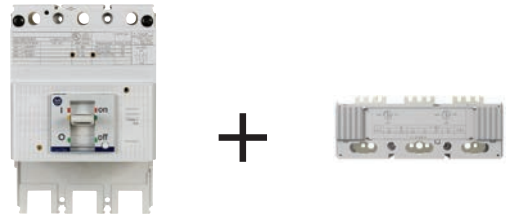


Product Details and Certifications

Cross Reference RA Part Number:

 **Product: 140G-N6I3-D60**

Description: 140G Molded Case Circuit Breaker



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

1. Cat. 140G-N6I3-E12, Molded Case Circuit Breaker, N frame
2. Cat. 140G-NRP-D60, 600A Rating Plug

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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]	65 kA at 480V / 50 kA at 600V

CIRCUIT BREAKER DATA

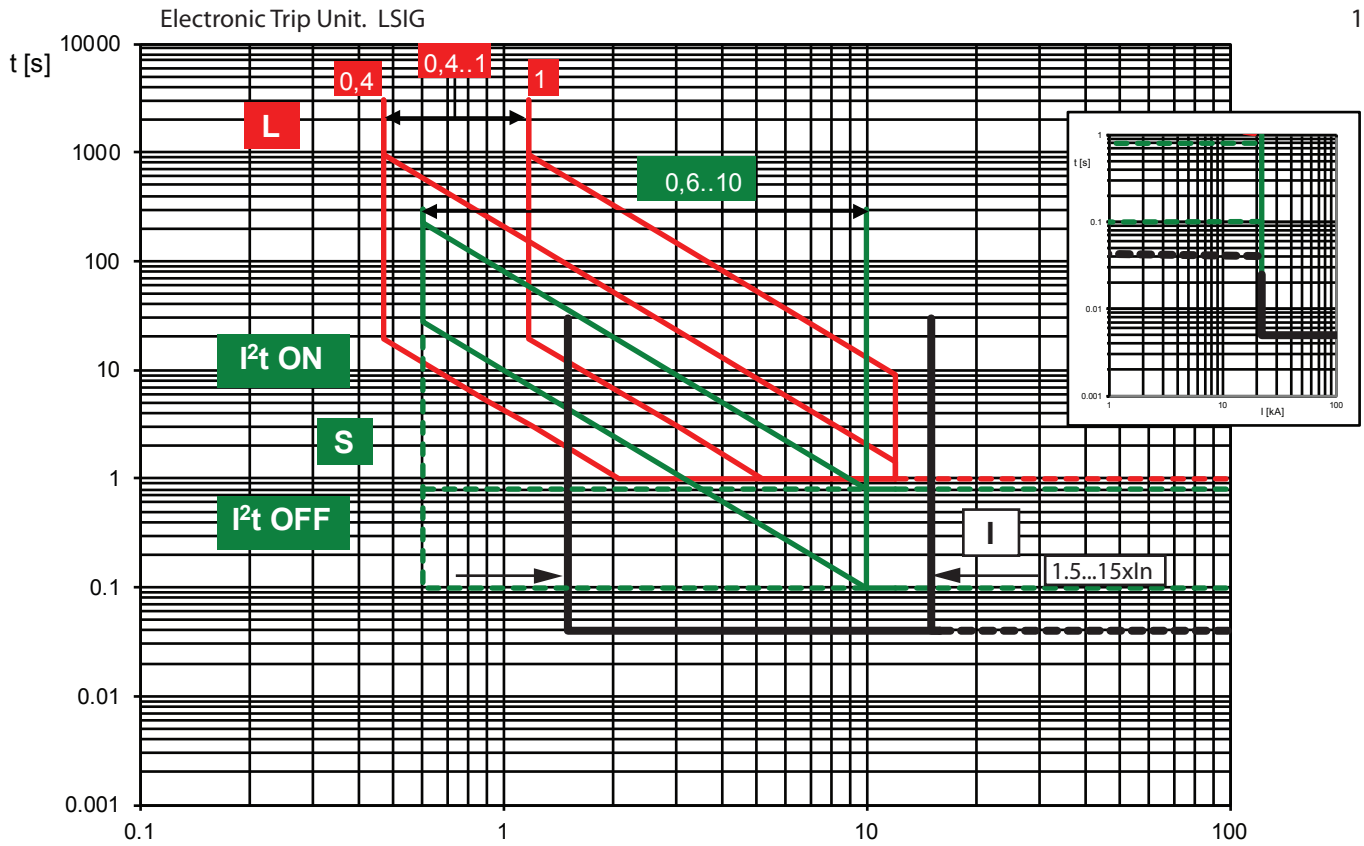
Bulletin Number	140G - Molded Case Circuit Breaker , Bulletin 140G/140MG
Number of Poles	3 Poles
Frame Size	N frame
Frame Current Range	80% Rated
Protection	Electronic LSIG - Long & Short Time, High Instantaneous, Ground Fault
Rated Current(A)	1200 A
Rating Plug	600 A Rating Plug

MANUFACTURING

Assembly	Factory Assembled
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Time-Current Curves for Bulletin 140G-N (-NS) Molded Case Circuit Breaker

Available Rating Plugs: (In):
400; 600; 800; 1000; 1200;
1250A (IEC)



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

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)
 - presence of auxiliary power supply
 - two-phase or three-phase power supply
 - preset trip time $\geq 100 \text{ ms}$
- Curve accuracy applies from -20 C to $+55 \text{ C}$ ambient.
For possible continuous ampere derating for ambient above 40 C , consult 140G-TD100.
- 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 22 kA .

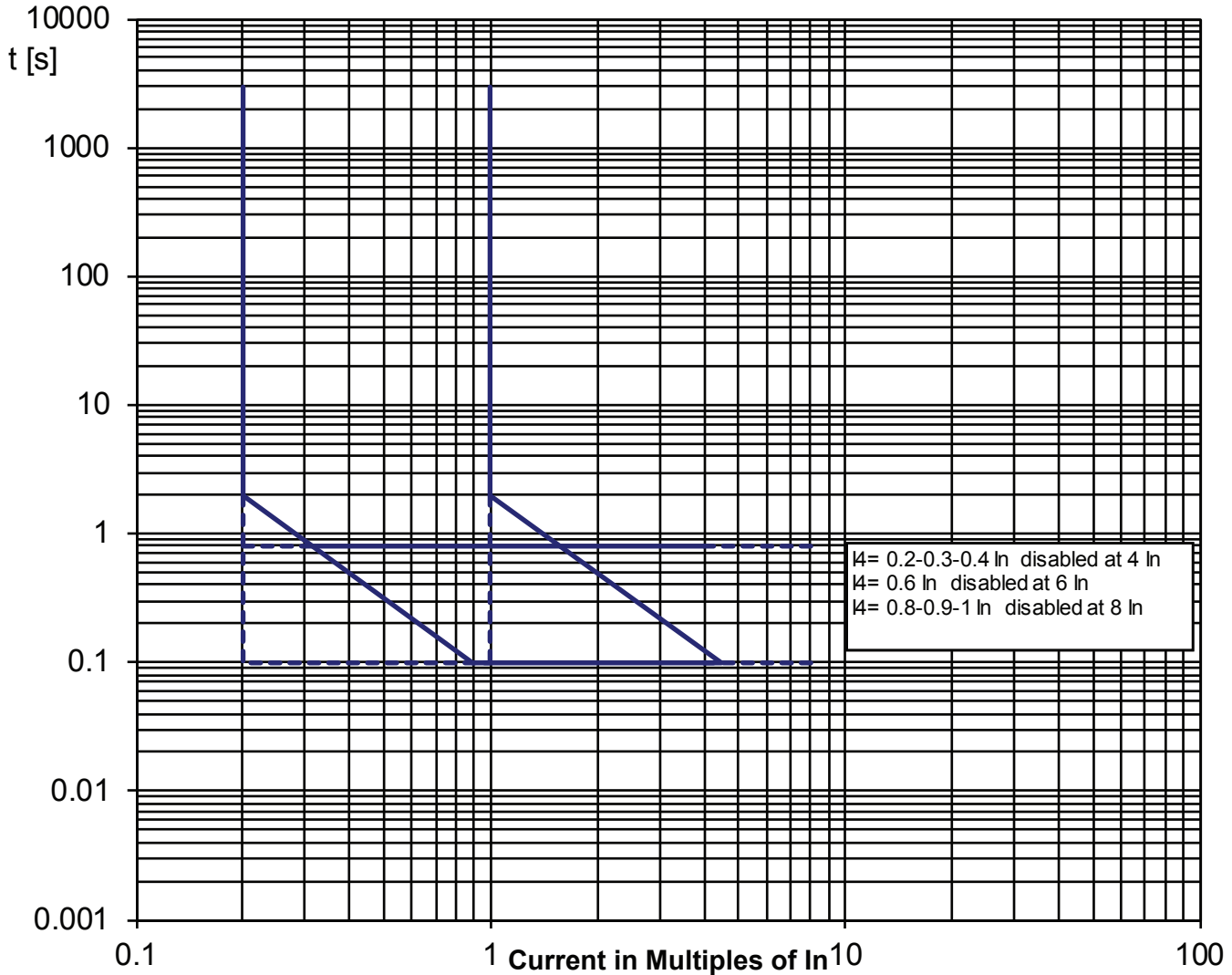
For all cases not covered by the above assumptions, the following tolerance values apply:

Protection	Trip Threshold	Trip Time
L	$1.05 \leq I_1 \leq 1.25$	$\pm 20\%$
S	$\pm 10\%$	$\pm 20\%$
I	$\pm 15\%$	$\leq 60 \text{ ms}$
Others	$\pm 20\%$	



Time-Current Curves for Bulletin 140G-N (-NS) Molded Case Circuit Breaker

Ground Fault Protection Curve for LSIG MCCBs



Protection	Disa ble	Trip Threshold	Trip Time	Trip Threshold Tolerance	Trip Time Tolerance
G (t=k)	✓	$I_4 = 0.2-0.3-0.4-0.6-0.8-0.9-1$ $\times I_n$	with $I > I_4$ $0.2-0.4-0.8$ s $t_4 = 0.1-$	$\pm 7\%$	The best of: $\pm 10\%$ or ± 40 ms
G (t=k/I ²)	✓	$I_4 = 0.2-0.3-0.4-0.6-0.8-0.9-1$ $\times I_n$	$t_4 = 0.1$ @ $4.47 I_4$ $t_4 = 0.2$ @ $3.16 I_4$ $t_4 = 0.8$ @ $1.58 I_4$ $t_4 = 0.4$ @ $2.24 I_4$	$\pm 7\%$	$\pm 15\%$

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

Protection	Trip Threshold	Trip Time
G	$\pm 10\%$	$\pm 20\%$
Others	$\pm 20\%$	