


Product Details and Certifications

Cross Reference RA Part Number:

 **Product: 140G-R12I3-E12**

Description: 140G Molded Case Circuit Breaker

Note: This product is an assembly of the following components:

1. Cat. 140G-R12I3-E20, Molded Case Circuit Breaker, R frame
2. Cat. 140G-NRP-E12, 1200A Rating Plug



Representative Photo Only (actual product may vary based on configuration selections)

SYSTEM DATA

Supply Voltage	480V 50/60Hz / 600V 50/60 Hz
Interrupt Rating[kA]	125 kA at 480V / 100 kA at 600V

CIRCUIT BREAKER DATA

Bulletin Number	140G - Molded Case Circuit Breaker , Bulletin 140G/140MG
Number of Poles	3 Poles
Frame Size	R frame
Frame Current Range	80% Rated
Protection	Electronic LSIG - Long & Short Time, High Instantaneous, Ground Fault
Rated Current(A)	2000 A
Rating Plug	1200 A Rating Plug

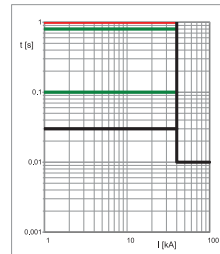
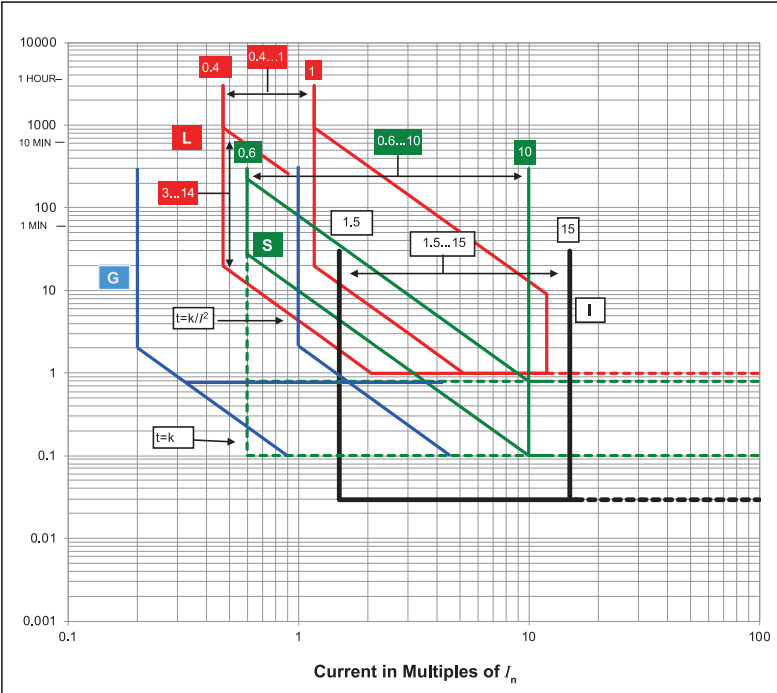
MANUFACTURING

Assembly	Factory Assembled
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Bulletin 140G-R

Available Sensors (I_n): 2000 A, 2500 A, 3000 A

Electronic Trip Unit. Long Delay Response, Short Delay with I^2t Response, and Instantaneous Curve



Protection	Disable	Trip Threshold	Trip Time	Trip Threshold Tolerance ⁽²⁾	Trip Time Tolerance ⁽²⁾
L ($t=k/I^2$)		$I_1=0.4-0.425-0.45-0.475-0.5\dots-1 \times I_n$	$t_1=3-12-24-36-48-72-108-144 \text{ s}^{(1)} @ 3I_1$	Release between 1.05 and $1.2 \times I_1$	$\pm 10\% I_f \leq 6 \times I_n$
S ($t=k$)	✓	$I_2=0.6-0.8-1.2-1.8-2.4-3-3.6-4.2-5-5.8-6.6-7.4-8.2-9-10 \times I_n$	with $I > I_2$ $t_2=0.1-0.2-0.3-0.4-0.5-0.6-0.7-0.8 \text{ s}$	$\pm 7\% I_f \leq 6 \times I_n$ $\pm 10\% I_f > 6 \times I_n$	The best of: $\pm 10\%$ or $\pm 40 \text{ ms}$
S ($t=k/I^2$)	✓	$I_2=0.6-0.8-1.2-1.8-2.4-3-3.6-4.2-5-5.8-6.6-7.4-8.2-9-10 \times I_n$	$t_2=0.1-0.2-0.3-0.4-0.5-0.6-0.7-0.8 \text{ s}$ @ $10 I_n$	$\pm 7\% I_f \leq 6 \times I_n$ $\pm 10\% I_f > 6 \times I_n$	$\pm 15\% I_f \leq 6 \times I_n$ $\pm 20\% I_f > 6 \times I_n$
I ($t=k$)	✓	$I_3=1.5-2-3-4-5-6-7-8-9-10-11-12-13-14-15 \times I_n$	$\leq 30 \text{ ms}$	$\pm 10\%$	
G ($t=k$)	✓	$I_4=0.2-0.3-0.4-0.6-0.8-0.9-1 \times I_n$	with $I > I_4$ $t_4=0.1-0.2-0.4-0.8 \text{ s}$	$\pm 7\%$	The best of: $\pm 10\%$ or $\pm 40 \text{ ms}$
G ($t=k/I^2$)	✓	$I_4=0.2-0.3-0.4-0.6-0.8-0.9-1 \times I_n$	$t_4=0.1 @ 4.47 I_4$ $t_4=0.4 @ 2.24 I_4$ $t_4=0.2 @ 3.16 I_4$ $t_4=0.8 @ 1.58 I_4$	$\pm 7\%$	$\pm 15\%$

Notes:

- The minimum value of this trip is 1s regardless of curve type (self-protection)
- These tolerances apply under the following conditions:
 - self-powered relay at full power (without start-up)
 - two-phase or three-phase power supply
 - presence of auxiliary power supply
 - preset trip time $\geq 100 \text{ ms}$
- Curve accuracy applies from $-20 \text{ }^\circ\text{C}$ to $+55 \text{ }^\circ\text{C}$ ($-4 \text{ }^\circ\text{F}$ to $+131 \text{ }^\circ\text{F}$) ambient temperature. For possible continuous ampere derating for ambient temperature above $40 \text{ }^\circ\text{C}$ ($104 \text{ }^\circ\text{F}$), consult your local Rockwell Automation sales office or Allen-Bradley distributor.
- The right portion of the curve is determined by the interrupting rating of the circuit breaker.
- Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
- For high fault current levels an additional fixed instantaneous hardware override is provided at 40 kA.

For all cases not covered by the above assumptions, the following tolerance values apply:

Protection	Trip Threshold	Trip Time
L	$1.05 \leq I_f \leq 1.25$	$\pm 20\%$
S	$\pm 10\%$	$\pm 20\%$
I	$\pm 15\%$	$\leq 60 \text{ ms}$
G	$\pm 10\%$	$\pm 20\%$
Others	$\pm 20\%$	