



## G Frame vs. EG Frame Breakers

[www.usa.siemens.com/circuitbreakers](http://www.usa.siemens.com/circuitbreakers)

The G Frame circuit breakers are compact, industrial design thermal magnetic breakers with valuable features for the global market. The information contained in this document is intended to compare the G Frame breakers with the EG Frame Breakers.

### Applications:

- Well suited for OEM designed equipment in both light commercial and industrial applications.
- For use in panelboard mounted applications.
- Breakers may be used as incoming main and branch breakers in distribution systems.

### Features:

- Overcenter toggle mechanism that is trip free, and uses repulsion contact arm construction.
- Suitable for Reverse Feed Applications.
- UL Listed Field Installable Accessories.
- Removable lugs.

### Operating Conditions:

- For installation in dusty and damp rooms or outdoors, suitable enclosures must be used. (Such enclosures for EG breakers are not provided by Siemens.)
- Factory calibrated for 40° C ambient.
- Units calibrated for 50° C maximum ambient (non-UL) and naval applications available.

### Flexibility of installation and on-site adjustments:

- UL listed field installable accessories allows for quick on-site changes. Interchangeable Lugs & Nut Keepers allows for last minute modifications in the field.
- Integral DIN rail or base mounting capability simplifies mounting without the need of additional plates or adapters (G Frame only.)

| Category  |  | Frame Type                    |                        |
|---|--|-------------------------------|------------------------|
|   |  | EG                            | G                      |
| <b>Marks &amp; Ratings</b>                        |  |                               |                        |
| Global rated (UL/CSA/IEC/NOM) UL489               |  |                               |                        |
|   | CSA-C22.2 No. 5-02   | ✓                             | ✓                      |
|   | IEC 60947-2  | ✓                             | ✓                      |
|   | NMX-J-515-ANCE-2000 <sup>®</sup>                           | ✓                             | ✓                      |
| HACR, SWD, and HID marked (at applicable ratings) |  | ✓                             | ✓                      |
| <b>Poles</b>                                      |  |                               |                        |
|   | 1 Pole   | ✓                             | ✓                      |
|   | 2 Pole   | ✓                             | ✓                      |
|   | 3 Pole   | ✓                             | ✓                      |
|   | 4 Pole   | ✓                             | -                      |
| <b>Size</b>                                       |  |                               |                        |
| <b>Dimensions</b>                                 |  |                               |                        |
|   | Width  | 3.0"                          | 3.0"                   |
|   | Height   | 5.5"                          | 5.4"                   |
|   | Depth  | 3.0"                          | 2.8"                   |
| <b>Mounting Holes</b>                             |  |                               |                        |
|   | Mounting Screw Specifications<br>(Unified Thread Standard) | #6-32 UNC-2B                  | #6-32 UNC              |
| <b>Shipping Weight</b>                            |  |                               |                        |
|   | 1 Pole   | 1.4 lbs. / 0.5 kgs.           | 0.9 lbs. / 0.4 kgs.    |
|   | 2 Pole   | 2.4 lbs. / 0.9 kgs.           | 1.9 lbs. / 0.9 kgs.    |
|   | 3 Pole   | 3.7 lbs. / 1.4 kgs.           | .9 lbs. / 1.2 kgs.     |
|   | 4 Pole   | 4.8 lbs. / 1.8 kgs.           | -                      |
| <b>Interrupt Ratings (UL 489)</b>                 |  |                               |                        |
| <b>120V AC</b>                                    |  | <b>Available On:</b>          |                        |
|   | 65 kA  | -                             | 1 Pole GG Breakers     |
|   | 100 kA   | 1 Pole EG Breakers            | 1 Pole GB Breakers     |
|   | 200 kA   | 1 Pole EG Breakers            | -                      |
| <b>240V AC</b>                                    |  | <b>Available On:</b>          |                        |
|   | 65 kA  | -                             | 2 & 3 Pole GG Breakers |
|   | 85 kA  | 1, 2, 3, & 4 Pole EG Breakers | -                      |
|   | 100 kA   | 1, 2, 3, & 4 Pole EG Breakers | 2 & 3 Pole GB Breakers |
| <b>277V AC</b>                                    |  | <b>Available On:</b>          |                        |
|   | 25 kA  | -                             | 1 Pole GG/GB Breakers  |
|   | 35 kA  | 1 Pole EG Breakers            | 1 Pole GG/GB Breakers  |
|   | 65 kA  | 1 Pole EG Breakers            | 1 Pole GG/GB Breakers  |
| <b>347V AC</b>                                    |  | <b>Available On:</b>          |                        |
|   | 14 kA  | -                             | 1 Pole GG/GB Breakers  |
|   | 22 kA  | 1 Pole EG Breakers            | 1 Pole GG Breakers     |
|   | 25 kA  | 1 Pole EG Breakers            | 1 Pole GG Breakers     |

| Category             |                             | Frame Type                 |                           |
|----------------------|-----------------------------|----------------------------|---------------------------|
|                      |                             | EG                         | G                         |
| 480V AC              |                             | Available On:              |                           |
|                      | 25 kA                       | -                          | 2 & 3 Pole GG Breakers    |
|                      | 35 kA                       | 2, 3, & 4 Pole EG Breakers | 2 & 3 Pole GG Breakers    |
|                      | 65 kA                       | 2, 3, & 4 Pole EG Breakers | 2 & 3 Pole GG Breakers    |
| 480Y/277V AC         |                             | Available On:              |                           |
|                      | 25 kA                       | -                          | 2 & 3 Pole GB Breakers    |
|                      | 35 kA                       | -                          | 2 & 3 Pole GB Breakers    |
|                      | 65 kA                       | -                          | 2 & 3 Pole GB Breakers    |
| 600Y/347V AC         |                             | Available On:              |                           |
|                      | 14 kA                       | -                          | 2 & 3 Pole GG/GB Breakers |
|                      | 22 kA                       | 2, 3, & 4 Pole EG Breakers | 2 & 3 Pole GG/GB Breakers |
|                      | 25 kA                       | 2, 3, & 4 Pole EG Breakers | 2 & 3 Pole GG/GB Breakers |
| Voltage Ratings      |                             |                            |                           |
| AC                   |                             |                            |                           |
|                      | 120V                        | ✓                          | ✓                         |
|                      | 240V                        | ✓                          | ✓                         |
|                      | 277V                        | ✓                          | ✓                         |
|                      | 347V                        | ✓                          | ✓                         |
|                      | 480V                        | ✓                          | ✓                         |
|                      | 480Y/277V                   | -                          | ✓                         |
|                      | 600Y/347V                   | ✓                          | ✓                         |
| DC                   |                             |                            |                           |
|                      | 125V                        | -                          | ✓                         |
|                      | 125/250V                    | ✓                          | ✓                         |
| Accessories          |                             |                            |                           |
| Internal Accessories |                             |                            |                           |
|                      | Shunt Trip                  | ✓                          | ✓ <sup>①</sup>            |
|                      | Auxiliary Switches          | ✓                          | ✓ <sup>①</sup>            |
|                      | Alarm Switch                | ✓                          | ✓ <sup>①</sup>            |
|                      | Undervoltage Release        | ✓                          | -                         |
| External Accessories |                             |                            |                           |
|                      | Handle Blocking Device      | ✓                          | ✓                         |
|                      | Handle Padlock Device       | ✓                          | ✓                         |
|                      | Mounting Screw Kit          | ✓                          | ✓                         |
|                      | Variable Depth Operator Kit | ✓                          | ✓                         |
|                      | Max-Flex™ Operator Kits     | ✓                          | ✓                         |
|                      | Flex Operator Kits          | ✓                          | -                         |
|                      | DIN Rail Adapter            | ✓                          | -                         |
|                      | Plug-In Assembly Kit        | ✓                          | -                         |
|                      | Handle Tie                  | -                          | ✓                         |
|                      | Face Mounting Plate         | -                          | ✓                         |
|                      | Nut Keeper Plate            | -                          | ✓                         |

① Rating pending for GB Breakers.

② Mounted left side only, not available in single pole.

| External Accessories:          |  | Catalog Number             |
|--------------------------------|--|----------------------------|
| Handle Operators               |  |                            |
| <b>EG Frame</b>                |  |                            |
| <b>NEMA Type 1</b>             |  |                            |
|                                | Rotary Handle Operator (Black Handle, Breaker Mounted)                                       | RHFESD                     |
|                                | Rotary Handle Operator with Door Interlock (Black Handle, Breaker Mounted)                   | RHFESDL                    |
|                                | Rotary Handle Operator (Red Handle, Breaker Mounted)   | RHFESDEM                   |
| <b>NEMA Type 1, 12</b>         |  |                            |
|                                | Variable Depth Rotary Operator Kit (Black Handle, 6 Inch Shaft)                              | RHVE6                      |
|                                | Variable Depth Rotary Operator Kit (Black Handle, 12 Inch Shaft)                             | RHVE12                     |
|                                | Variable Depth Rotary Operator (Black Handle, 24 Inch Shaft)                                 | RHVE24                     |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 6 Inch Shaft)                                | RHVEEM6                    |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 12 Inch Shaft)                               | RHVEEM12                   |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 24 Inch Shaft)                               | RHVEEM24                   |
| <b>NEMA Type 1, 12, 3R</b>     |  |                            |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Complete Kit)                             | MFKE3 ①                    |
| <b>NEMA Type 1, 12, 3R, 4X</b> |  |                            |
|                                | Variable Depth Rotary Operator Kit (Black Handle, 6 Inch Shaft)                              | RHVE64XA                   |
|                                | Variable Depth Rotary Operator Kit (Black Handle, 12 Inch Shaft)                             | RHVE124XA                  |
|                                | Variable Depth Rotary Operator Kit (Black Handle, 24 Inch Shaft)                             | RHVE244XA                  |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 6 Inch Shaft)                                | RHVEEM64XA                 |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 12 Inch Shaft)                               | RHVEEM124XA                |
|                                | Variable Depth Rotary Operator Kit (Red Handle, 24 Inch Shaft)                               | RHVEEM244XA                |
| <b>NEMA Type 4, 4X</b>         |  |                            |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Complete Kit)                             | MFKE4X3                    |
| <b>G Frame</b>                 |  |                            |
| <b>NEMA Type 1, 12</b>         |  |                            |
|                                | Variable Depth Rotary Operator Kit (Handle, Shaft, Breaker Operator) (Standard)              | RHOCQVD                    |
|                                | Variable Depth Rotary Operator Kit (Handle, Shaft, Breaker Operator) (Red and Yellow Handle) | RHOCQVDE                   |
|                                | Standard Depth Operator Handle (Through Door) (Standard)                                     | FMHOS                      |
|                                | Standard Depth Operator Handle (Through Door) (Red and Yellow Handle)                        | FMHOE                      |
| <b>NEMA Type 1, 12, 3R</b>     |  |                            |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Complete Kit)                             | MFKG3R3                    |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Handle Only)                              | MFHM3R                     |
| <b>NEMA Type 1, 12, 3R, 4X</b> |  |                            |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Breaker Operator)                         | MFMG                       |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (36" Cable)                                | MFCF036                    |
| <b>NEMA Type 3R</b>            |  |                            |
|                                | Variable Depth Rotary Operator Kit (Operator, Handle, Shaft)                                 | CQDOP34<br>RHOH<br>RHOSVD  |
| <b>NEMA Type 4, 4X</b>         |  |                            |
|                                | Variable Depth Rotary Operator Kit (Operator, Handle, Shaft)                                 | CQDOP34<br>RHOH4<br>RHOSVD |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Complete Kit)                             | MFKG4X3                    |
|                                | Max-Flex™, Flange Mounted Variable Depth Operator (Handle Only)                              | MFHM4X                     |

① Consult sales office for additional cable lengths for EG Flex Shaft Operators. For 3-Pole only.

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