

| 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 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



Cat. No. 140MG-H8P-D12

Bulletin 140MG Motor Circuit Protectors

- Current range 0.16...1200 A
- UL Listed/Recognized for motor loads
 - Short-circuit protection
 - Overload protection must be provided separately
- Visible trip indication
- High current limiting
- High switching capacity

The Bulletin 140MG Motor Circuit Protectors provide short circuit protection for individual motor loads. Factory-installed internal accessories make installation and wiring easy.

Your order must include: cat. no. of the Motor Circuit Protector or Motor Protection Circuit Breaker selected and, if required, cat. no. of any accessories.

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Standards Compliance

IEC 60947-2
 UL489
 CSA22.2, No. 5

Certifications

CE Marked
 CSA Certified (File No. LR1234)
 UR Recognized (File No. E224135)
 CCC

General Information

Motor Circuit Protectors may provide the following protective and control functions.

- Disconnect for Motor Branch Circuit
- Branch-Circuit, Short-Circuit Protection (Magnetic Protection)
- Switching (Manual)

In North America, electrical codes require that an individual Motor Branch Circuit be protected by a UL/CSA Listed Fuse, Circuit Breaker or Self-Protected Combination Motor Controller.

140MG-G, H, I, J, K, M and N Frames:

The 140MG-G, H, I, J, K, M and N frame Motor Circuit Protectors are UL/CSA Recognized as Circuit Breakers. They are UL/CSA Recognized, rather than UL/CSA Listed, since they only provide short circuit protection and not thermal overload protection for the motor.

Motor Circuit Protectors

- Short-Circuit Protection — Magnetic Trip
- Overload Protection — None (Magnetic Trip Only)

| Rated Operational Current (I_e) [A] | Magnetic Trip Current [A] | | | | | | | | | 3-phase Hp Ratings★ | | | | Max. kW, 3-Phase — AC-3★ | | | | Cat. No.‡ | |
|---|---------------------------|------|------|------|------|------|------|------|------|---------------------|------|------|------|--------------------------|----------|------|------|---------------|--|
| | Cam Setting | | | | | | | | | 200V | 230V | 460V | 575V | 230V | 400/415V | 500V | 690V | | |
| | A | B | C | D | E | F | G | H | I | | | | | | | | | | |
| G-Frame | | | | | | | | | | | | | | | | | | | |
| 3 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 0.5 | 0.5 | 1.5 | 2 | 0.6 | 0.75 | 1.1 | 1.5 | 140MG-G8P-B30 | |
| 7 | 21 | 28 | 35 | 42 | 49 | 26 | 63 | 70 | 77 | 1.5 | 2 | 3 | 5 | 1.1 | 2.2 | 3 | 4 | 140MG-G8P-B70 | |
| 15 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 3 | 3 | 10 | 10 | 3 | 5.5 | 7.5 | 11 | 140MG-G8P-C15 | |
| 30 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 7.5 | 10 | 20 | 25 | 5.5 | 11 | 15 | 22 | 140MG-G8P-C30 | |
| 50 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 15 | 15 | 30 | 40 | 11 | 22 | 22 | 37 | 140MG-G8P-C50 | |
| 70 | 210 | 280 | 350 | 420 | 490 | 560 | 630 | 700 | 770 | 20 | 25 | 50 | 60 | 15 | 30 | 37 | 55 | 140MG-G8P-C70 | |
| 80 | 240 | 320 | 400 | 480 | 560 | 640 | 720 | 800 | 880 | 25 | 30 | 60 | 75 | 22 | 45 | 55 | 75 | 140MG-G8P-C80 | |
| 100 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 30 | 30 | 75 | 100 | 30 | 55 | 75 | 110 | 140MG-G8P-D10 | |
| 125 | 375 | 500 | 625 | 750 | 875 | 1000 | 1125 | 1250 | 1375 | 40 | 40 | 100 | 125 | 22 | 45 | 55 | 90 | 140MG-G8P-D12 | |
| H-Frame | | | | | | | | | | | | | | | | | | | |
| 3 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 0.5 | 0.5 | 1.5 | 2 | 0.6 | 0.75 | 1.1 | 1.5 | 140MG-H8P-B30 | |
| 7 | 21 | 28 | 35 | 42 | 49 | 26 | 63 | 70 | 77 | 1.5 | 2 | 3 | 5 | 1.1 | 2.2 | 3 | 4 | 140MG-H8P-B70 | |
| 15 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 3 | 3 | 10 | 10 | 3 | 5.5 | 7.5 | 11 | 140MG-H8P-C15 | |
| 30 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 7.5 | 10 | 20 | 25 | 5.5 | 11 | 15 | 22 | 140MG-H8P-C30 | |
| 50 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 15 | 15 | 30 | 40 | 11 | 22 | 22 | 37 | 140MG-H8P-C50 | |
| 70 | 210 | 280 | 350 | 420 | 490 | 560 | 630 | 700 | 770 | 20 | 25 | 50 | 60 | 15 | 30 | 37 | 55 | 140MG-H8P-C70 | |
| 80 | 240 | 320 | 400 | 480 | 560 | 640 | 720 | 800 | 880 | 25 | 30 | 60 | 75 | 22 | 45 | 55 | 75 | 140MG-H8P-C80 | |
| 100 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 30 | 30 | 75 | 100 | 30 | 55 | 75 | 110 | 140MG-H8P-D10 | |
| 125 | 625 | 703 | 781 | 859 | 938 | 1016 | 1094 | 1172 | 1250 | 40 | 40 | 100 | 125 | 22 | 45 | 55 | 90 | 140MG-H8P-D12 | |
| I-Frame | | | | | | | | | | | | | | | | | | | |
| 100 | 600 | 675 | 750 | 825 | 900 | 975 | 1050 | 1125 | 1200 | 30 | 30 | 75 | 100 | 22 | 37 | 45 | 55 | 140MG-I8P-D10 | |
| 110 | 660 | 743 | 825 | 908 | 990 | 1073 | 1150 | 1238 | 1320 | 30 | 40 | 75 | 100 | 22 | 45 | 55 | 90 | 140MG-I8P-D11 | |
| 125 | 750 | 844 | 938 | 1031 | 1125 | 1219 | 1313 | 1406 | 1500 | 40 | 40 | 100 | 125 | 22 | 45 | 55 | 90 | 140MG-I8P-D12 | |
| 150 | 900 | 1013 | 1125 | 1238 | 1350 | 1463 | 1575 | 1688 | 1800 | 50 | 50 | 100 | 150 | 30 | 55 | 75 | 110 | 140MG-I8P-D15 | |
| J-Frame | | | | | | | | | | | | | | | | | | | |
| 150 | 750 | 844 | 938 | 1031 | 1125 | 1219 | 1313 | 1406 | 1500 | 50 | 50 | 100 | 150 | 30 | 55 | 75 | 110 | 140MG-J8P-D15 | |
| 175 | 875 | 984 | 1094 | 1203 | 1313 | 1422 | 1531 | 1641 | 1750 | 50 | 60 | 125 | 150 | 37 | 55 | 90 | 132 | 140MG-J8P-D17 | |
| 200 | 1000 | 1125 | 1250 | 1375 | 1500 | 1625 | 1750 | 1875 | 2000 | 60 | 75 | 150 | 200 | 45 | 75 | 90 | 132 | 140MG-J8P-D20 | |
| 225 | 1125 | 1266 | 1406 | 1547 | 1688 | 1828 | 1969 | 2109 | 2250 | 75 | 75 | 150 | 200 | 55 | 90 | 110 | 160 | 140MG-J8P-D22 | |
| 250 | 1250 | 1406 | 1563 | 1719 | 1875 | 2031 | 2188 | 2344 | 2500 | 75 | 100 | 200 | 250 | 55 | 90 | 132 | 160 | 140MG-J8P-D25 | |

★ The Hp and kW ratings shown are for reference only. They allow for a magnetic trip setting of at least up to 13X the motor FLA. However, the final selection of the MCP should be made based on motor full load current and the requirements of local electrical codes.

‡ The interrupting rating for MCPs is dependent upon the controller used. Please contact your local Rockwell Automation sales office or Allen-Bradley distributor for further information.

| Rated Operational Current (I_e) [A] | Magnetic Trip Current [A] | 3-phase Hp Ratings★ | | | | Max. kW, 3-Phase — AC-3★ | | | | Cat. No.‡ |
|---|---------------------------|---------------------|------|------|------|--------------------------|----------|------|------|---------------|
| | I_3 (adjustable) [A] | 200V | 230V | 460V | 575V | 230V | 400/415V | 500V | 690V | |
| K-Frame | | | | | | | | | | |
| 300 | 300...3000 | 75 | 75 | 150 | 200 | 55 | 110 | 160 | 200 | 140MG-K8P-D30 |
| 400 | 400...4000 | 100 | 100 | 250 | 300 | 90 | 160 | 200 | 250 | 140MG-K8P-D40 |
| M-Frame | | | | | | | | | | |
| 600 | 600...6000 | 125 | 150 | 300 | 400 | 110 | 200 | 250 | 355 | 140MG-M8P-D60 |
| 800 | 800...8000 | 150 | 200 | 400 | 500 | 160 | 250 | 355 | 500 | 140MG-M8P-D80 |
| N-Frame | | | | | | | | | | |
| 1200§ | 1200...12000 | 250 | 300 | 600 | 700 | 200 | 250 | 500 | 710 | 140MG-N8P-E12 |

★ The Hp and kW ratings shown are for reference only. They allow for a magnetic trip setting of at least up to 13X the motor FLA. However, the final selection of the MCP should be made based on motor full load current and the requirements of local electrical codes.

‡ The interrupting rating for MCPs is dependent upon the controller used. Please contact your local Rockwell Automation sales office or Allen-Bradley distributor for further information.

§ I_3 is adjustable between 1...10x motor FLA. Values based on 1200 A rating plug.

Motor Circuit Protectors

Catalog Number Explanation — 125A, G-Frame & 150 A, I-Frame

Complete Motor Circuit Protector Assemblies with Factory-Installed Options

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



140MG – I 8 P – C70 – SD – KA

a b c d e f

a

| Bulletin No. | |
|--------------|--------------------------------|
| Code | Description |
| 140MG | Global Motor Circuit Protector |

b

| Frame/Rating | |
|--------------|-------------|
| Code | Description |
| G | 125 A |
| I | 150 A |

c

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

d

| Protection Type | |
|-----------------|--|
| Code | Description |
| P | Adjustable magnetic only (less than $13 \times I_n$) |

e

| Current Range | |
|---------------|-------------------|
| Code | Description |
| B | e.g., D30 = 3 A |
| C | e.g., C30 = 30 A |
| D | e.g., D12 = 120 A |

f

| 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 | |
| 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 |
| AJ | 1 Aux., 1 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.



Bulletin 140G
Molded Case Circuit Breakers
 Accessories

Accessories Table of Contents

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Bulletin 1494V Variable Depth Flange-Mounted Circuit Breaker Operating Mechanism

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Internal Electrical Accessories

Auxiliary/Alarm Contact (AX/AL)

Auxiliary and alarm contacts are supplied in multiple variations for customer application.

- Auxiliary Contacts (AX) : Indicate ON/OFF status of the MCCB.
- Alarm Contacts (AL): Indicate trip status of the MCCB. Alarm trip can be initiated by pressing the test button on the molded case circuit breaker, a trip due to overcurrent, short circuit; or trip due to residual current, shunt, or undervoltage release signals.
- Thermal Trip Contacts (TU): Trips only when the MCCB has detected an overcurrent, short-circuit, or protection trip. H- and J-Frame MCCBs have a button to test this feature. Available only for H, J, N, NS, and R frames.

These contacts are installed by removing the MCCB cover and accessing right-side pockets within the breaker with snap-in mounting provisions. Frames G...M are supplied with pig tail wiring, with each terminal wire marked. Frames N, NS, and R are wired internal to the breaker and are terminated for connection using a 3-pin quick connector.

| Description | Designation | Diagram | Frame Size | Cat. No. |
|--|-----------------------|---------|------------|----------------|
| (1) TU Alarm Contact 250V | TU AL | C | H, J | 140G-H-EA1TA |
| (1) Auxiliary (1) Alarm Contact 250V | AX2/AL1 | D | G, H, I, J | 140G-G-EA1R1A |
| (2) Auxiliary (1) Alarm Contact 250V | AX1/AX2/AL1 | E | G, H, I, J | 140G-G-EA2R1A |
| (3) Auxiliary (1) Alarm Contact 250V | AX1/AX2/AX3/AL1 | F | H, I, J | 140G-H-EA3R1A |
| (3) Auxiliary (2) Alarm Contact 250V | AX1/AX2/AX3/AL1/AL2 | G | H, J | 140G-H-EA3R2A |
| (2) Auxiliary (2) Alarm (1) TU AL Contact 250V | AX2/AX3/AL1/AL2/TU AL | H | H, J | 140G-H-EA2R2TA |
| (1) Auxiliary Contact 250V | AX2 | A | G, H, I, J | 140G-G-EA1A |
| (1) Auxiliary Contact 250V or (1) Alarm Contact 250V | AX2 | A | G, H, I, J | 140G-G-EA1AU★ |
| | AL1 | B | | |
| (1) Auxiliary Contact 24V | AX2 | A | G, H, I, J | 140G-G-EA1J★ |
| (1) TU Alarm Contact 24V | TU AL | C | H, J | 140G-H-EA1TJ |
| (1) Auxiliary (1) Alarm Contact 24V | AX2/AL1 | D | G, H, I, J | 140G-G-EA1R1J |
| (3) Auxiliary (1) Alarm Contact, 24V | AX1/AX2/AX3/AL1 | F | H, I, J | 140G-H-EA3R1J |
| (1) Auxiliary (1) Alarm Contact, 400V | AX2/AL1 | D | H, J | 140G-H-EA1R1B |
| (2) Auxiliary Contact 400V | AX1/AX2 | I | H, J | 140G-H-EA2B |
| (1) Auxiliary (1) Alarm Contact 250V | AX1/AL1 | J | K, M | 140G-K-EA1R1A |
| (3) Auxiliary (1) Alarm Contact 250V | AX1/AX2/AX3/AL1 | F | K, M | 140G-K-EA3R1A |
| (3) Auxiliary (1) Alarm Contact 24V | AX1/AX2/AX3/AL1 | F | K, M | 140G-K-EA3R1J |
| (1) Auxiliary (1) Alarm Contact 400V | AX1/AL1 | J | K, M | 140G-K-EA1R1B |
| (2) Auxiliary Contact 400V | AX1/AX2 | I | K, M | 140G-K-EA2B |
| (1) Auxiliary (1) Alarm Contact 24V | AX2/AL1 | D | N | 140G-N-EA1R1J |
| (2) Auxiliary Contact 24V | AX1/AX2 | I | N, NS | 140G-N-EA2J |
| (1) Auxiliary (1) Alarm Contact 400V | AX2/AL1 | D | N | 140G-N-EA1R1B |
| (2) Auxiliary Contact 400V | AX1/AX2 | I | N, NS | 140G-N-EA2B |
| (1) TU Alarm Contact 250V | TU AL | C | N, NS | 140G-N-EA1TA |
| (4) Auxiliary Contact 24V | AX1/AX2/AX3/AX4 | K | R | 140G-R-EA4J |
| (4) Auxiliary Contact 400V | AX1/AX2/AX3/AX4 | K | R | 140G-R-EA4A |
| (1) TU Alarm Contact 250V | TU AL | L | R | 140G-R-EA1TA |

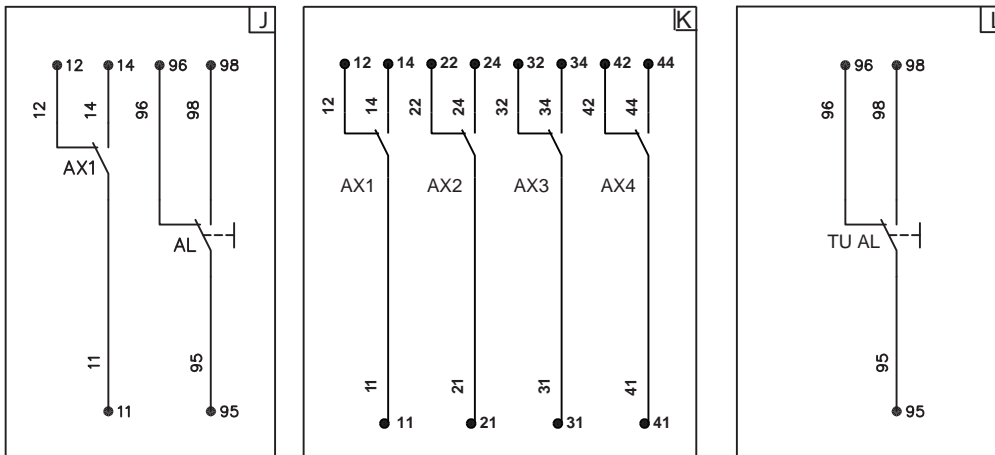
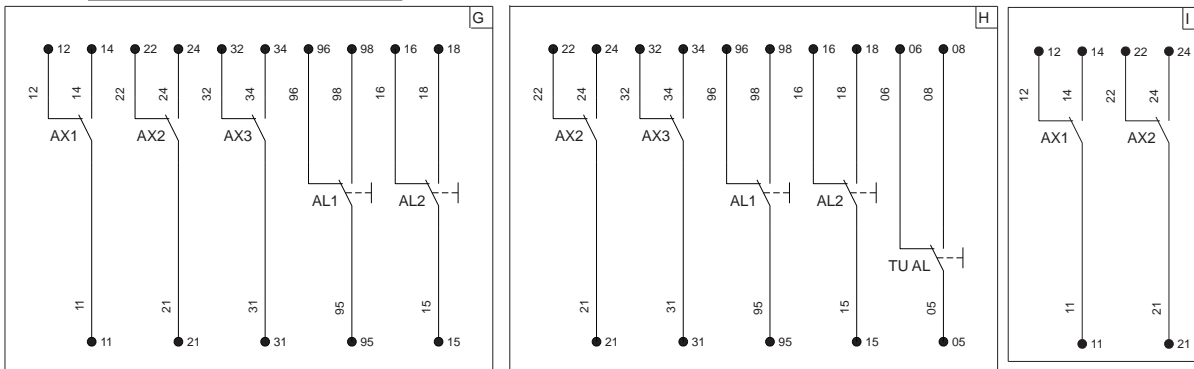
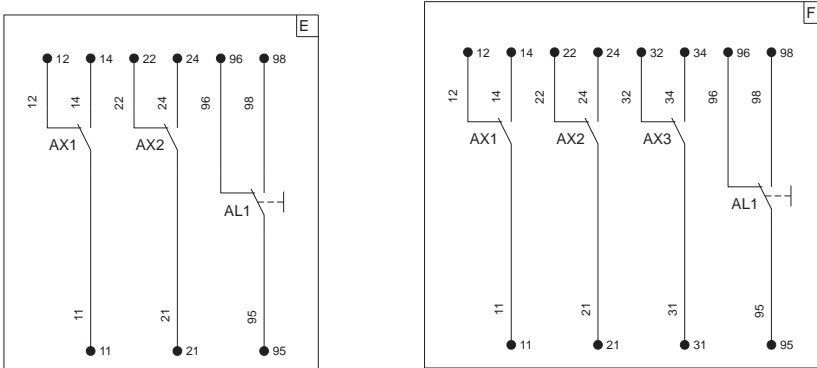
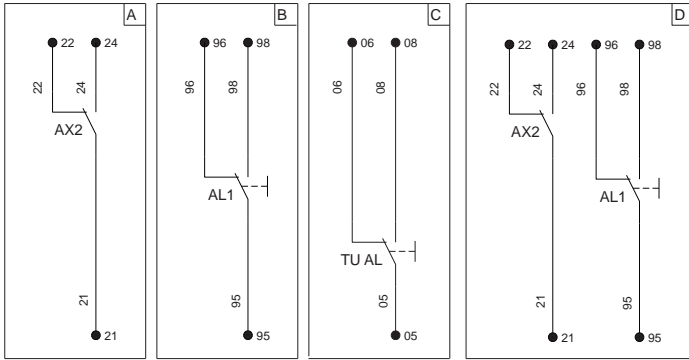


Representative Photo

★ This contact is supplied with unmarked wires. Contact can function as either an auxiliary or alarm contact, depending on connection method.




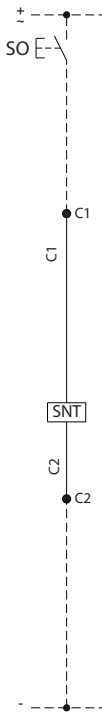


Diagrams



Bulletin 140G
Molded Case Circuit Breakers
 Accessories

Shunt Trip (SNT)


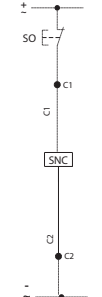
- Allows for remote tripping of the MCCB by applying control voltage to the shunt trip coil.
- Frames G, H, I, J, K, and M are supplied with pig-tail wiring (each terminal wire is marked).
- Frame N, NS, and R are wired internal to the breaker and terminated for connection using a 3-pin quick connector.

| Description | | Diagram | Frame Size | Cat. No. |
|---|-----------------------------|--|-------------|-------------|
|  <p>Representative Photo</p> | 12V DC |  | G, H, I, J | 140G-G-SNR |
| | 24...30V AC/DC | | | 140G-G-SNJ |
| | 48...60V AC/DC | | | 140G-G-SNKY |
| | 110...127V AC/110...125V DC | | | 140G-G-SND |
| | 220...240V AC/220...250V DC | | | 140G-G-SNA |
| | 380...440V AC | | | 140G-G-SNB |
|  <p>Representative Photo</p> | 480...525V AC | | 140G-G-SNC | |
| | 12V DC | | 140G-K-SNR | |
| | 24...30V AC/DC | | 140G-K-SNJ | |
| | 48...60V AC/DC | | 140G-K-SNKY | |
| | 110...127V AC/110...125V DC | | 140G-K-SND | |
| | 220...240V AC/220...250V DC | | 140G-K-SNA | |
|  <p>Representative Photo</p> | 380...440V AC | | 140G-K-SNB | |
| | 480...525V AC | | 140G-K-SNC | |
| | 24V AC/DC | | 140G-N-SNJ | |
| | 48V AC/DC | | 140G-N-SNKY | |
| | 110...120V AC/DC | | 140G-N-SND | |
| | 220...240V AC/DC | | 140G-N-SNA | |
| | 380...400V AC | 140G-N-SNB | | |
| | 24V DC | 140G-R-SNJ | | |
| | 48V AC/DC | 140G-R-SNKY | | |
| | 110...120V AC/DC | 140G-R-SND | | |
| 220...240V AC/DC | 140G-R-SNA | | | |
| 380...400V AC/DC | 140G-R-SNB | | | |

Shunt Close (SNC)


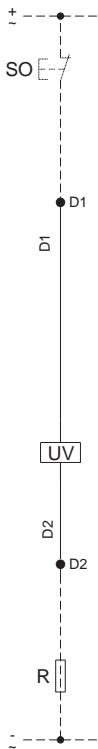


- For use with motorized versions of the NS- and R-Frame MCCB.
- Allows for remote closing of the MCCB when the spring motor is charged.

The shunt close unit is wired internal to the MCCB and terminated for connection using a 3-pin quick connect.

| Description | | Diagram | Frame Size | Cat. No. |
|--|------------------|---|------------------|---------------|
|  <p>Representative Photo</p> | 24V AC/DC |  | NS | 140G-NS-SNCJ |
| | 48V AC/DC | | | 140G-NS-SNCKY |
| | 110...120V AC/DC | | | 140G-NS-SNCD |
| | 220...240V AC/DC | | | 140G-NS-SNCA |
| | 380...400V AC | | | 140G-NS-SNCB |
| | | | 24V DC | 140G-R-SNCJ |
| | | | 48V AC/DC | 140G-R-SNCKY |
| | | | 110...120V AC/DC | 140G-R-SNCD |
| | | | 220...240V AC/DC | 140G-R-SNCA |
| | | | 380...400V AC | 140G-R-SNCB |

Undervoltage Release (UVR)


- Opens the MCCB when supply voltage drops below 0.7 of the UV relay, with a trip rating from 0.7...0.35.
- The MCCB can be reset when the supply voltage is higher than 0.85 of the relay rating.
- When the UV is de-energized it is not possible to close the main contacts on the MCCB.
- R Resistor is supplied with the MCCB when reset is required.

| Description | Diagram | Frame Size | Cat. No. | |
|--|--|------------|-------------|-------------|
|  Representative Photo |  | G, H, I, J | 140G-G-UVJ | |
| | | | 140G-G-UVR | |
| | | | 140G-G-UVKY | |
| | | | 140G-G-UVD | |
| | | | 140G-G-UVA | |
| | | | 140G-G-UVB | |
|  Representative Photo | | | K, M | 140G-G-UVC |
| | | | | 140G-K-UVJ |
| | | | | 140G-K-UVR |
| | | | | 140G-K-UVKY |
| | | | | 140G-K-UVD |
| | | | | 140G-K-UVA |
|  Representative Photo | | | N, NS | 140G-K-UVB |
| | | | | 140G-K-UVC |
| | | | | 140G-N-UVJ |
| | | | | 140G-N-UVKY |
| | | | | 140G-N-UVD |
| | | | | 140G-N-UVA |
| | | R | 140G-N-UVB | |
| | | | 140G-N-UVC | |
| | | | 140G-R-UVJ | |
| | | | 140G-R-UVKY | |
| | | | 140G-R-UVD | |
| | | | 140G-R-UVA | |
| 140G-R-UVB | | | | |
| 140G-R-UVC | | | | |

Residual Current Release Module (IEC Only)

The residual current release module provides protection against low levels of earth (ground) fault currents. It continuously monitors the state of the insulation, with adjustability to provide protection from direct and indirect contact. Compliant with IEC 60947-2 annex B, IEC 61000 for protection against unwarranted tripping.

- Alarm & Trip indication
- 0.03 A with 0.0 s override
- Current adjustment: 0.5...10 A
- Time adjustment: 0.0...3 s
- Test

|  Representative Photo | Frame Size | 3-Pole Cat. No. | 4-Pole Cat. No. |
|---|------------|-----------------|-----------------|
| | G | 140G-G-ELP1603 | 140G-G-ELP1604 |
| | H | — | 140G-H-ELP1604 |
| | I | 140G-I-ELP2503 | 140G-I-ELP2504 |
| | J | — | 140G-J-EP2504 |
| K | — | 140G-K-ELP | |

Molded Case Circuit Breakers

Accessories

Current Transformer for Neutral Current



Representative Photo

| Rated Current [A] | Frame Size | Cat. No. |
|-------------------|------------|---------------|
| 300 | K ★ | 140G-K-NCTD30 |
| 400 | K ★ | 140G-K-NCTD40 |
| 600 | M ★ | 140G-M-NCTD60 |
| 800 | M ★ | 140G-M-NCTD80 |
| 400...1600 | N, NS | 140G-N-NCTE16 |
| 1000...3200 | R | 140G-R-NCTE30 |

★ Order with connector (Cat. No. 140G-K-CC).


Mechanical Accessories

Terminal Lugs



| Description | Frame Size | Cat. No. (Pkg. Qty. 3) | Cat. No. (Pkg. Qty. 4) | | |
|---|--------------|---|---|--|---------------|
| <p>Representative Photo</p> | G | Cu wire, MCCB only (1) 14...1/0 AWG or 2.5...70 mm ² | 140G-G-TLC13 | 140G-G-TLC14 | |
| | | Cu wire, MCP only (1) 14...1/0 AWG or 1.5...70 mm ² | 140G-G-TLC13A | — | |
| | | Multiple cable - Cu wire (6) 14...2 AWG or 2.5...35 mm ² | 140G-G-MTL63 | 140G-G-MTL64 | |
| | | Cu wire only (1) 14...1/0 AWG or 2.5...95 mm ² | 140G-H-TLC13 | 140G-H-TLC14 | |
| <p>Representative Photo</p> | H | Multiple cable - Cu wire (6) 14...2 AWG or 2.5...35 mm ² | 140G-H-MTL63 | 140G-H-MTL64 | |
| | | <p>Representative Photo</p> | Al or Cu wire (1) 14...1/0 AWG or 2.5...50 mm ² | 140G-I-TLA13 | 140G-I-TLA14 |
| | | | Al or Cu wire (1) 4...300 MCM or 25...150 mm ² | 140G-I-TLA1A3 | 140G-I-TLA1A4 |
| | | | Cu wire only (1) 10...250 MCM or 6...185 mm ² | 140G-I-TLC13 | 140G-I-TLC14 |
| <p>Representative Photo</p> | J | Multiple cable - Cu wire (6) 12...2 AWG or 2.5...35 mm ² | 140G-I-MTL63 | 140G-I-MTL64 | |
| | | Al or Cu wire (1) 14...1/0 AWG or 2.5...50 mm ² | 140G-J-TLA13 | 140G-J-TLA14 | |
| | | Al or Cu wire (1) 4...300 MCM or 25...150 mm ² | 140G-J-TLA1A3 | 140G-J-TLA1A4 | |
| | | Al or Cu wire (1) 6 (Al)/10 (Cu)...350 MCM or 2.5...185 mm ² (Al) | 140G-J-TLA1B3 | 140G-J-TLA1B4 | |
| | | Cu wire only (1) 10...350 MCM or 6...185 mm ² | 140G-J-TLC13 | 140G-J-TLC14 | |
| <p>Representative Photo</p> | K | Multiple cable - Cu wire (6) 12...2 AWG or 2.5...35 mm ² | 140G-J-MTL63 | 140G-J-MTL64 | |
| | | Al or Cu wire (1) 250...500 MCM or 120...240 mm ² | 140G-K-TLA13 | 140G-K-TLA14 | |
| | | Al or Cu wire (2) 2/0...250 MCM or 95...120 mm ² | 140G-K-TLA23 | 140G-K-TLA24 | |
| | | Cu wire only (1) 250...500 MCM or 120...240 mm ² | 140G-K-TLC13 | 140G-K-TLC14 | |
| | | Cu wire only (2) 2/0...250 MCM or 95...120 mm ² | 140G-K-TLC23 | 140G-K-TLC24 | |
| <p>Representative Photo</p> | M | Multiple cable - Cu wire (6) 6...1/0 AWG or 16...50 mm ² | 140G-K-MTL63 | 140G-K-MTL64 | |
| | | Al or Cu wire (2) 250...500 MCM or 120...240 mm ² | 140G-M-TLA23 | 140G-M-TLA24 | |
| | | Al or Cu wire (3) 2/0...400 MCM or 70...185 mm ² | 140G-M-TLA33 | 140G-M-TLA34 | |
| | | Cu wire only (2) 3/0...350 MCM or 85...185 mm ² | 140G-M-TLC23 | 140G-M-TLC24 | |
| <p>Representative Photo</p> | N, NS | Cu wire only (3) 2/0...350 MCM or 70...185 mm ² | 140G-M-TLC33 | 140G-M-TLC34 | |
| | | Al or Cu wire (4) 4/0...500 MCM or 70...240 mm ² | 140G-N-TLA43 | 140G-N-TLA44 | |
| | | Cu wire only (4) 4/0...500 MCM or 70...240 mm ² | 140G-N-TLC43 | 140G-N-TLC44 | |
| | | <p>Representative Photo</p> | R | Al or Cu wire (6) 1/0...750 MCM or 50...400 mm ² | 140G-R-TLA63 |
| Cu wire only (6) 1/0...750 MCM or 50...400 mm ² | 140G-R-TLC63 | | | — | |



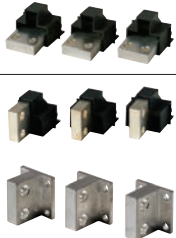
Extended Terminals

|  Representative Photo | Description | Frame Size | 3-Pole Cat. No. (Pkg. Qty. 3) | 4-Pole Cat. No. (Pkg. Qty. 4) |
|---|--|------------|----------------------------------|----------------------------------|
| | Extended Terminals for busbar or ring type connection <ul style="list-style-type: none"> • G- & I-frame supplied with 100 mm phase barrier • H- & J-frame supplied with insulator, 100 mm phase barrier, and terminal cover • K- & N-/NS-frame supplied with insulator and 100 mm phase barrier • M-frame terminals only | G | 140G-G-EXT3 | 140G-G-EXT4 |
| | | H | 140G-H-EXT3 | 140G-H-EXT4 |
| | | I | 140G-I-EXT3 | 140G-I-EXT4 |
| | | J | 140G-J-EXT3 | 140G-J-EXT4 |
| | | K | 140G-K-EXT3 | 140G-K-EXT4 |
| | | M | 140G-M-EXT3 | 140G-M-EXT4 |
| | | N, NS | 140G-N-EXT3 | 140G-N-EXT4 |

Spreader Terminals

|  Representative Photo | Description | Frame Size | 3-Pole Cat. No. (Pkg. Qty. 3) | 4-Pole Cat. No. (Pkg. Qty. 4) |
|--|---|------------|----------------------------------|----------------------------------|
| | Spreader Terminals for busbar or ring type connection <ul style="list-style-type: none"> • G- & I-frame supplied with 200 mm phase barrier • H- & J-frame supplied with insulator, 100 mm phase barrier, and terminal cover • K- & N-/NS-frame supplied with insulator and 100 mm phase barrier • M- & R-frame terminals only | G | 140G-G-EXS3 | 140G-G-EXS4 |
| | | H | 140G-H-EXS3 | 140G-H-EXS4 |
| | | I | 140G-I-EXS3 | 140G-I-EXS4 |
| | | J | 140G-J-EXS3 | 140G-J-EXS4 |
| | | K | 140G-K-EXS3 | 140G-K-EXS4 |
| | | M | — | 140G-M-EXS4 |
| | | N, NS | — | 140G-N-EXS4 |
| | | R | 140G-R-EXS3 | 140G-R-EXS4 |
|  Representative Photo | Top Spreader Terminals for busbar or ring type connection <ul style="list-style-type: none"> • M-frame terminals only | M | 140G-M-EXSLI3 | — |
| | | N, NS | 140G-N-EXSLI3 | — |
| | Bottom Spreader Terminals for busbar or ring type connection <ul style="list-style-type: none"> • N-/NS-frame supplied with insulator and 100 mm phase barrier | M | 140G-M-EXSLO3 | — |
| | | N, NS | 140G-N-EXSLO3 | — |

Rear Terminals

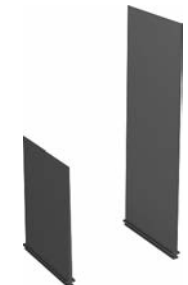
|  Representative Photo | Description | Frame Size | 3-Pole Cat. No. (Pkg. Qty. 3) | 4-Pole Cat. No. (Pkg. Qty. 4) |
|---|---------------------------------------|-------------|----------------------------------|----------------------------------|
| | Rear flat horizontal terminals | N, NS | 140G-N-TLH3 | 140G-N-TLH4 |
| Rear flat vertical terminals | N, NS | 140G-N-TLV3 | 140G-N-TLV4 | |
| | R ★ | 140G-R-TLV3 | 140G-R-TLV4 | |

★ 2000 A and 2500 A MCCBs only.

Bulletin 140G
Molded Case Circuit Breakers
 Accessories

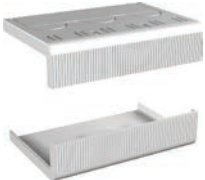
Phase Barriers

- Provides additional clearance when special connections that extend beyond the frame of the MCCB are used.
- Frames G, H, I, J, and K are supplied with 25 mm barriers as standard.

|  <i>Representative Photo</i> | Frame Size | Length | 3-Pole Cat. No. (Pkg. Qty. 4) | 4-Pole Cat. No. (Pkg. Qty. 6) |
|--|------------|----------------|----------------------------------|----------------------------------|
| | G, I | | 1 in. (25 mm) | 140G-G-PB3M |
| 4 in. (100 mm) | | | 140G-G-PB3L | 140G-G-PB4L |
| 8 in. (200 mm) | | | 140G-G-PB3H | 140G-G-PB4H |
| H, J | | 1 in. (25 mm) | 140G-H-PB3M | 140G-H-PB4M |
| | | 4 in. (100 mm) | 140G-H-PB3L | 140G-H-PB4L |
| | | 8 in. (200 mm) | 140G-H-PB3H | 140G-H-PB4H |
| K, N, NS | | 4 in. (100 mm) | 140G-K-PB3L | 140G-K-PB4L |
| | | 8 in. (200 mm) | 140G-K-PB3H | 140G-K-PB4H |
| M | | 4 in. (100 mm) | 140G-M-PB3L | 140G-M-PB4L |
| R | | 4 in. (100 mm) | 140G-R-PB3L | 140G-R-PB4L |
| | | 8 in. (200 mm) | 140G-R-PB3H | 140G-R-PB4H |

Terminal Covers

- Provide IP40 finger protection against accidental contact with live parts.
- Terminal covers are pre-punched to ease installation.
- Supplied as standard with the selection of multiple cable terminal lugs.

|  <i>Representative Photo</i> | Frame Size | Height | 3-Pole Cat. No. (Pkg. Qty. 2) | 4-Pole Cat. No. (Pkg. Qty. 2) |
|---|------------|------------------|----------------------------------|----------------------------------|
| | G | | 0.08 in. (2 mm) | 140G-G-TC3L |
| 2 in. (50 mm) | | | 140G-G-TC3H | 140G-G-TC4H |
| H | | 0.08 in. (2 mm) | 140G-H-TC3L | 140G-H-TC4L |
| | | 2 in. (50 mm) | 140G-H-TC3H | 140G-H-TC4H |
| I | | 0.08 in. (2 mm) | 140G-I-TC3L | 140G-I-TC4L |
| | | 2.36 in. (60 mm) | 140G-I-TC3H | 140G-I-TC4H |
| J | | 0.08 in. (2 mm) | 140G-J-TC3L | 140G-J-TC4L |
| | | 2.36 in. (60 mm) | 140G-J-TC3H | 140G-J-TC4H |
| K | | 0.08 in. (2 mm) | 140G-K-TC3L | 140G-K-TC4L |
| | | 2.36 in. (60 mm) | 140G-K-TC3H | 140G-K-TC4H |
| M | | 0.08 in. (2 mm) | 140G-M-TC3L | 140G-M-TC4L |
| | | 2.36 in. (60 mm) | 140G-M-TC3H | 140G-M-TC4H |
| N, NS | | 0.1 in. (2.5 mm) | 140G-N-TC3L | 140G-N-TC4L |
| | | 2.76 in. (70 mm) | 140G-N-TC3H | 140G-N-TC4H |

Variable Depth Rotary Operating Kits

Rotary, Variable Depth Operators

- Supplied with external handle, operating shaft, and MCCB mounted operating mechanism.
- Refer to page 56 to select as components.
- Frames G, H, I, and J use a Bul. 140U P-style handle.
- Frames K, M, and N use a Bul. 140U medium style handle.

| | Frame Size | Handle Color | Shaft Length | Cat. No. |
|--|------------|-------------------|-------------------|---------------|
|  <p><i>Representative Photo</i></p> | G, I | Black | 12 in. (30.48 mm) | 140G-G-RVM12B |
| | | Red/Yellow | | 140G-G-RVM12R |
| | | Black | 21 in. (53.34 mm) | 140G-G-RVM21B |
| | | Red/yellow | | 140G-G-RVM21R |
| | H, J | Black | 12 in. (30.48 mm) | 140G-H-RVM12B |
| | | Red/yellow | | 140G-H-RVM12R |
| | | Black | 21 in. (53.34 mm) | 140G-H-RVM21B |
| | | Red/yellow | | 140G-H-RVM21R |
|  <p><i>Representative Photo</i></p> | K | Black | 12.6 in. (320 mm) | 140G-K-RVM12B |
| | | Red/yellow | | 140G-K-RVM12R |
| | | Black | 22.8 in. (580 mm) | 140G-K-RVM21B |
| | | Red/yellow | | 140G-K-RVM21R |
| | M | Black | 12.6 in. (320 mm) | 140G-M-RVM12B |
| | | Red/yellow | | 140G-M-RVM12R |
| | | Black | 22.8 in. (580 mm) | 140G-M-RVM21B |
| | | Red/yellow | | 140G-M-RVM21R |
| N | Black | 12.6 in. (320 mm) | 140G-N-RVM12B | |
| | Red/yellow | | 140G-N-RVM12R | |
| | Black | 22.8 in. (580 mm) | 140G-N-RVM21B | |
| | Red/yellow | | 140G-N-RVM21R | |

Rotary, Variable Depth Operators with Internal NFPA 79 Operating Handle


- Supplied with external handle, NFPA handle with operating shaft, support bracket, and MCCB mounted operating mechanism.
- Refer to page 58 to select as components.
- Frames G, H, I, and J use a Bul. 140U P-style handle.
- Frames K, M, and N use a Bul. 140U medium style handle.


| | Frame Size | Handle Color | Shaft Length | Cat. No. |
|--|------------|-------------------|-------------------|---------------|
|  <p><i>Representative Photo</i></p> | G, I | Black | 12 in. (30.48 mm) | 140G-G-NVM12B |
| | | Red/yellow | | 140G-G-NVM12R |
| | | Black | 21 in. (53.34 mm) | 140G-G-NVM21B |
| | | Red/yellow | | 140G-G-NVM21R |
| | H, J | Black | 12 in. (30.48 mm) | 140G-H-NVM12B |
| | | Red/yellow | | 140G-H-NVM12R |
| | | Black | 21 in. (53.34 mm) | 140G-H-NVM21B |
| | | Red/yellow | | 140G-H-NVM21R |
|  <p><i>Representative Photo</i></p> | K | Black | 12.6 in. (320 mm) | 140G-K-NVM12B |
| | | Red/yellow | | 140G-K-NVM12R |
| | | Black | 22.8 in. (580 mm) | 140G-K-NVM21B |
| | | Red/yellow | | 140G-K-NVM21R |
| | M | Black | 12.6 in. (320 mm) | 140G-M-NVM12B |
| | | Red/yellow | | 140G-M-NVM12R |
| | | Black | 22.8 in. (580 mm) | 140G-M-NVM21B |
| | | Red/yellow | | 140G-M-NVM21R |
| N | Black | 12.6 in. (320 mm) | 140G-N-NVM12B | |
| | Red/yellow | | 140G-N-NVM12R | |
| | Black | 22.8 in. (580 mm) | 140G-N-NVM21B | |
| | Red/yellow | | 140G-N-NVM21R | |


Molded Case Circuit Breakers


Accessories

Variable Depth Rotary Components

|  Representative Photo | Description | Handle Color | Frame Size | Cat. No. | |
|--|---|--------------|------------|------------|-----------|
| | <ul style="list-style-type: none"> • P-style handle for G, H, I, and J frames • Medium handles for K, M, and N frames • Rated 3/3R/4/4X/12 • Accepts 3 padlocks | | Black/Grey | G, H, I, J | 140U-PB |
| | | | Red/Yellow | | 140U-PY |
| | | | Black/Grey | K, M, N | 140U-HM4 |
| | | | Red/Yellow | | 140U-HM4E |

|  Representative Photo | Description | Shaft Length | Frame Size | Cat. No. | |
|--|------------------------|--------------|-----------------|------------|---------|
| | Extension Shaft | | 12 in. (305 mm) | G, H, I, J | 194R-S1 |
| | | | 21 in. (533 mm) | | 194R-S2 |
| | | | 12 in. (305 mm) | K, M, N | 140U-R5 |
| | | | 21 in. (533 mm) | | 140U-R6 |

|  Representative Photo | Description | Shaft Length | Frame Size | Cat. No. | |
|--|---|--------------|-----------------|------------|---------|
| | NFPA 79 internal operating handle with shaft Internal handle permits operation of the molded case circuit breaker when the door is open in compliance with NFPA 79. | | 12 in. (305 mm) | G, H, I, J | 140G-N1 |
| | | | 21 in. (533 mm) | | 140G-N2 |
| | | | 12 in. (305 mm) | K, M, N | 140G-N7 |
| | | | 21 in. (533 mm) | | 140G-N8 |


|  Representative Photo | Description | Frame Size | Cat. No. |
|--|---|------------|------------|
| | Rotary, Variable Depth Operating Mechanism <ul style="list-style-type: none"> • Direct molded case circuit breaker mount • G, H, I, and J frame use 194R-S1 or 194R-S2 shafts (140G-N1 or 140G-N2 NFPA) • K, M, and N frames use 194R-R7 or 194R-R8 shafts (140G-R7 or 140G-R8 NFPA) • Shaft secured with set screw or cotter pin | G, I | 140G-G-RMX |
| | | H, J | 140G-H-RMX |
| | | K | 140G-K-RMX |
| | | M | 140G-M-RMX |
| | | N | 140G-N-RMX |

| Description | Frame Size | Cat. No. |
|---|------------|------------|
| Support Bracket Supplied as standard with NFPA variable depth operator kits | G, H, I, J | 140G-G-OSB |
| | K | 140G-K-OSB |
| | M | 140G-M-OSB |
| | N | 140G-N-OSB |

Auxiliary Contacts for Handle Mechanism Mounting



Suitable for:

- 140G-G-RMB, -RMY, RMX
- 140G-H-RMB, -RMY, RMX
- 140G-K-RMB, -RMY, RMX
- 140G-M-RMB, -RMY, RMX

|  Representative Photo | Description | Pkg. Qty | Frame Size | Cat. No. |
|--|---|----------|--------------|--------------|
| | Early Make Handle Auxiliary Contact Open 400V | 2 | G, H, I, J | 140G-G-EAM1B |
| | Early Break Handle Auxiliary Contact Close 400V | 2 | | 140G-G-EAB1B |
| | Early Make Handle Auxiliary Contact Close 250V | 2 | K | 140G-K-EAM1A |
| M | | | 140G-M-EAM1A | |

Direct Rotary Operators


- Mount with direct handle operation of the MCCB.
- Lockable in OFF position (three padlocks max.).

|  Representative Photo  Representative Photo | Frame Size | Handle Color | Cat. No. |
|--|------------|--------------|------------|
| | G, I | Black | 140G-G-RMB |
| | | Red/yellow | 140G-G-RMY |
| | H, J | Black | 140G-H-RMB |
| | | Red/yellow | 140G-H-RMY |
| | K | Black | 140G-K-RMB |
| | | Red/yellow | 140G-K-RMY |
| | M | Black | 140G-M-RMB |
| | | Red/yellow | 140G-M-RMY |
| | N | Black | 140G-N-RMB |
| Red/yellow | | 140G-N-RMY | |

Motor Operators

- Remotely opens, closes, and resets the MCCB.
- Frame G & I motor operators are supplied with auto/manual selector, test feature, and special tool for local operation of the MCCB.
- Frames H, J, K, and M utilize a stored energy motor for local control of the motor without the use of special tools and include auto/manual/lock selection, lever to recharge the motor, and open & close push button operation.

| Description | Frame Size | Cat. No. |
|---|------------|--------------|
|  Representative Photo | G, I | 140G-G-EOPJ |
| | | 140G-G-EOPKY |
| | | 140G-G-EOPD |
| | | 140G-G-EOPA |
| | | 140G-G-EOPB |
| | | 140G-G-EOPC |
|  Representative Photo | H, J | 140G-H-EOPJ |
| | | 140G-H-EOPKY |
| | | 140G-H-EOPD |
| | | 140G-H-EOPA |
| | | 140G-H-EOPB |
| | | 140G-H-EOPC |
|  Representative Photo | K | 140G-K-EOPJ |
| | | 140G-K-EOPKY |
| | | 140G-K-EOPD |
| | | 140G-K-EOPA |
| | M | 140G-M-EOPB |
| | | 140G-M-EOPJ |
| | | 140G-M-EOPKY |
| | | 140G-M-EOPD |
| | | 140G-M-EOPA |
| | | 140G-M-EOPB |

| Description | Frame Size | Cat. No. |
|---|------------|---------------|
|  Representative Photo | NS | 140G-NS-SCMA |
| | | 140G-NS-SCMB |
| | | 140G-NS-SCMD |
| | | 140G-NS-SCMJ |
| | | 140G-NS-SCMKY |
| | R | 140G-R-SCMA |
| | | 140G-R-SCMD |
| | | 140G-R-SCMJ |
| | | 140G-R-SCMKY |
| | | 140G-R-SCMKY |

Molded Case Circuit Breakers

Accessories

Flex Cable Operators

- For use with NEMA-style flange enclosures.
- Includes handle, MCCB operator, cable, and necessary hardware.
- Pre-assembled for ease of installation.



Representative Photo

| Frame Size | Handle Type | Cable Length | Cat. No. |
|------------|---------------------------------------|---------------|--------------|
| G, I | Non-metallic Handle, Type 1/3/12/4/4X | 4 ft (1.3 m) | 140G-G-FCX04 |
| | | 6 ft (1.9 m) | 140G-G-FCX06 |
| | | 10 ft (3.0 m) | 140G-G-FCX10 |
| | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-G-FCS04 |
| | | 6 ft (1.9 m) | 140G-G-FCS06 |
| | | 10 ft (3.0 m) | 140G-G-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-G-FMX04 |
| | | 6 ft (1.9 m) | 140G-G-FMX06 |
| | | 10 ft (3.0 m) | 140G-G-FMX10 |
| H | Non-metallic Handle, Type 1/3/12/4/4X | 4 ft (1.3 m) | 140G-H-FCX04 |
| | | 6 ft (1.9 m) | 140G-H-FCX06 |
| | | 10 ft (3.0 m) | 140G-H-FCX10 |
| | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-H-FCS04 |
| | | 6 ft (1.9 m) | 140G-H-FCS06 |
| | | 10 ft (3.0 m) | 140G-H-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-H-FMX04 |
| | | 6 ft (1.9 m) | 140G-H-FMX06 |
| | | 10 ft (3.0 m) | 140G-H-FMX10 |
| J | Non-metallic Handle, Type 1/3/12/4/4X | 4 ft (1.3 m) | 140G-J-FCX04 |
| | | 6 ft (1.9 m) | 140G-J-FCX06 |
| | | 10 ft (3.0 m) | 140G-J-FCX10 |
| | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-J-FCS04 |
| | | 6 ft (1.9 m) | 140G-J-FCS06 |
| | | 10 ft (3.0 m) | 140G-J-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-J-FMX04 |
| | | 6 ft (1.9 m) | 140G-J-FMX06 |
| | | 10 ft (3.0 m) | 140G-J-FMX10 |
| K | Non-metallic Handle, Type 1/3/12/4/4X | 4 ft (1.3 m) | 140G-K-FCX04 |
| | | 6 ft (1.9 m) | 140G-K-FCX06 |
| | | 10 ft (3.0 m) | 140G-K-FCX10 |
| | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-K-FCS04 |
| | | 6 ft (1.9 m) | 140G-K-FCS06 |
| | | 10 ft (3.0 m) | 140G-K-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-K-FMX04 |
| | | 6 ft (1.9 m) | 140G-K-FMX06 |
| | | 10 ft (3.0 m) | 140G-K-FMX10 |
| M | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-M-FCS04 |
| | | 6 ft (1.9 m) | 140G-M-FCS06 |
| | | 10 ft (3.0 m) | 140G-M-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-M-FMX04 |
| | | 6 ft (1.9 m) | 140G-M-FMX06 |
| | | 10 ft (3.0 m) | 140G-M-FMX10 |
| N | Stainless Steel Handle, Type 4/4X | 4 ft (1.3 m) | 140G-N-FCS04 |
| | | 6 ft (1.9 m) | 140G-N-FCS06 |
| | | 10 ft (3.0 m) | 140G-N-FCS10 |
| | Painted Metal Handle, Type 1/12 | 4 ft (1.3 m) | 140G-N-FMX04 |
| | | 6 ft (1.9 m) | 140G-N-FMX06 |
| | | 10 ft (3.0 m) | 140G-N-FMX10 |

Bulletin 1494V Variable Depth Flange-Mounted Circuit Breaker Operating Mechanism



Components

Circuit Breaker Operating Mechanism

The mechanism listed must be combined with a connecting rod, operating handle, and a circuit breaker (supplied by customer) to obtain a functional device.

| 3-Pole Circuit Breaker★ | | | Operating Mechanism |
|-------------------------|----------------|-------------------|---------------------|
| Brand | Frame Size [A] | Frame Designation | Cat. No. |
| Allen-Bradley | 125, 225, 250 | 140G-G, H, I, J | 1494V-M70 |
| Allen-Bradley | 400 | 140G-K | 1494V-M71 |
| Allen-Bradley | 800, 1200 | 140G-M, N | 1494V-M72 |

★ Circuit breakers to be provided by customer.

Connecting Rods

Approximate dimensions are in inches (millimeters). Approximate dimensions are not intended for manufacturing purposes.

| Circuit Breaker Frame Size [A] | Enclosure Depth | | Cat. No. |
|------------------------------------|-----------------|--------------|------------------|
| | Minimum | Maximum | |
| 125, 150, 250, 400, 600, 800, 1200 | 6-3/4 (172) | 9-1/8 (232) | 1494V-RA3 |
| | 6-3/4 (172) | 21-5/8 (549) | 1494V-RA4 |

Operating Handle






| Handle Type | Description | Circuit Breaker Frame Size [A] | Operating Handle |
|-----------------------|-----------------|--------------------------------|------------------|
| | | | Cat. No. |
| Type 1, 3R, 4, 4X, 12 | Nonmetallic | 125, 150, 250, 400 | 1494F-P1 |
| Type 1, 3R, 4, 12 | Painted Metal | 125, 150, 250, 400 | 1494F-M1 |
| Type 4, 4X | Stainless Steel | 125, 150, 250, 400 | 1494F-S1 |
| Type 1, 3R, 4, 12 | Painted Metal | 800, 1200 | 1494F-M2 |
| Type 4, 4X | Stainless Steel | 800, 1200 | 1494F-S2 |

Auxiliary Contacts

| Description | For Use With | Contact Type | Cat. No. |
|--|---|--------------|-----------------|
| Auxiliary Contact Kit for Circuit Breakers (includes contacts and adapter) | 125...1200 A Allen-Bradley Bul. 140G Circuit Breakers | 1 N.O. | 1495-N85 |
| | | 1 N.C. | 1495-N86 |



Bulletin 140G
Molded Case Circuit Breakers
 Accessories

Additional Accessories

| | Description | Frame Size | Cat. No. | |
|--|---|------------|-----------------|-----------------|
| | Trip Test Unit | All | 140G-ELTT | |
|  <i>Representative Photo</i> | Padlockable Handle Block Padlocking Hasp Lock-OFF only | G, I | 140G-G-PL | |
| | | H, J | 140G-H-PL | |
| | | N | 140G-N-PL | |
| | | NS | 140G-NS-PL | |
| | | R | 140G-R-PL | |
| | | | | |
| | Direct Mechanical Lock to Door | N, NS | 140G-N-SINT | |
| | | | | |
| | Description | Frame Size | 3-Pole Cat. No. | 4-Pole Cat. No. |
|  <i>Representative Photo</i> | Replacement Mounting Hardware Metric threads | G, I | ★ 140G-G-MH3 | ‡ 140G-G-MH4 |
| | | H, J | — | ★ 140G-H-MH4 |
| | | K | — | § 140G-K-MH4 |
| | | M | — | § 140G-M-MH4 |
| | | N, NS | — | § 140G-N-MH4 |
| | | G | 140G-G-DRA | 140G-G-DRA4 |
| | | | | |
| | DIN Rail Adapter Adapts to 35 mm DIN Rail | H, J | 140G-H-DRA | |
|  <i>Representative Photo</i> | | I | 140G-I-DRA | 140G-I-DRA4 |
| | | G | 140G-G-EP3 | 140G-G-EP4 |
|  <i>Representative Photo</i> | Escutcheon Plates Finish Frame with Marking provision window. For flush mounted (to door) MCCB applications. | H | 140G-H-EP3 | 140G-H-EP4 |
| | | I | 140G-I-MH3 | 140G-I-MH4 |
| | | J | 140G-J-MH3 | 140G-J-MH4 |
| | | K | 140G-K-MH3 | |
| | | M | 140G-M-MH3 | |
| | | N, NS | 140G-N-MH3 | |
| | | R | 140G-R-MH3 | |
| | | | | |
| | IP54 Door protection Transparent plastic cover flush mounted to the enclosure door. Mounted on hinges and provided with a keyed lock. | N, NS | 140G-N-BC12 | |
|  <i>Representative Photo</i> | | R | 140G-R-BC12 | |

- ★ Pkg. Qty. 2
- ‡ Pkg. Qty. 3
- § Pkg. Qty. 4

Replacement Parts

|  <i>Representative Photo</i> | Description | Frame Size | 3-Pole Cat. No. | 4-Pole Cat. No. |
|--|--|---------------------------------|--|---|
| | Replacement End Cap Kits End Caps are supplied as standard for G, H, I, J, K, M, N & NS frames. Provide connections for ring type or bolt-on terminals. | G H I J K M N | 140G-G-ECM 140G-H-ECM 140G-I-ECM 140G-J-ECM 140G-K-ECM 140G-M-ECM 140G-N-ECM | 140G-G-ECM4 140G-H-ECM4 140G-I-ECM4 140G-J-ECM4 140G-K-ECM4 140G-M-ECM4 140G-N-ECM4 |
|  <i>Representative Photo</i> | Insulators Supplied as standard for G, H, I, J, K, and M frames. Provide insulating barrier for MCCB applications, required for all applications with a $U_e > 440V$. Pkg Qty 10. | H J K M | 140G-H-BP3 140G-J-BP3 140G-K-BP3 140G-M-BP3 | 140G-H-BP4 140G-J-BP4 140G-K-BP4 140G-M-BP4 |

Bulletin 140G
Molded Case Circuit Breakers
 Specifications — I- and J-Frame

| | | I-Frame | | | J-Frame‡ | | |
|--|-----------|------------------------------|----------|------|------------------------------|------|------|
| Max. Rated Current | [A] | 225 | | | 250 | | |
| Rated insulation voltage, U_i , IEC | [V] | 800 | | | 1000 | | |
| NEMA, UL, CSA | | | | | | | |
| Interrupting Rating Code | | I2 | I3 | J2 | J3 | J6 | J0 |
| 240V AC, 50/60Hz | [kA] | 50 | 65 | 65 | 100 | 150 | 200 |
| 480V AC, 50/60Hz | [kA] | 25 | 35 | 25 | 35 | 65 | 100 |
| 600Y/347V AC, 50/60Hz | [kA] | 10 | 10 | — | — | — | — |
| 600V AC, 50/60 Hz | [kA] | — | — | 14 | 18 | 25 | 35 |
| IEC 60947-2 | | | | | | | |
| Rated ultimate short-circuit breaking capacity, I_{cu} | | | | | | | |
| 220/230/240V AC, 50/60Hz | [kA] | 50 | 85 | 65 | 85 | 100 | 150 |
| 380V AC, 50/60Hz | [kA] | 36 | 50 | 36 | 50 | 70 | 120 |
| 415V AC, 50/60Hz | [kA] | 36 | 50 | 36 | 50 | 70 | 120 |
| 440V AC, 50/60Hz | [kA] | 25 | 40 | 36 | 50 | 65 | 100 |
| 500V AC, 50/60Hz | [kA] | 20 | 30 | 30 | 36 | 50 | 60 |
| 525V AC, 50/60Hz | [kA] | 13 | 20 | 20 | 25 | 45 | 50 |
| 690V AC, 50/60Hz | [kA] | 5 | 6 | 10 | 12 | 15 | 20 |
| 250V DC, 2 Poles in Series | [kA] | 36 | 50 | 36 | 50 | 70 | 85 |
| 500V DC, 2 Poles in Series | [kA] | — | — | 36 | 50 | 70 | 85 |
| 500V DC, 3 Poles in Series | [kA] | 36 | 50 | 36 | 50 | 70 | 85 |
| 750V DC, 3 Poles in Series | [kA] | — | — | — | — | — | — |
| Rated service short-circuit breaking capacity, I_{cs} | | | | | | | |
| 220/230/240V AC, 50/60Hz | [kA] | 75% | 50% | 100% | 100% | 100% | 100% |
| 380V AC, 50/60Hz | [kA] | 75% | 50% (27) | 100% | 100% | 100% | 100% |
| 415V AC, 50/60Hz | [kA] | 75% | 50% (27) | 100% | 100% | 100% | 100% |
| 440V AC, 50/60Hz | [kA] | 75% | 50% | 100% | 100% | 100% | 100% |
| 500V AC, 50/60Hz | [kA] | 75% | 50% | 100% | 100% | 100% | 100% |
| 525V AC, 50/60Hz | [kA] | 75% | 50% | 100% | 100% | 100% | 100% |
| 690V AC, 50/60Hz | [kA] | 50% | 50% | 100% | 100% | 100% | 100% |
| 250V DC, 2 Poles in Series | [kA] | 100% | 75% | 100% | 100% | 100% | 100% |
| 500V DC, 2 Poles in Series | [kA] | — | — | 100% | 100% | 100% | 100% |
| 500V DC, 3 Poles in Series | [kA] | 100% | 75% | 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: 105x70x150 | | | 3 poles: 105x82.5x160 | | |
| | [mm] | 4 poles: 140x70x150 | | | 4 poles: 140x82.5x160 | | |

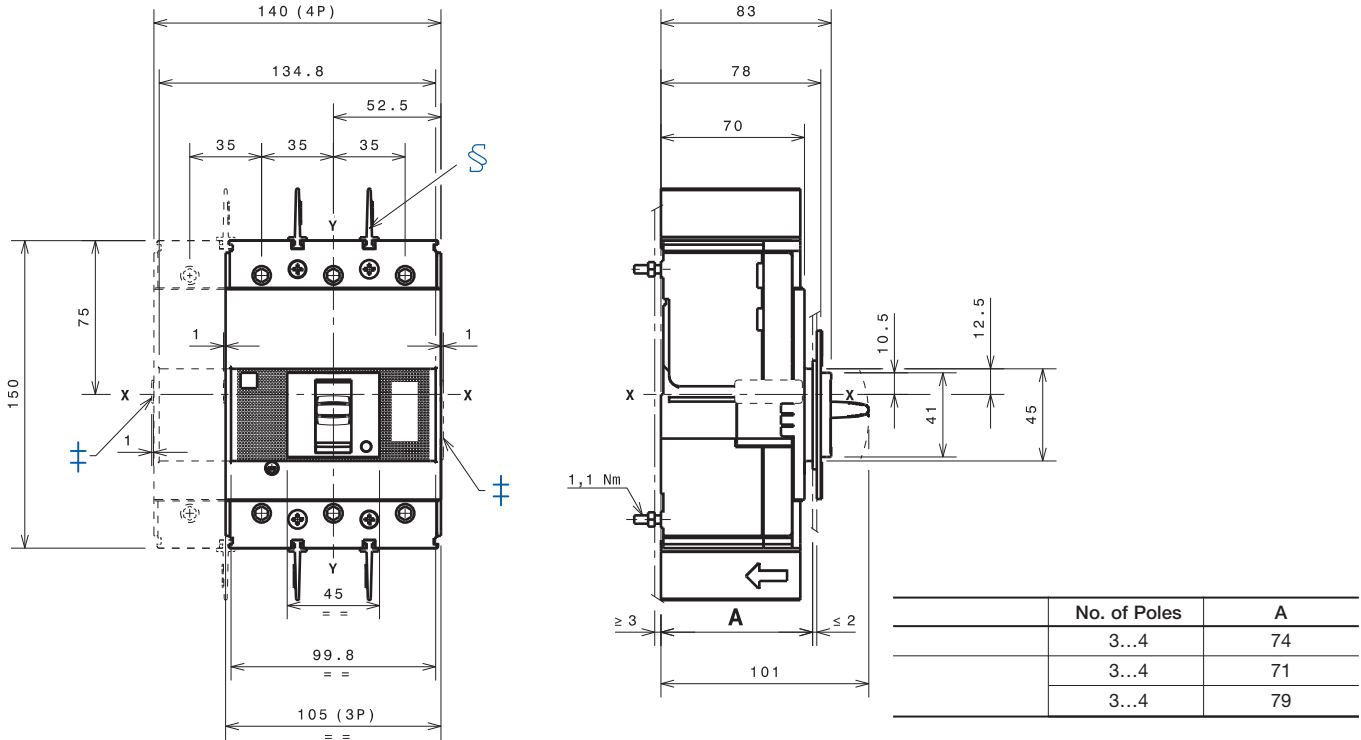
‡ Cannot be reverse fed above 600V

Molded Case Circuit Breakers

Approximate Dimensions — 225 A, I-Frame

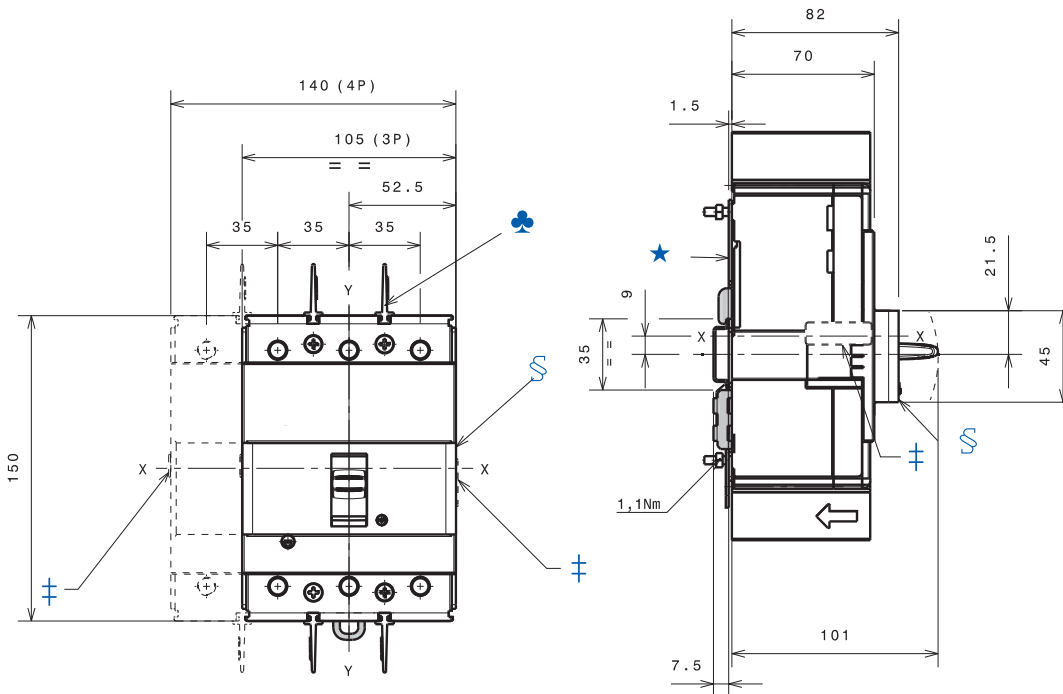
Dimensions are in millimeters. Dimensions are not intended to be used for manufacturing purposes.

Panel Mounted Molded Case Circuit Breaker



- ± Overall dimensions of optional wiring ducts
- § Required 25 mm insulating phases barriers provided

DIN Rail Mounted Molded Case Circuit Breaker

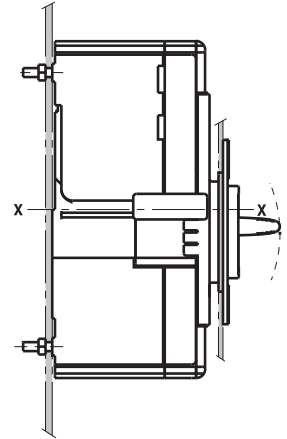
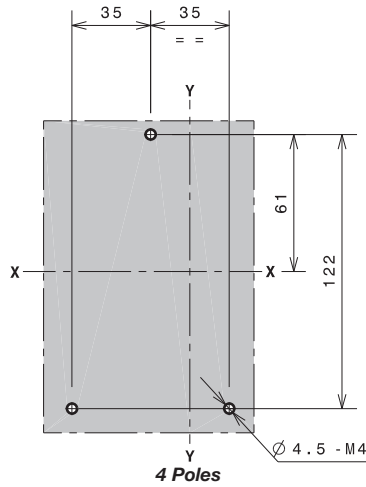
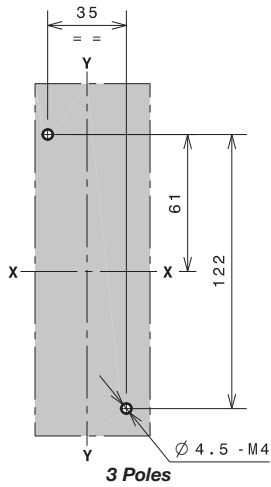


- ★ Mounting bracket
- ± Optional wiring ducts
- § Optional front cover for DIN Rail
- ♣ Required 25 mm insulating phase barriers provided

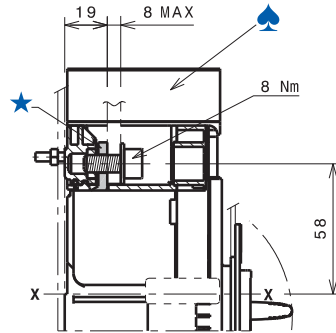
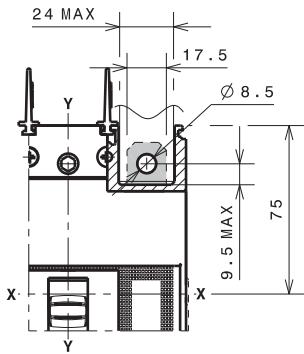
Molded Case Circuit Breakers

Approximate Dimensions — 225 A, I-Frame

Drilling Template for Molded Case Circuit Breaker Mounting

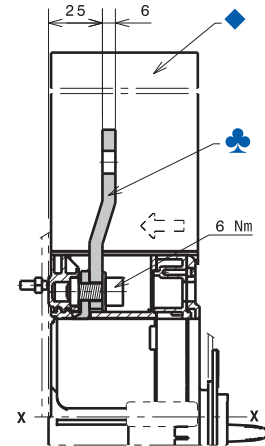
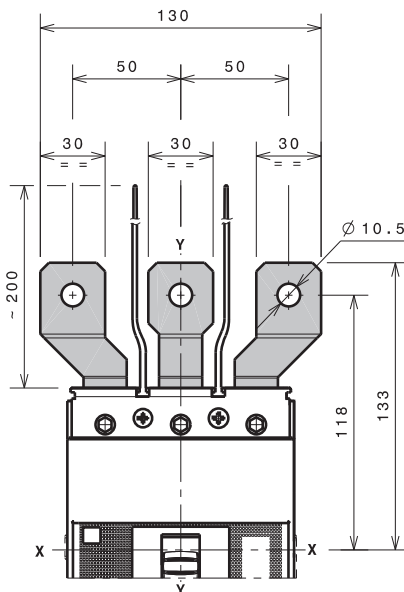
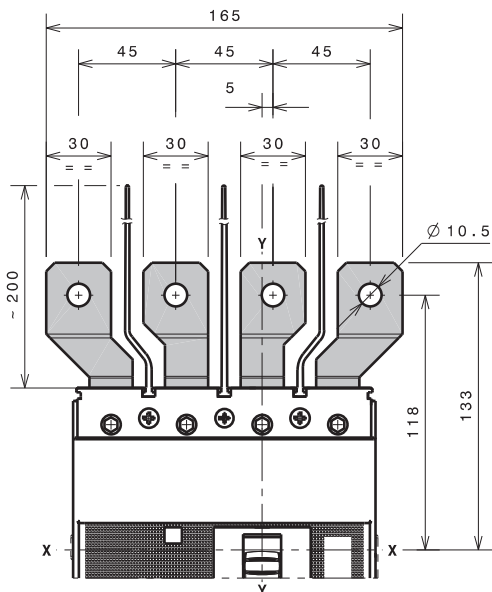


Cat. Nos. 140G-I-ECM, -ECM4 Terminals



- ★ Front terminals for busbar connection
- ‡ Required 25 mm insulating phase barriers provided

Cat. Nos. 140G-J-EXS3, -EXS4 Terminals

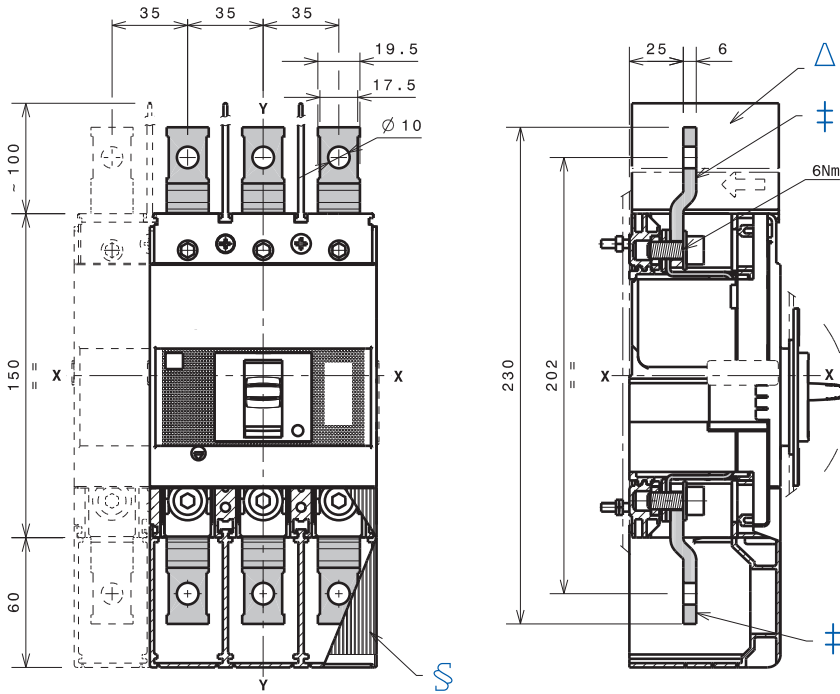


- ♣ Extended spread terminals
- ◆ Required 200 mm insulating phase barriers provided

Molded Case Circuit Breakers

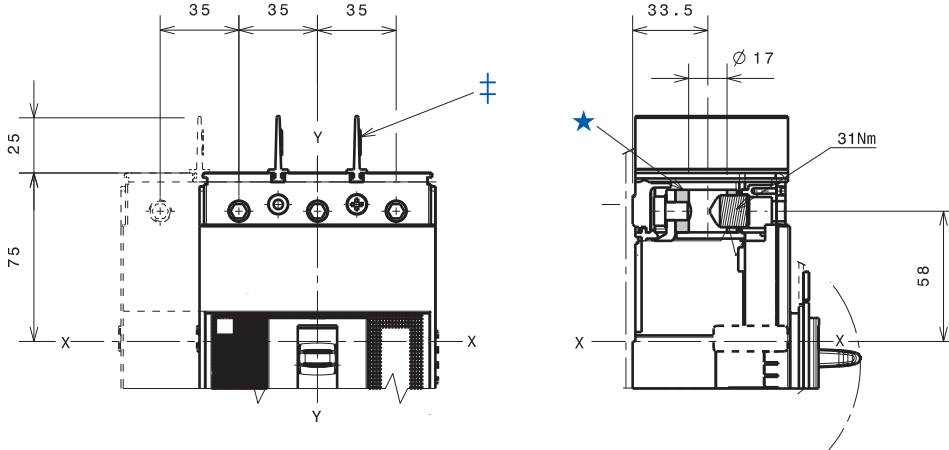
Approximate Dimensions — 225 A, I-Frame

Cat. Nos. 140G-I-EXT3, -EXT4 Extended Terminals



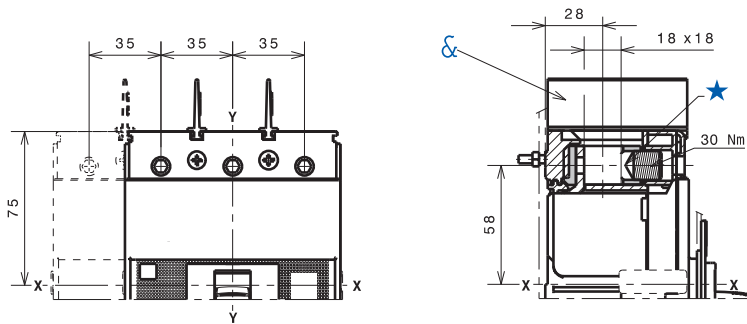
- ⊕ Extended terminals
- § Optional terminal covers with IP40 protection provided
- △ Required 100 mm insulating phase barriers provided

Cat. Nos. 140G-I-TLA1A3, -TLA1A4 Terminals



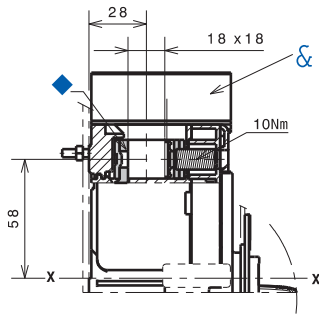
- ★ 30...150 mm² terminals
- ⊕ Required 25 mm insulating phase barriers provided

Cat. Nos. 140G-I-TLA3, -TLA4 Terminals



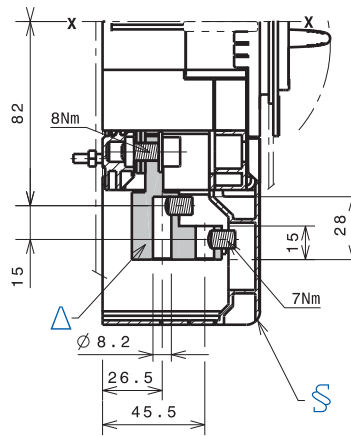
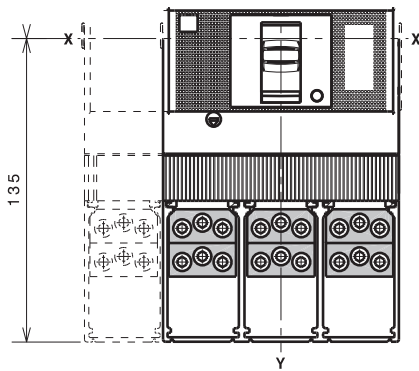
- ★ 1x90...185 mm² terminal
- § Required 25 mm insulating phase barriers provided

Cat. Nos. 140G-I-TLC13, -TLC14 Terminals



- ◆ Front terminals
- & Required 25 mm insulating phase barriers provided

Cat. Nos. 140G-I-MTL63, -MTL64 Terminals

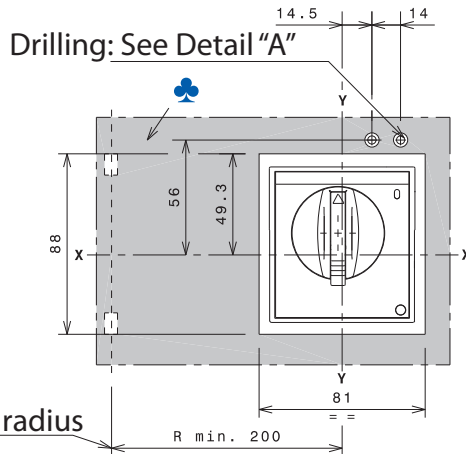
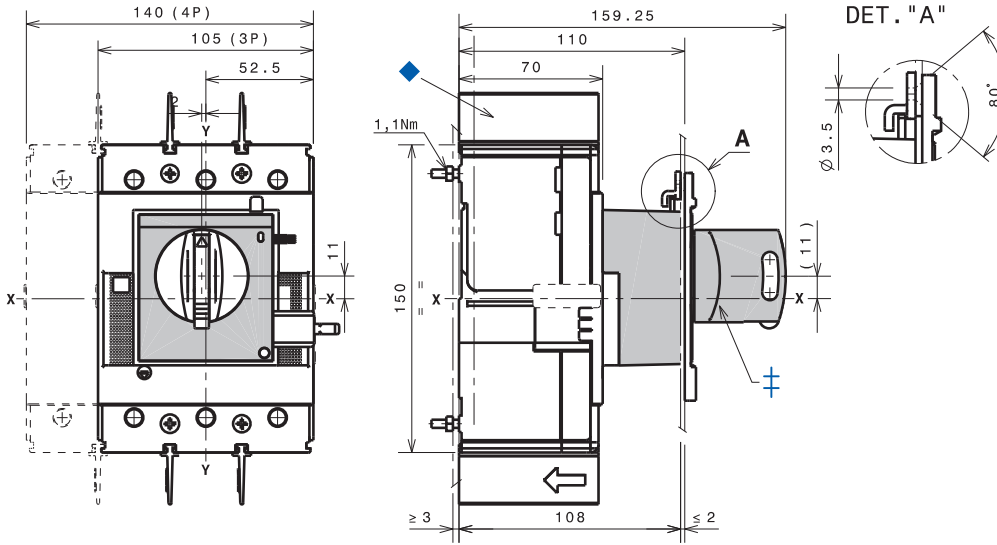


- § Optional terminal covers with IP40 protection provided
- △ Multi-cable terminal lugs

Molded Case Circuit Breakers

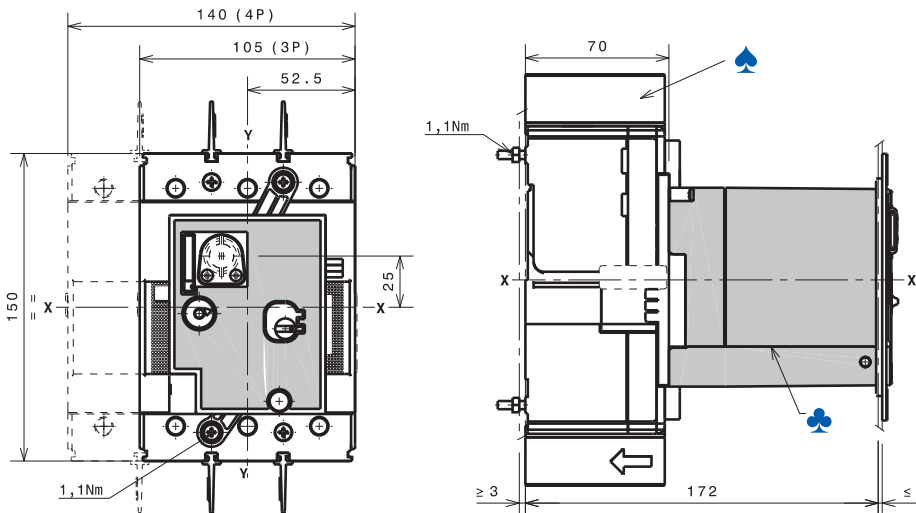
Approximate Dimensions — 225 A, I-Frame

Cat. No. 140G-G-RMB, -RMY Direct Rotary Operating Handle (For I- and G-Frame Molded Case Circuit Breaker)



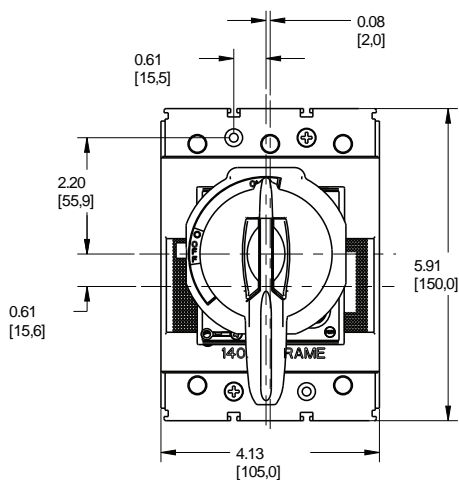
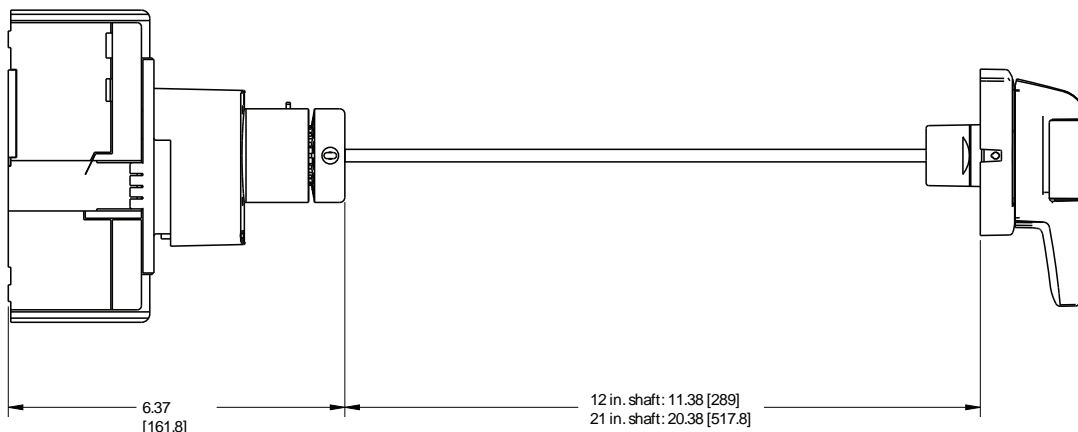
- ‡ Rotary handle operating mechanism on molded case circuit breaker
- ♣ Door drilling template with direct rotary handle
- ◆ Required 25 mm insulating phase barriers provided

Cat. No. 140G-G-EOP... Motor Operator (I-Frame)

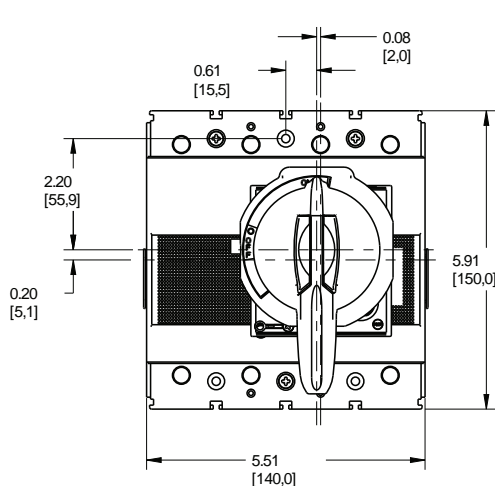


- ‡ Motor operator
- ♣ Required 25 mm insulating phase barriers provided

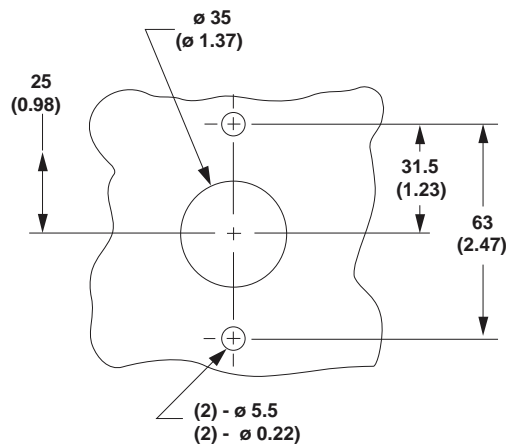
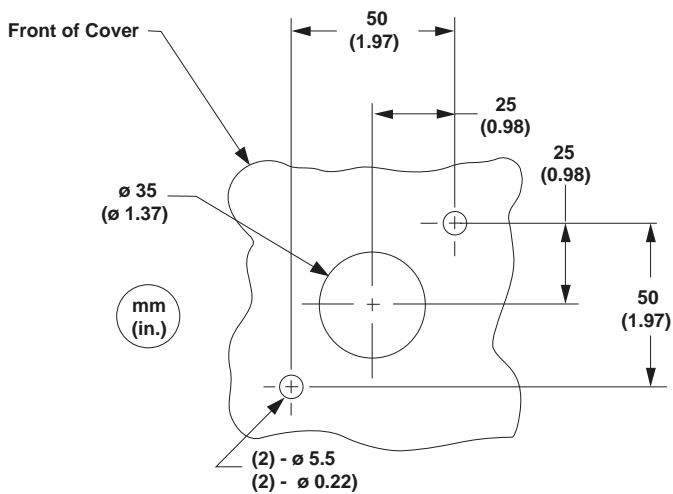
Cat. No. 140G-G-RVM... Variable Depth Rotary Handle Operating Mechanism (For I-Frame Molded Case Circuit Breaker)



3-Pole

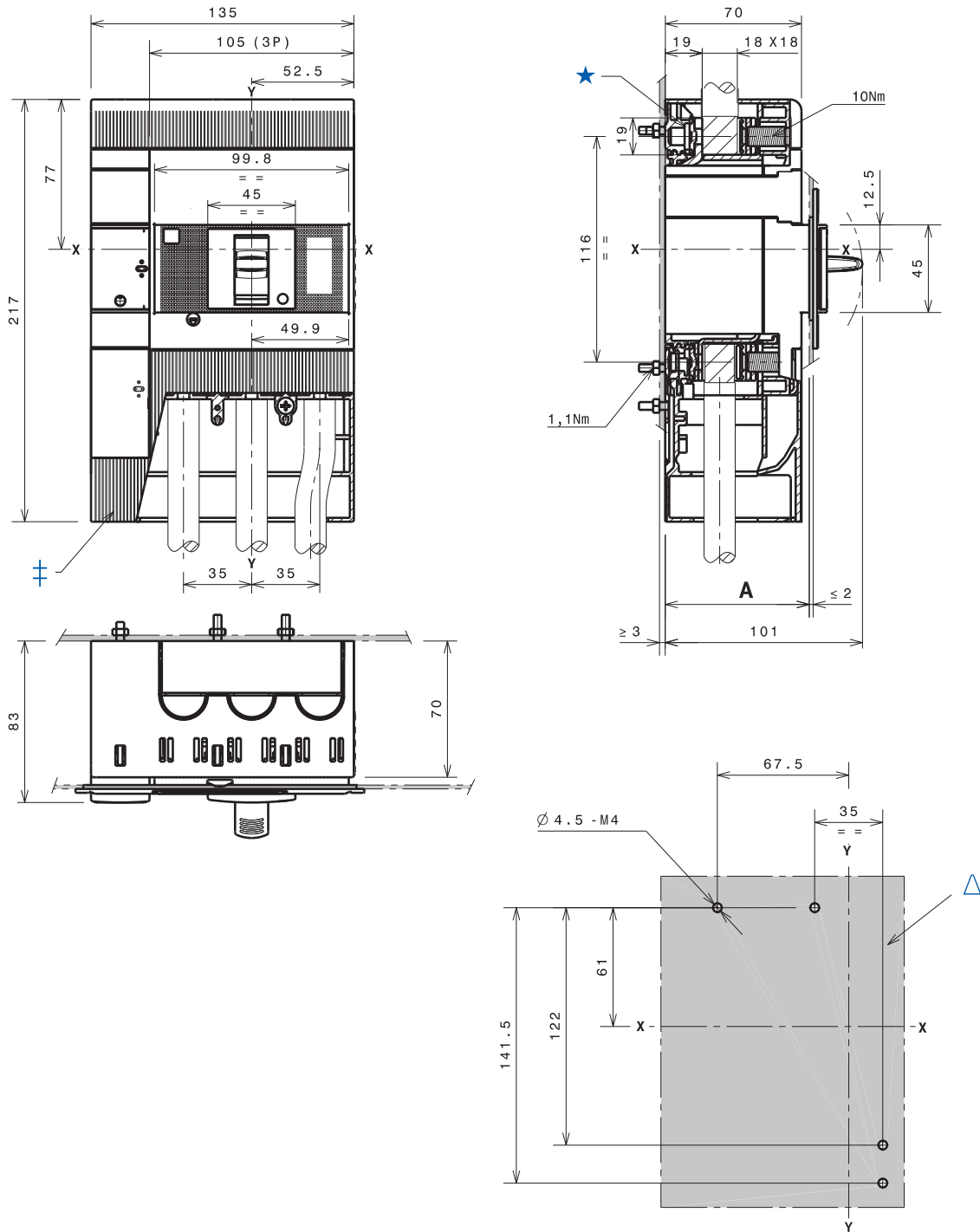


4-Pole



Bulletin 140G
Molded Case Circuit Breakers
 Approximate Dimensions — 225 A, I-Frame

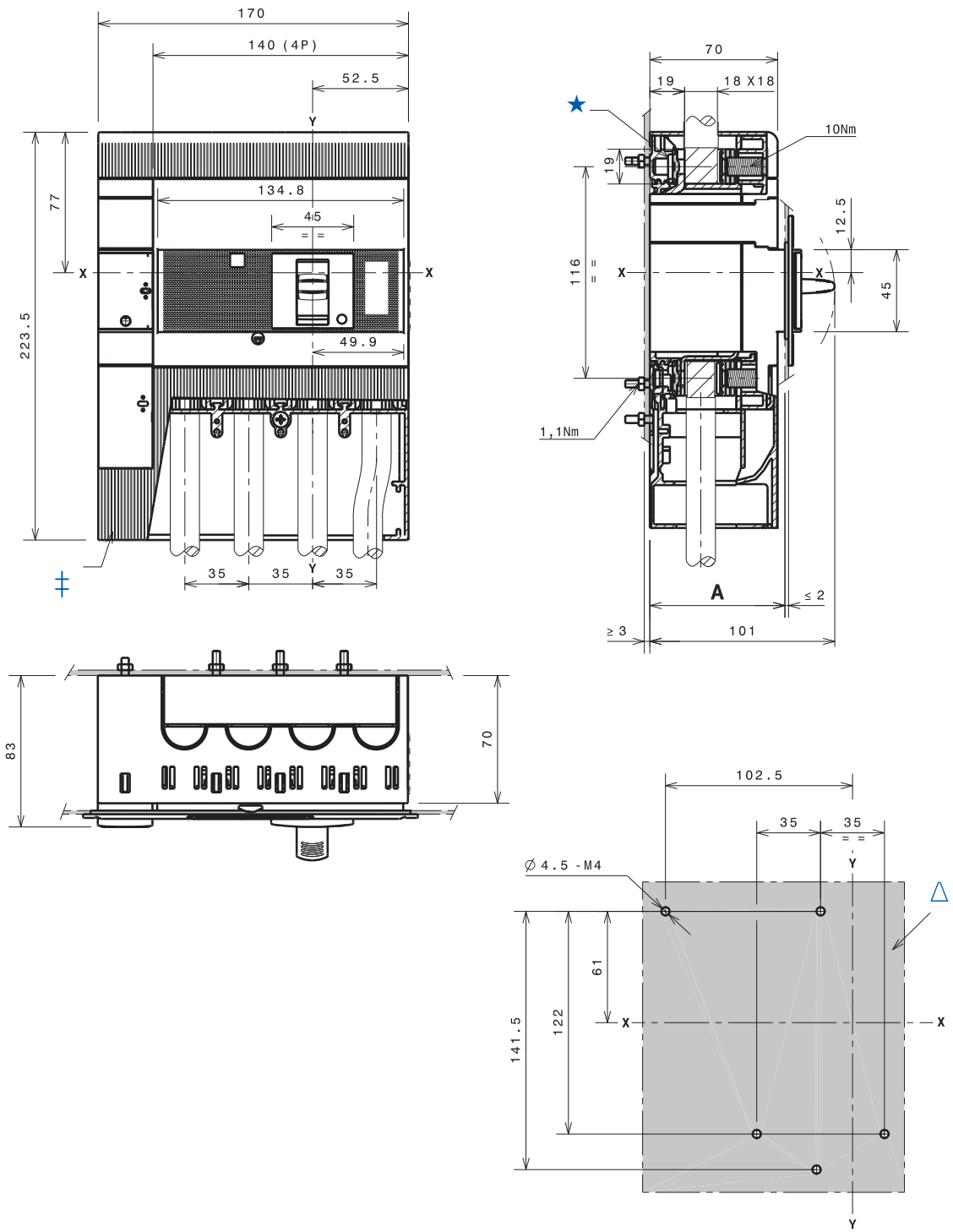
Cat. No. 140G-I-ELP2503 Residual Current Release Module



| Description | No. of Poles | A |
|----------------|--------------|----|
| With flange | 3 | 74 |
| Without flange | 3 | 71 |

- ★ Terminals for cable connection
- ‡ Terminal covers with IP40 protection
- △ Drilling template — molded case circuit breaker mounting on mounting plate

Cat. No. 140G-I-ELP2504 Residual Current Release Module for 4-Pole Molded Case Circuit Breakers



| Description | No. of Poles | A |
|----------------|--------------|----|
| With flange | 4 | 74 |
| Without flange | 4 | 71 |

- ★ Terminals for busbar connection
- ‡ Terminal covers with IP40 protection
- △ Drilling template — molded case circuit breaker mounting on mounting plate