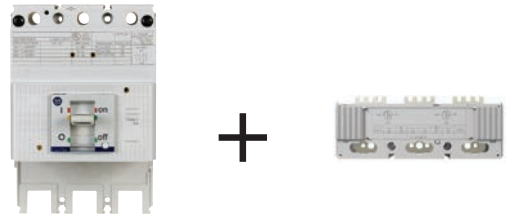


# Product Details and Certifications

## Cross Reference RA Part Number:

 **Product: 140G-N6I3-D40**

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-D40, 400A Rating Plug

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

### **SYSTEM DATA**

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Supply Voltage	480V 50/60Hz / 600V 50/60 Hz
Interrupt Rating[kA]	65 kA at 480V / 50 kA at 600V

### **CIRCUIT BREAKER DATA**

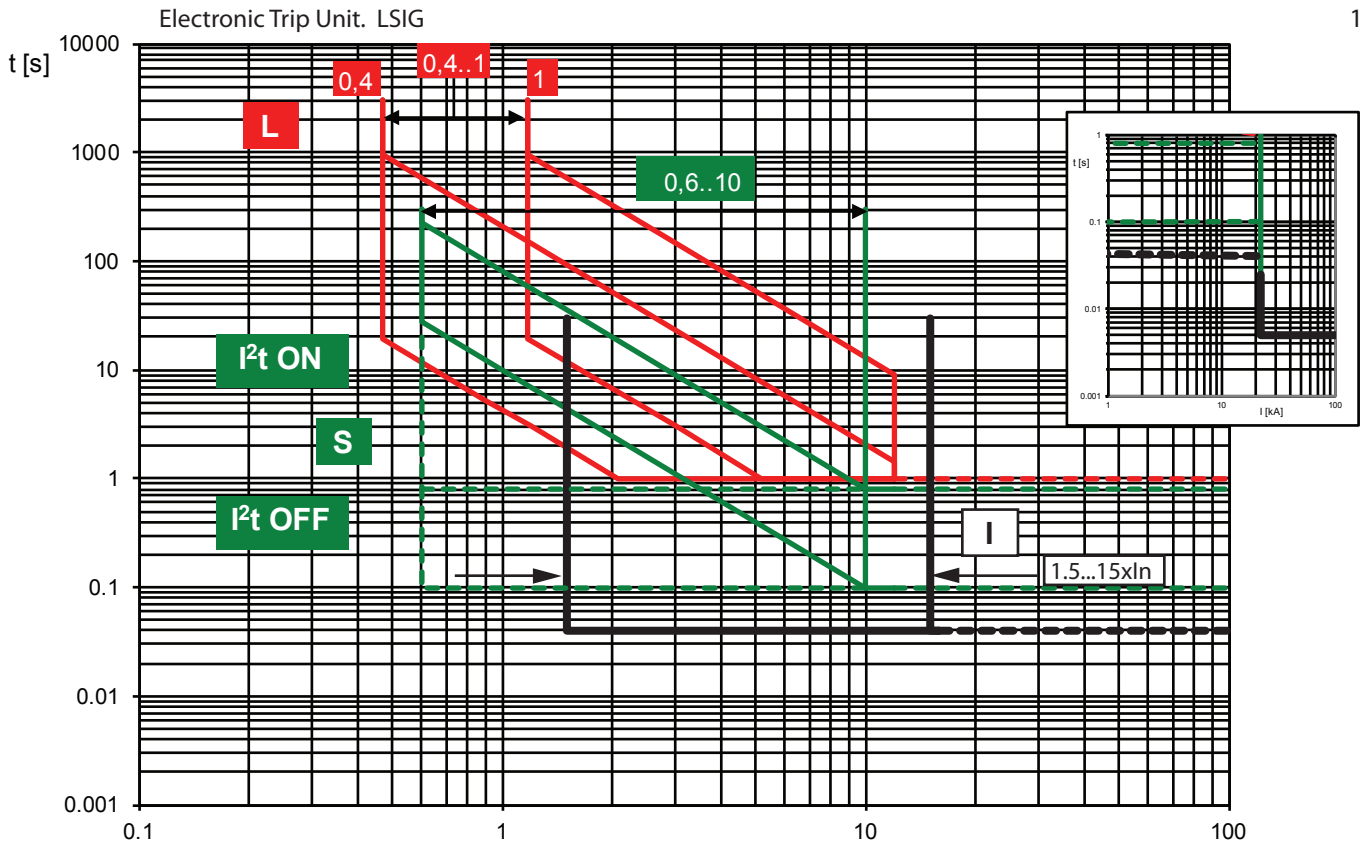
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Bulletin Number	140G - Molded Case Circuit Breaker , Bulletin 140G/140MG
Number of Poles	3 Poles
Frame Size	N frame
Frame Current Range	80% Rated
Protection	Electronic LSIG - Long & Short Time, High Instantaneous, Ground Fault
Rated Current(A)	1200 A
Rating Plug	400 A Rating Plug

### **MANUFACTURING**

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Assembly	Factory Assembled
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Protection	Disa ble	Trip Threshold	Trip Time	Trip Threshold Tolerance <sup>(2)</sup>	Trip Time Tolerance <sup>(2)</sup>
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  $-20 \text{ C}$  to  $+55 \text{ C}$  ambient.  
For possible continuous ampere derating for ambient above  $40 \text{ C}$ , 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  $22 \text{ kA}$ .

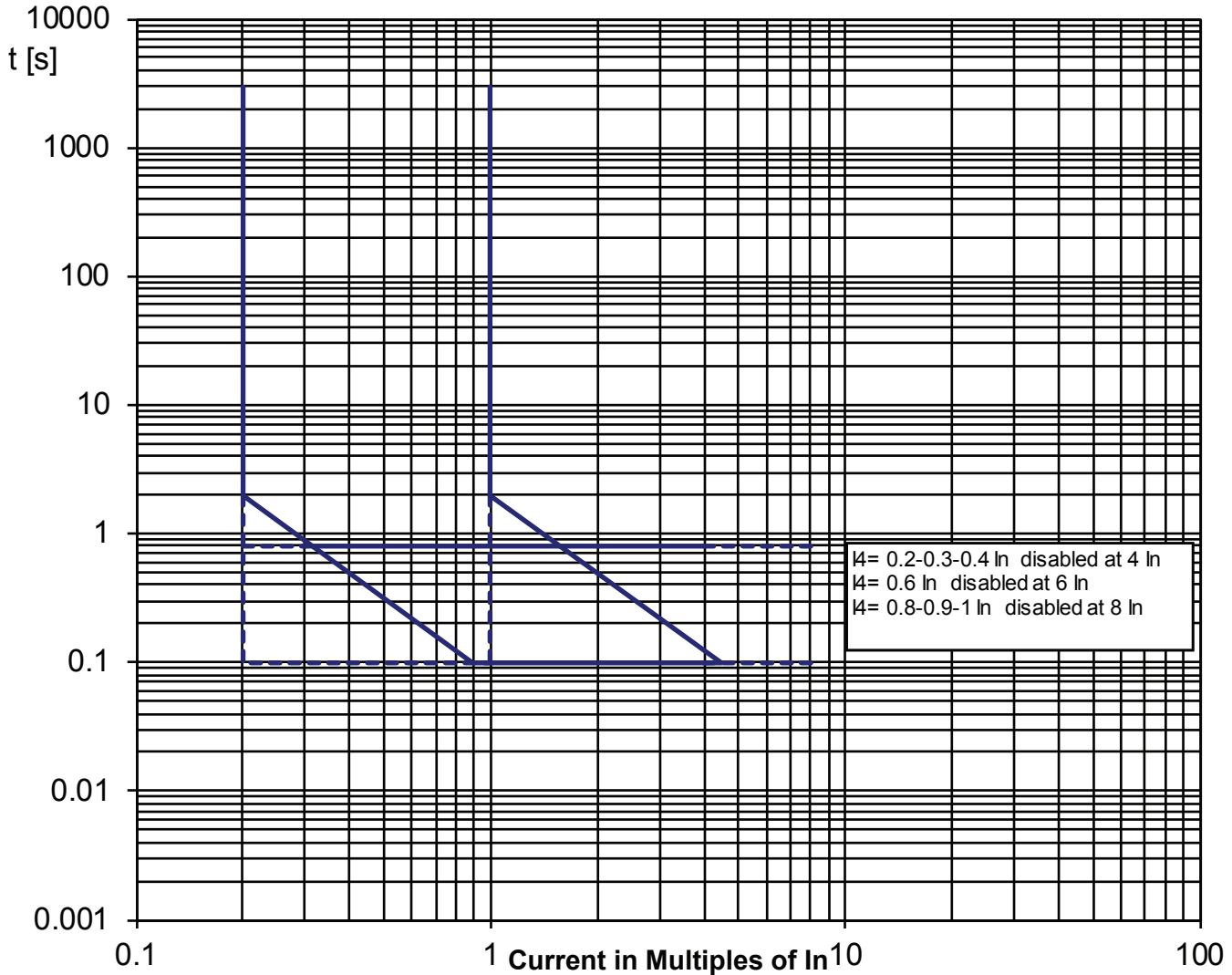
For all cases not covered by the above assumptions, the following tolerance values apply:

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 $\pm 40$ ms
G (t=k/I <sup>2</sup> )	✓	$I_4 = 0.2-0.3-0.4-0.6-0.8-0.9-1$ $\times I_n$	$t_4 = 0.1$ @ $4.47 I_4$ $t_4 = 0.2$ @ $3.16 I_4$ $t_4 = 0.8$ @ $1.58 I_4$  $t_4 = 0.4$ @ $2.24 I_4$	$\pm 7\%$	$\pm 15\%$

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	$\pm 20\%$	