat. No.
0.2	1492-GH002	1492-GS1G002	1492-GS2G002	1492-GS3G002
0.5	1492-GH005	1492-GS1G005	1492-GS2G005	1492-GS3G005
0.8	1492-GH008	1492-GS1G008	1492-GS2G008	1492-GS3G008
1	1492-GH010	1492-GS1G010	1492-GS2G010	1492-GS3G010
1.2	1492-GH012	—	—	—
1.5	1492-GH015	1492-GS1G015	1492-GS2G015	1492-GS3G015
2	1492-GH020	1492-GS1G020	1492-GS2G020	1492-GS3G020
2.5	1492-GH025	1492-GS1G025	1492-GS2G025	1492-GS3G025
3	1492-GH030	1492-GS1G030	1492-GS2G030	1492-GS3G030
4	1492-GH040	1492-GS1G040	1492-GS2G040	1492-GS3G040
5	1492-GH050	1492-GS1G050	1492-GS2G050	1492-GS3G050
6	—	1492-GS1G060	1492-GS2G060	1492-GS3G060
7	1492-GH070	1492-GS1G070	1492-GS2G070	1492-GS3G070
8	—	1492-GS1G080	1492-GS2G080	1492-GS3G080
10	1492-GH100	1492-GS1G100	1492-GS2G100	1492-GS3G100
12	—	1492-GS1G120	1492-GS2G120	1492-GS3G120
15	1492-GH150	1492-GS1G150	1492-GS2G150	1492-GS3G150
16	—	1492-GS1G160	1492-GS2G160	1492-GS3G160
20	—	1492-GS1G200	1492-GS2G200	1492-GS3G200
25	—	1492-GS1G250	1492-GS2G250	1492-GS3G250
Integrated Auxiliary Contact	—	Add suffix — H1 for integrated N.O. auxiliary contact (only one may be added per device)		

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 18...25 A	5 kA C1 (2 kA C1 for 65V DC – 1-pole) 2 kA C1	
IEC/EN 60934 (CBE)	—	0.2...5 A 6...25 A	400 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	6,000 operations @ rated current			
Housing material	Glass-filled Polyamide 6.6			
Shock	25 G, 11 ms duration			
Vibration	5 G (10...500 Hz)			
Dielectric strength	1,500V AC	1,600V 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

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. (88.4 mm)		
Width	0.49 in. (12.4 mm)	0.49 in. (12.4 mm)	0.98 in. (24.9 mm)	1.47 in. (37.3 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/minature 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
Correction Factor	1:3	1:4	1:5	1:6	1:7

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

When several breakers are rail mounted adjacent to each other, the no-trip current is 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



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

Figure 144 - Time Current Curve -1492-GH

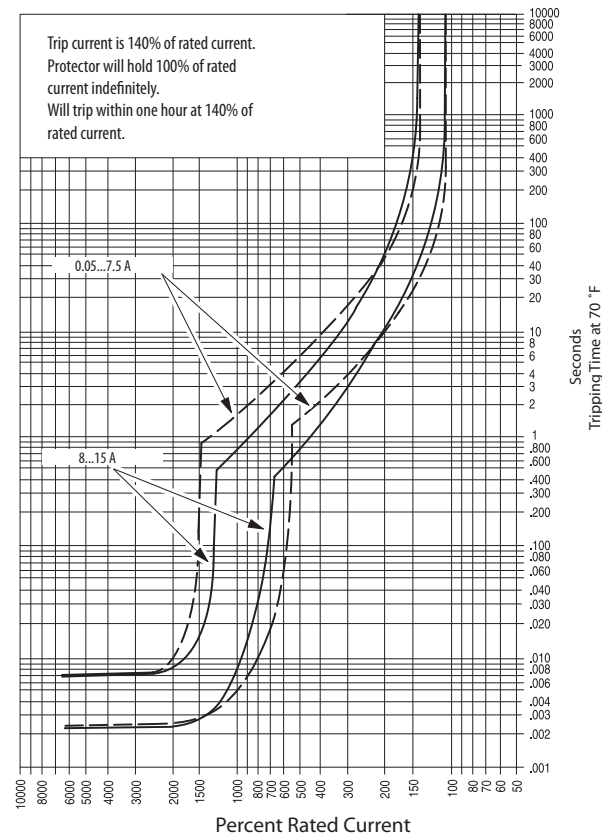


Figure 145 - Time Current Curve -1492-GS

