Product Details and Certifications

Cross Reference RA Part Number: PN-D12583

Product: 140G-H2I3-C25

Description: 140G - Molded Case Circuit Breaker, H frame, 25 kA, LSIG (electronic), Rated Current 25 A

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]	25 kA at 480V / 14 kA at 600V

CIRCUIT BREAKER DATA

Bulletin Number	140G - Molded Case Circuit Breaker
Number of Poles	3 Poles
Frame Size	H frame
Rated Current(A)	25 A
Protection	Electronic LSIG -Long, Short, Instant & Ground Fault

MANUFACTURING

Assembly	Factory Assembled

INTERNAL ACCESSORIES

Auxiliaries(AX), Alarm (AL), Auxiliary/Alarm Combination (AX/AL), Right Side Mounting	N/A
Voltage for Aux Alarm Combination	N/A

Frame Reference	G-Frame	H-Frame	I-Frame	J-Frame	K-Frame	M-Frame	N-Frame	NS-Frame	R-Frame
Rated Current I_n	125 A	125 A	225 A	250 A	400 A	800 A	1200 A	1200 A	3000 A
No. of Poles	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4
Interrupting Rating [kA]									
240V	50 65 100	65 100 150 200 200	50 65	65 100 150 200	100 150 200 200	100 200 200	65 100 150	65 100 150	125
480V	25 35 65	25 35 65 100 150	25 35	25 35 65 100	35 65 100 150	50 65 100	50 65 100	50 65 100	125
600Y/347V	10 14 25	—	10 10	—	—	—	—	—	—
600V	—	14 18 25 35	10 10	14 18 25 35	25 35 65 100	25 35 42	25 50 65	25 50 65	100
Breaking Capacity [I_{cu} (kA)]									
220…240V	65 85 100	65 85 100 150 200	65 85	65 85 100 150	85 100 200 200	85 100 200	85 100 200	85 100 200	130
415V	36 50 70	36 50 70 120 150	36 50	36 50 70 120	50 70 120 200	36 70 100	50 70 120	50 70 120	80
440V	36 50 65	36 50 65 100 150	25 40	36 50 65 100	40 65 100 180	35 50 65	50 65 100	50 65 100	80
690V	6 8 10	10 12 15 18 20	5 8	10 12 15 20	25 40 70 80	22 25 30	30 42 50	30 42 50	40
250V DC	36 50 70	36 50 70 85 100	36 50	36 50 70 85	—	36 50 65	—	—	—
500V DC	36 50 70	36 50 70 85 100	36 50	36 50 70 85	36 50 70 100	—	—	—	—
750V DC	—	—	—	—	25 36 70 70	16 36 50	—	—	—
Protection Type									
Thermal Magnetic	✓	✓	✓	✓	✓	✓	—	—	—
Electronic	—	✓	—	✓	✓	✓	✓	✓	✓
Molded Case Switch	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Accessories									
Auxiliary Contact	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alarm Contact	✓	✓	✓	✓	✓	✓	✓	✓	✓
AX/AL Combo	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trip Unit Contact	—	✓	—	✓	—	—	✓	✓	✓
Shunt Trip	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shunt Close	—	—	—	—	—	—	✓	✓	✓
UV Relay	✓	✓	✓	✓	✓	✓	✓	✓	✓
Field Installable	✓	✓	✓	✓	✓	✓	✓	✓	✓
External Accessories									
End Cap	STD	STD	STD	STD	STD	STD	STD	STD	—
25 mm Phase Barriers	STD	STD	STD	STD	STD	—	—	—	—
Insulators	STD	STD	STD	STD	STD	STD	—	—	—
Terminal Lugs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extended Terminal	✓	✓	✓	✓	✓	✓	✓	✓	—
Spreader Terminal	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rear Terminal	—	—	—	—	—	—	✓	✓	✓
Phase barriers	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminal Cover	✓	✓	✓	✓	✓	✓	✓	✓	—
Direct Rotary	✓	✓	✓	✓	✓	✓	✓	—	—
Variable Depth (Door)	✓	✓	✓	✓	✓	✓	✓	—	—
Internal NFPA 79	✓	✓	✓	✓	✓	✓	✓	—	—
Flange Operator	✓	✓	✓	✓	✓	✓	✓	—	—
Flange Cable	✓	✓	✓	✓	✓	✓	✓	—	—
Motor Operator	✓	✓	✓	✓	✓	✓	—	✓	✓
Field Installable	✓	✓	✓	✓	✓	✓	✓	✓	✓

Molded Case Circuit Breakers

Catalog Number Explanation — 125 A, H-Frame

Complete Circuit Breaker Assemblies — 125 A, H-Frame

Examples given in this section are not intended to be used for product selection. Use ProposalWorks to configure the molded case circuit breaker. Use these configurations only to select all factory-installed options for shunt trips, undervoltage release units, auxiliary contacts, trip units, and alarm contacts. Use the codes from Table g to add on to the molded case circuit breaker cat. no. selected on the previous pages to form a complete cat. no. for a complete assembly with factory-installed options.

140G –	H	2	I	3	- C25		
a	*b*	*c*	*d*	*e*	*f*	*g*	

a

Bulletin No.	
Code	Description
140G	Global Molded Case Circuit Breaker

b

Frame/Rating	
Code	Description
H	125 A

c

Interrupting Rating/Breaking Capacity (based on I_c at 480V)	
Code	Description
2	25 kA
3	35 kA
6	65 kA
0	100 kA
15	150 kA
T	Trip unit

d

Protection Type	
Code	Description
C	Fixed thermal/fixed magnetic
F	Adjust thermal/ adjust magnetic
H	Electronic LSI- long, short, instant
I	Electronic LSIG -Long, short, instant & ground fault
X	Breaker frame
S	Molded case switch (isolator)

e

Poles	
Code	Description
3	3 poles
4	4 poles

f

Current Range	
Code	Description
C	e.g., C30 = 30 A
D	e.g., D16 = 160 A
Blank	Frame only

g

Factory-Installed Internal Options♦	
Shunt Trip and Undervoltage Release Units	
Code	Description
SJ	Shunt Trip, 24…30V AC/DC
SK	Shunt Trip, 48…60V AC/DC
SD	Shunt Trip, 110…127V AC; 110…125V DC
SA	Shunt Trip, 220…240V AC; 220…250V DC
SB	Shunt Trip, 380…440V AC
SC	Shunt Trip, 480…525V AC
UJ	Undervoltage Release, 24…30V AC/DC
UR	Undervoltage Release, 48V AC/DC
UD	Undervoltage Release, 110…127V AC; 110…125V DC
UA	Undervoltage Release, 220…240V AC; 220…250V DC
UB	Undervoltage Release, 380…440V AC
UC	Undervoltage Release, 480…525V AC
No Digit	No Selection
Auxiliary and Alarm Contacts, Trip Units	
Code	Description
KA	1 Aux. Contact, 250V
TA	1 Alarm Contact, 250V
AA	1 Aux., 1 Alarm Contact, 250V
BA	2 Aux., 1 Alarm Contact, 250V
DA	1 Trip Unit Alarm Contact, 250V
FB	2 Aux. Contacts, 400V
AB	1 Aux., 1 Alarm Contact, 400V
AJ	1 Aux., 1 Alarm Contact, 24V
DJ	1 Trip Unit Alarm Contact, 24V

♦ Select up to two internal options: 1 for left side mounting (shunt trip or undervoltage release), 1 for right (auxiliary or alarm contact). Consult your local Rockwell automation sales office or Allen-Bradley distributor for further assistance.

Interrupting Rating/Breaking Capacity — Electronic Circuit Breakers

Interrupting Rating (50/60 Hz), UL 489/CSA C22.2-5, No. 5-02 [kA]			Breaking Capacity (50/60 Hz), IEC 60947-2								Breaking Capacity (DC), IEC 60947-2				Interrupting Code‡
			220V★		415V		440V★		690V		250V DC (2-pole in series)		500V DC (3-pole in series)		
240V	480V	600V	I_{cu} [kA]	I_{cs} [%I_{cu}]	I_{cu} [kA]	I_{cs} [%I_{cu}]	I_{cu} [kA]	I_{cs} [%I_{cu}]	I_{cu} [kA]	I_{cs} [%I_{cu}]	I_{cu} [kA]	I_{cs} [%I_{cu}]	I_{cu} [kA]	I_{cs} [%I_{cu}]	
65	25	14	65	100	36	100	36	100	10	100	36	100	36	100	H2
100	35	18	85	100	50	100	50	100	12	100	50	100	50	100	H3
150	65	25	100	100	70	100	65	100	15	100	70	100	70	100	H6
200	100	35	150	100	120	100	100	100	18	75	85	100	85	100	H0
200	150	42	200	100	150	100	150	100	20	75	100	100	100	100	H15

★ These ratings have not been tested for the CCC listing.
‡ See table below for Cat. No. selection

Electronic LSI (Long, Short, Instantaneous)

Rated Current I_n [A]	Protection Type					Interrupting Code H2		Interrupting Code H3	
	L		S		I	Cat. No.		Cat. No.	
	I_1=0.4…1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	3 Poles	4 Poles	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	140G-H2H3-C25	140G-H2H4-C25	140G-H3H3-C25	140G-H3H4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	140G-H2H3-C60	140G-H2H4-C60	140G-H3H3-C60	140G-H3H4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	140G-H2H3-D10	140G-H2H4-D10	140G-H3H3-D10	140G-H3H4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	140G-H2H3-D12	140G-H2H4-D12	140G-H3H3-D12	140G-H3H4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	140G-H2H3-D16	140G-H2H4-D16	140G-H3H3-D16	140G-H3H4-D16

★ IEC only.

Rated Current I_n [A]	Protection Type					Interrupting Code H6	
	L		S		I	Cat. No.	Cat. No.
	I_1=0.4…1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	140G-H6H3-C25	140G-H6H4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	140G-H6H3-C60	140G-H6H4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	140G-H6H3-D10	140G-H6H4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	140G-H6H3-D12	140G-H6H4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	140G-H6H3-D16	140G-H6H4-D16

★ IEC only.

Rated Current I_n [A]	Protection Type					Interrupting Code H0		Interrupting Code H15	
	L		S		I	Cat. No.		Cat. No.	
	I_1=0.4…1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	3 Poles	4 Poles	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	140G-H0H3-C25	140G-H0H4-C25	140G-H15H3-C25	140G-H15H4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	140G-H0H3-C60	140G-H0H4-C60	140G-H15H3-C60	140G-H15H4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	140G-H0H3-D10	140G-H0H4-D10	140G-H15H3-D10	140G-H15H4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	140G-H0H3-D12	140G-H0H4-D12	140G-H15H3-D12	140G-H15H4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	140G-H0H3-D16	140G-H0H4-D16	140G-H15H3-D16	140G-H15H4-D16

★ IEC only.

Molded Case Circuit Breakers

Product Selection — 125 A, H-Frame

Electronic LSIG (Long, Short, Instantaneous, Ground Fault)

Rated Current I_n [A]	Protection Type							Interrupting Code H2		Interrupting Code H3	
	L		S		I	G		Cat. No.		Cat. No.	
	I_1=0.4… 1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	I_4=0.2… 1 x I_n	t_4=sec.	3 Poles	4 Poles	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	5…25	0.1, 0.2, 0.4, 0.8	140G-H2I3-C25	140G-H2I4-C25	140G-H3I3-C25	140G-H3I4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	12…60	0.1, 0.2, 0.4, 0.8	140G-H2I3-C60	140G-H2I4-C60	140G-H3I3-C60	140G-H3I4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	20…100	0.1, 0.2, 0.4, 0.8	140G-H2I3-D10	140G-H2I4-D10	140G-H3I3-D10	140G-H3I4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	25…125	0.1, 0.2, 0.4, 0.8	140G-H2I3-D12	140G-H2I4-D12	140G-H3I3-D12	140G-H3I4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	32…160	0.1, 0.2, 0.4, 0.8	140G-H2I3-D16	140G-H2I4-D16	140G-H3I3-D16	140G-H3I4-D16

★ IEC only.

Rated Current I_n [A]	Protection Type							Interrupting Code H6	
	L		S		I	G		Cat. No.	Cat. No.
	I_1=0.4…1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	I_4=0.2…1 x I_n	t_4=sec.	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	5…25	0.1, 0.2, 0.4, 0.8	140G-H6I3-C25	140G-H6I4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	12…60	0.1, 0.2, 0.4, 0.8	140G-H6I3-C60	140G-H6I4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	20…100	0.1, 0.2, 0.4, 0.8	140G-H6I3-D10	140G-H6I4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	25…125	0.1, 0.2, 0.4, 0.8	140G-H6I3-D12	140G-H6I4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	32…160	0.1, 0.2, 0.4, 0.8	140G-H6I3-D16	140G-H6I4-D16

★ IEC only.

Rated Current I_n [A]	Protection Type							Interrupting Code H0		Interrupting Code H15	
	L		S		I	G		Cat. No.		Cat. No.	
	I_1=0.4… 1 x I_n	t_1=sec.	I_2=1…10 x I_n	t_2=sec.	I_3=1…10 x I_n	I_4=0.2… 1 x I_n	t_4=sec.	3 Poles	4 Poles	3 Poles	4 Poles
25	10…25	3, 12, 36, 60	25…250	0.05, 0.1, 0.2, 0.4	25…250	5…25	0.1, 0.2, 0.4, 0.8	140G-H0I3-C25	140G-H0I4-C25	140G-H15I3-C25	140G-H15I4-C25
60	24…60	3, 12, 36, 60	60…600	0.05, 0.1, 0.2, 0.4	60…600	12…60	0.1, 0.2, 0.4, 0.8	140G-H0I3-C60	140G-H0I4-C60	140G-H15I3-C60	140G-H15I4-C60
100	40…100	3, 12, 36, 60	100…1000	0.05, 0.1, 0.2, 0.4	100…1000	20…100	0.1, 0.2, 0.4, 0.8	140G-H0I3-D10	140G-H0I4-D10	140G-H15I3-D10	140G-H15I4-D10
125	50…125	3, 12, 36, 60	125…1250	0.05, 0.1, 0.2, 0.4	125…1250	25…125	0.1, 0.2, 0.4, 0.8	140G-H0I3-D12	140G-H0I4-D12	140G-H15I3-D12	140G-H15I4-D12
160★	64…160	3, 12, 36, 60	160…1600	0.05, 0.1, 0.2, 0.4	160…1600	32…160	0.1, 0.2, 0.4, 0.8	140G-H0I3-D16	140G-H0I4-D16	140G-H15I3-D16	140G-H15I4-D16

★ IEC only.

Molded Case Switch — UL489§

Rated Current I_n [A]	Magnetic Trip [A] I_m	Cat. No.	
		3 Poles	4 Poles
125	1250	140G-H6S3-D12	140G-H6S4-D12

§ Does not provide overcurrent protection; may open above 1250 A.

Molded Case Circuit Breakers

Specifications — G- and H-Frame

		G-Frame				H-Frame‡					
Max. Rated Current	[A]	125			160★	125					160★
Rated insulation voltage, U_i, IEC	[V]	800				1000					
NEMA, UL, CSA											
Interrupting Rating Code		G2	G3	G6	G2 G3 G6	H2	H3	H6	H0	H15	H2 H3 H6 H0 H15
240V AC, 50/60Hz	[kA]	50	65	100	50 65 100	65	100	150	200	200	65 100 150 200 200
480V AC, 50/60Hz	[kA]	25	35	65	25 35 65	25	35	65	100	150	25 35 65 100 150
600Y/347V AC, 50/60Hz	[kA]	10	14	25	10 14 25	—	—	—	—	—	—
600V AC, 50/60 Hz	[kA]	—	—	—	—	14	18	25	35	42	14 18 35 35 42
IEC 60947-2											
Rated ultimate short-circuit breaking capacity, I_{cu}											
220/230/240V AC, 50/60Hz	[kA]	65	85	100	65 85 100	65	85	100	150	200	65 85 100 150 200
380V AC, 50/60Hz	[kA]	36	50	70	36 60 70	36	50	70	120	150	26 50 70 120 150
415V AC, 50/60Hz	[kA]	36	50	70	36 50 70	36	50	70	120	150	36 50 70 120 150
440V AC, 50/60Hz	[kA]	36	50	65	36 50 65	36	50	65	100	150	36 50 65 100 150
500V AC, 50/60Hz	[kA]	30	36	50	36 50 65	30	36	50	60	70	30 36 50 60 70
525V AC, 50/60Hz	[kA]	22	35	35	22 35 35	20	25	30	36	50	20 25 30 36 50
690V AC, 50/60Hz	[kA]	6	8	10	6 8 10	10	12	15	18	20	10 12 15 18 20
250V DC, 2 Poles in Series	[kA]	36	50	70	36 50 70	36	50	70	85	100	36 50 70 85 100
500V DC, 2 Poles in Series	[kA]	—	—	—	—	—	—	—	—	—	—
500V DC, 3 Poles in Series	[kA]	36	50	70	36 50 70	36	50	70	85	100	36 50 70 85 100
750V DC, 3 Poles in Series	[kA]	—	—	—	—	—	—	—	—	—	—
Rated service short-circuit breaking capacity, I_{cs}											
220/230/240V AC, 50/60Hz	[kA]	75% (50)	75%	75%	75% 75% 75%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
380V AC, 50/60Hz	[kA]	100%	100%	75%	100% 100% 75%	100%	100% 100%	100%	100%	100%	100% 100% 100% 100% 100%
415V AC, 50/60Hz	[kA]	100%	75%	50%	100% 75% 50%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
440V AC, 50/60Hz	[kA]	50%	50%	50%	50% 50% 50%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
500V AC, 50/60Hz	[kA]	50%	50%	50%	50% 50% 50%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
525V AC, 50/60Hz	[kA]	50%	50%	50%	50% 50% 50%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
690V AC, 50/60Hz	[kA]	75%	50%	50%	75 50 50%	100%	100%	100%	75%	75%	100% 100% 100% 75% 75%
250V DC, 2 Poles in Series	[kA]	100%	100%	75%	100% 100% 75%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
500V DC, 2 Poles in Series	[kA]	—	—	—	—	—	—	—	—	—	—
500V DC, 3 Poles in Series	[kA]	100%	100%	75%	100% 100% 75%	100%	100%	100%	100%	100%	100% 100% 100% 100% 100%
750V DC, 3 Poles in Series	[kA]	—	—	—	—	—	—	—	—	—	—
Mechanical Life	[No. Ops]	25 000				25 000					
	[Ops/hr]	240				240					
Electrical Life @ 415V AC	[No. Ops]	8000				8000					
	[Ops/hr]	120				120					
Ambient Temp. w/out derating	°F [°C]	104 °F [40 °C]				104 °F [40 °C]					
Storage Temperature	°F [°C]	-40...+176 °F [-40…+80 °C]				-40...+176 °F [-40…+80 °C]					
Dimensions [Width/Depth/Height]	[mm]	3 poles: 76.2x70x130				3 poles: 90x82.5x130					
	[mm]	4 poles: 101.6x70x130				4 poles: 120x82.5x130					

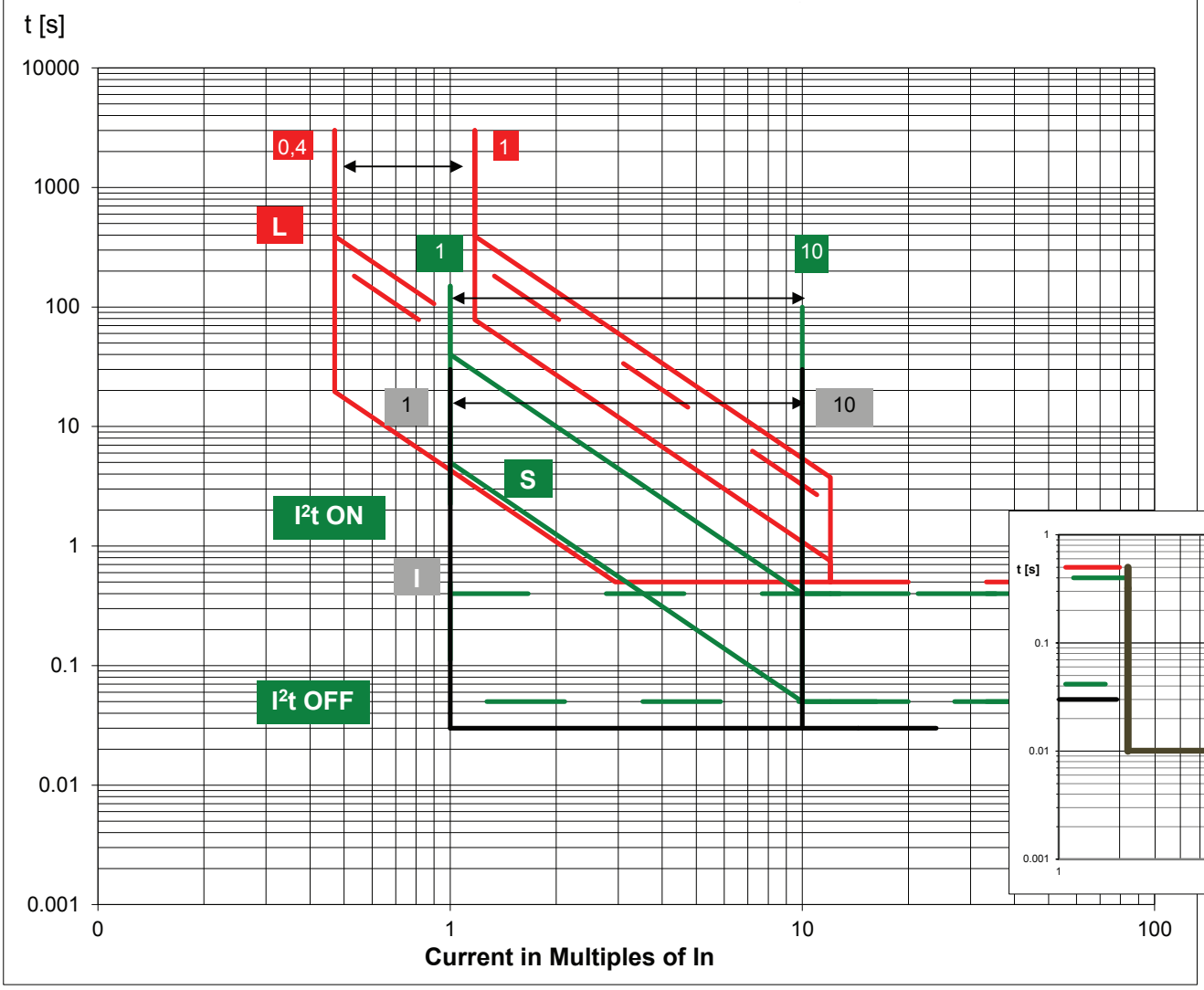
★ IEC version with a 160 A I_{cu} rating

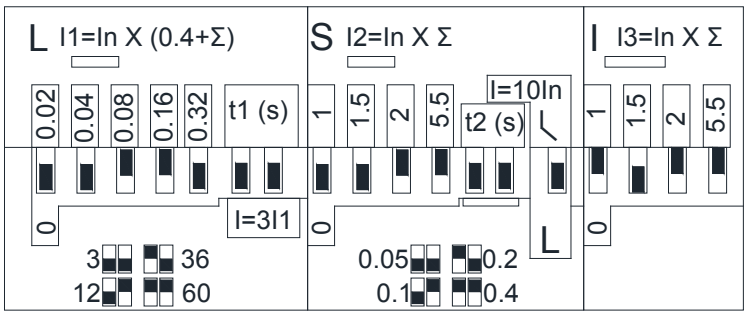
‡ Cannot be reverse fed above 480V

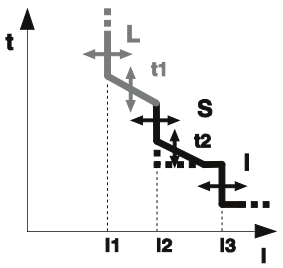
Time-Current Curves for Bulletin 140G-H Molded Case Circuit Breaker

Available Sensors (In):
25A; 60A; 100A; 125A;

Electronic Trip Unit. Long Delay Response, Short Delay with I²t Response, and Instantaneous Curve







Tolerance values:

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

Notes:
1. Curve accuracy applies from -20 C to +55 C ambient.
For possible continuous ampere derating for ambient above 40 C, consult Rockwell Automation.
2. The right portion of the curve is determined by the interrupting rating of the circuit breaker.
3. Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.
4. For high fault current levels an additional fixed instantaneous hardware override is provided at 2.2 kA.

Rockwell Automation