



Molded Case Circuit Breaker Specifications

Bulletin 140G, 140MG

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Catalog Number Explanation

Examples that are given in this section are not intended to be used for product selection. Not all combinations generate a valid catalog number. Use ProposalWorks™ software to configure the MPCB. ProposalWorks software is available from rok.auto/systemtools.



Terminal lugs are not supplied and can be ordered separately. See [page 93](#) for available lugs.



140MG - J 8 E - D15 - SD - AA
 a b c d e f f

a	
Bulletin Number	
Code	Description
140MG	Motor Protection Circuit Breaker

b	
Frame/Rating	
Code	Description
H	100 A
J	150 A

c	
Interrupting Rating/Breaking Capacity (based on I_c at 480V)	
Code	Description
8	High break

d	
Protection Type	
Code	Description
E	LUI

e	
Rated Current	
Code	Description
C	example: C25 = 25 A
D	example: D15 = 150 A

f
Factory-installed Internal Options—see page 78

Table 115 - Interrupting Rating/Breaking Capacity

Interrupting Rating (50/60 Hz), UL 489/CSA C22.2, No. 5 [kA]			Breaking Capacity (50/60 Hz), IEC 60947-2							
240V	480V	600V	220V ⁽¹⁾		415V		440V ⁽¹⁾		690V	
			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}]
150	65	25	100	100	70	100	65	100	15	100

(1) These ratings have not been tested for the CCC listing.

Table 116 - Motor Protection Circuit Breaker—H- and J-Frame Devices

Max. Rated Motor Current I_n [A]	L (Motor FLC)		U	I	Cat. No. ⁽¹⁾
	$I_1 = 0.4...1 \times I_n$	Trip Class	50% of I_1	$I_n = \text{Instantaneous}$	
H-Frame					
25	10...25	3E, 5E, 10E, 20E (approx. 2...20 s)	ON or OFF	Adjustable from 6...13 x I_n	140MG-H8E-C25
60	24...60				140MG-H8E-C60
100	40...100				140MG-H8E-D10
J-Frame					
40	16...40	3E, 5E, 10E, 20E (approx. 2...20 s)	ON or OFF	Adjustable from 6...13 x I_n	140MG-J8E-C40
60	24...60				140MG-J8E-C60
100	40...100				140MG-J8E-D10
150	60...150				140MG-J8E-D15

(1) Select the Motor Protection Circuit Breaker based on the motor FLC.

Bulletin 140MG Motor Protection Circuit Breakers

Table 202 - Performance Characteristics

Attribute		H-Frame	J-Frame	
Max. Rated Current	[A]	100	150	
Rated insulation voltage, U_i , IEC	[V]	1000	1000	
Rated impulse withstand voltage, U_{imp}	[kV]	8	8	
NEMA, UL, CSA Ratings				
Interrupting Rating Code⁽¹⁾		H8	J8	
240V AC, 50/60 Hz	[kA]	150	150	
480V AC, 50/60 Hz	[kA]	65	65	
600V AC, 50/60 Hz	[kA]	25	25	
IEC 60947-2 Ratings				
Rated ultimate short-circuit breaking capacity, I_{cu}	220...230V AC, 50/60 Hz	[kA]	100	100
	380V AC, 50/60 Hz	[kA]	70	70
	400...415V AC, 50/60 Hz	[kA]	70	70
	440V AC, 50/60 Hz	[kA]	65	65
	525V AC, 50/60 Hz	[kA]	15	45
	550V AC, 50/60 Hz	[kA]	15	45
	690V AC, 50/60 Hz	[kA]	15	15
	250V DC- 2 poles in series	[kA]	70	70
	500V DC- 3 poles in series	[kA]	70	70
Rated service short-circuit breaking capacity, I_{cs}	220...230V AC, 50/60 Hz	% I_{cu}	100%	100%
	380V AC, 50/60 Hz	% I_{cu}	100%	100%
	400...415V AC, 50/60 Hz	% I_{cu}	100%	100%
	440V AC, 50/60 Hz	% I_{cu}	100%	100%
	525V AC, 50/60 Hz	% I_{cu}	100%	100%
	550V AC, 50/60 Hz	% I_{cu}	100%	100%
	690V AC, 50/60 Hz	% I_{cu}	100%	100%
	250V DC- 2 poles in series	% I_{cu}	100%	100%
	500V DC- 3 poles in series	% I_{cu}	100%	100%

(1) Explanation of Interrupting Code. Example: code H8, H=H-Frame; 8= 65 kA@480V. See product selection for complete ratings

Table 203 - Mechanical and Environmental Ratings

Attribute		H-Frame	J-Frame
Mechanical Life	[No. of Operations]	25000	25000
	[Operations/hour]	240	240
Electrical Life @ 415V (AC)	[No. of Operations]	8000	8000
	[Operations/hour]	120	120
Wire Temperature Rating ⁽¹⁾		Cu; 75 °C (167 °F)	Al or Cu; 75 °C (167 °F)
Ambient Temperature without derating		40 °C (104 °F)	40 °C (104 °F)
Operational Temperature		-25...+70 °C (-13...+158 °F)	-25...+70 °C (-13...+158 °F)
Storage Temperature		-40...+70 °C (-40...158 °F)	-40...+70 °C (-40...158 °F)
Dimensions [Width/Depth/Height]	[mm (in.)]	90 x 82.5 x 130 (3.54 x 3.25 x 5.12)	105 x 82.5 x 160 (4.13 x 3.25 x 6.3)
Weight (approx.)	[lb. (kg)]	2.6 (1.2)	5.5 (2.5)

(1) Wire temperature rating is determined by testing the circuit breaker under full load current with the conductors sized for 75 °C (167 °F).

Bulletin 140G/MG J-Frame

Dimensions are in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.


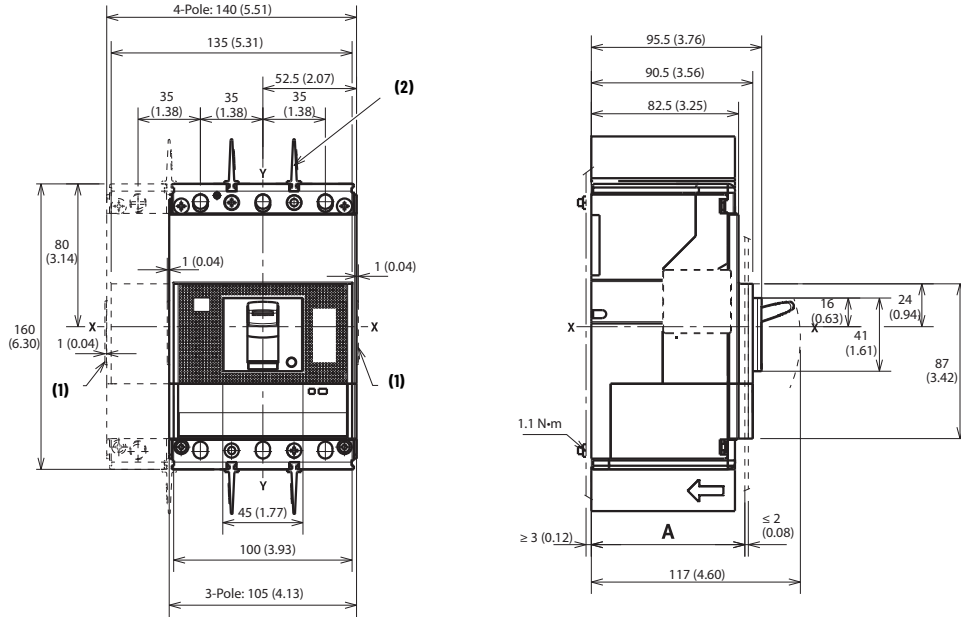
 Dimension tolerances ± 0.1 mm (0.004 in)

Figure 176 - Panel Mounted Molded Case Circuit Breaker



Description	No. of Poles	A
With escutcheon	3...4	86 (3.39)
Without escutcheon	3...4	83.5 (3.29)
	3...4	91.5 (3.60)

Note	Information
1	Overall dimensions of optional wiring ducts
2	Required 25 mm (0.98 in.) insulating phase barriers are provided