

Product Details and Certifications

Cross Reference RA Part Number: PN-D13255

 **Product: 140G-NRP-D60**

Description: 600A Rating Plug

CIRCUIT BREAKER DATA

Bulletin Number	140G Molded Case Circuit Breaker Accessories
Number of Poles	3 Poles
Frame Size	N frame
Rated Current(A)	600 A

ACCESSORY ITEMS

Rating Plug	600A Rating Plug
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Maintenance Mode (MM)

Maintenance Mode (MM) offers a preset set of protection parameters. MM allows systems testing when the molded case circuit breaker is energized or ON. This feature is a manual adjustment on the molded case circuit breaker, via a DIP switch. The following table illustrates the preset values for Maintenance Mode.

Rated Current I_n [A]	L		S		I	G		MM
	$I_1=1 \times I_n$	$t_1=MAX$ sec.	$I_2=OFF$	$t_2=OFF$ sec.	$I_3=4 \times I_n$	$I_4=OFF$	$t_4=OFF$ sec.	$I_5=2.5 \times I_n$
1200	480...1200	3...144	—	—	—	—	—	1800...4800

Molded Case Switch — UL489‡

Rated Current I_n [A]	Magnetic Trip [A] I_m	Cat. No.	
		3 Poles	4 Poles
1200	20 000	140G-N6S3-E12	140G-N6S4-E12



‡ Does not provide overcurrent protection; may open above 20,000 A.

Trip Units, Electronic LSI (Long, Short, Instantaneous), LSIG (Long, Short, Instantaneous, Ground Fault), LSIG-MM (Long, Short, Instantaneous, Ground Fault - Maintenance Mode)§

Rated Current I_n [A]	Protection Type	Cat. No.
		3 Poles
1200	H (LSI)	140G-NTH-E12
1200	I (LSIG)	140G-NTI-E12
1200	K (LSIG-MM)	140G-NTK-E12



§ Supplied installed with each MCCB. Cat. Nos. listed are replacement parts.

Rating Plugs

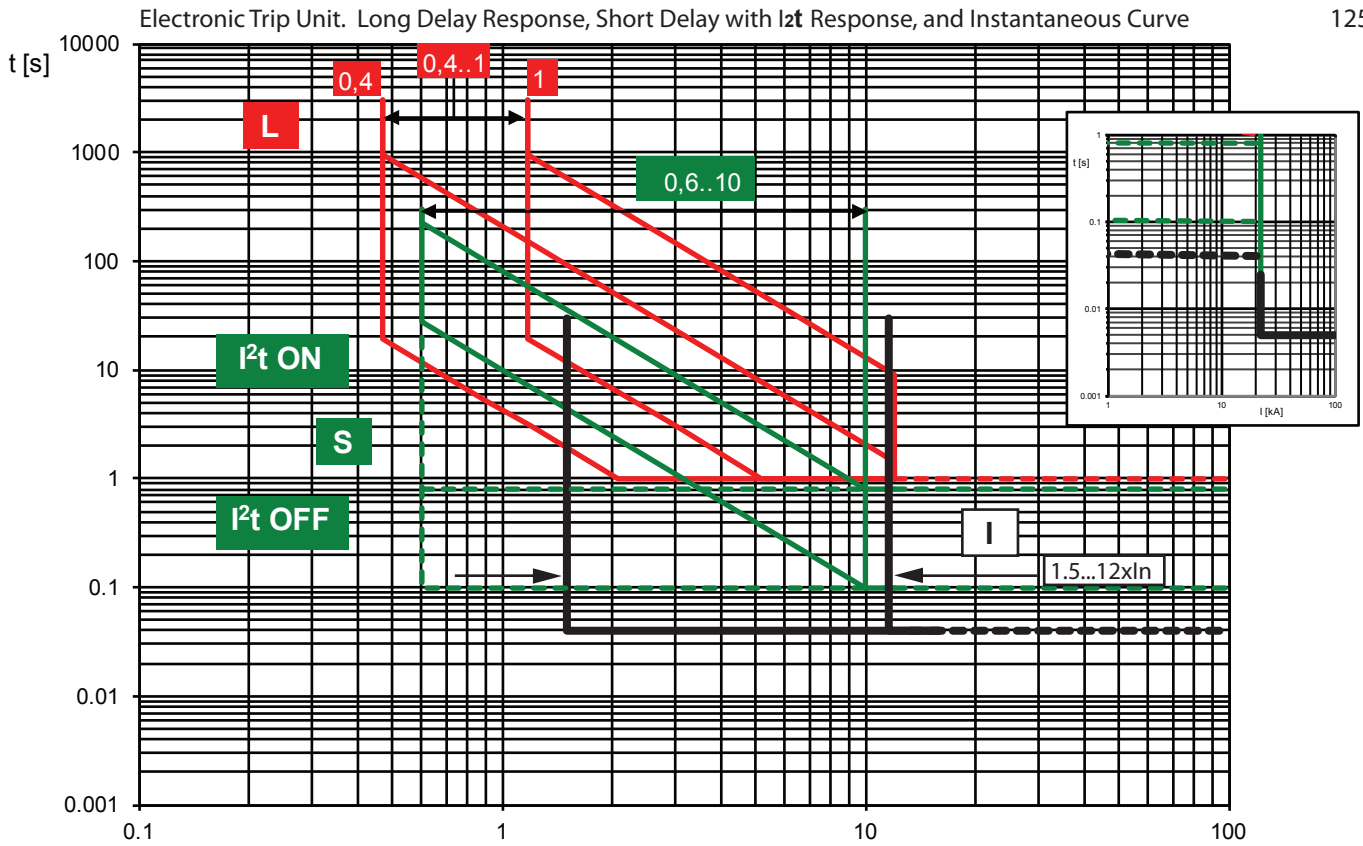
Rated Current I_n [A]	Cat. No.
400	140G-NRP-D40
600	140G-NRP-D60
800	140G-NRP-D80
1000	140G-NRP-E10
1200	140G-NRP-E12
1250 ★	140G-NRP-E125



★ IEC only.

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 ($t=k/I^2$)		$I_1 = 0.4-0.44-0.48-0.52-... 1 \times I_n$	$t_1 = 3-6-12-18$ s ⁽¹⁾ @ $6I_1$	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 $I > I_2$ $t_2 = 0.1-0.25-0.5-0.8$ s	$\pm 7\%$ $I_g \leq 6 \times I_n$ $\pm 10\%$ $I_g > 6 \times I_n$	The best of: $\pm 10\%$ or ± 40 ms
S ($t=k/I^2$)	✓	$I_2 = 0.6-0.8-1.2-1.8-2.4-3-3.6-4.2-5-5.8-6.6-7.4-8.2-9-10 \times I_n$	$I = 10 \times I_n$ $t_2 = 0.1-0.25-0.5-0.8$ s	$\pm 7\%$ $I_g \leq 6 \times I_n$ $\pm 10\%$ $I_g > 6 \times I_n$	$\pm 15\%$ $I_g \leq 6 \times I_n$ $\pm 20\%$ $I_g > 6 \times I_n$
I ($t=k$)	✓	$I_3 = 1.5-2.5-3-4-4.5-5-5.5-6.5-7-7.5-8-9-9.5-10.5-12- \times I_n$	≤ 30 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 ≥ 100 ms
- Curve accuracy applies from -20 C to +55 C ambient.
For possible continuous ampere derating for ambient above 40 C, consult Rockwell Automation.
- 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 22kA.

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

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