

**G-Frame**

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**Product Description**

- All two- and three-pole circuit breakers are of the common trip type. On all 3-phase Delta (240V) Grounded B phase applications, refer to Cutler-Hammer.
- Single-pole circuit breakers, 15 and 20 amperes. Switching duty rated (SWD) for fluorescent lighting applications.
- All G-Frame circuit breakers are suitable for reverse feed use.
- HACR rated.

**Technical Data and Specifications**

**Interrupting Capacity Ratings**

**Table 12-2. UL489 Interrupting Capacity Ratings**

| Circuit Breaker Type | Number of Poles | Interrupting Capacity (Symmetrical Amperes) (kA) |     |     |     |           |        |
|----------------------|-----------------|--|-----|-----|-----|-----------|--------|
|                      |                 | Volts AC (50/60 Hz)                              |     |     |     | Volts DC  |        |
|                      |                 | 120  | 240 | 277 | 480 | 125/250 ② | 250 ①② |
| GD                   | 2               | —  | 65  | —   | 14  | 10        | —      |
|                      | 3               | —  | 65  | —   | 22  | —         | 10     |

① Two poles of 3-pole circuit breaker.

② Time constant is 8 milliseconds minimum.

**Table 12-3. UL489 Interrupting Capacity Ratings (Continued)**

| Circuit Breaker Type | Number of Poles | Interrupting Capacity (Symmetrical Amperes) (kA) |     |     |          |          |         |
|----------------------|-----------------|--|-----|-----|----------|----------|---------|
|                      |                 | Volts AC (50/60 Hz)                              |     |     |          | Volts DC |         |
|                      |                 | 120  | 240 | 277 | 480Y/277 | 125      | 125/250 |
| GB                   | 1               | 65   | —   | —   | —        | 14 ③     | —       |
|                      | 2, 3            | —  | 65  | —   | —        | —        | 14      |
| GQ                   |                 |  |     |     |          |          |         |
| GHB                  | 1               | 65   | —   | 14  | —        | 14 ③     | —       |
|                      | 2, 3            | —  | 65  | —   | 14       | —        | 14      |
| HGHB                 | 1               | 65   | —   | 25  | —        | 14       | —       |
| GC                   | 1               | 65   | —   | —   | —        | 14 ③     | —       |
|                      | 2, 3            | —  | 65  | —   | —        | —        | 14      |
| GHC                  | 1               | 65   | —   | 14  | —        | 14 ③     | —       |
|                      | 2, 3            | —  | 65  | —   | 14       | —        | 14      |
| HGHC                 | 1               | 65   | —   | 25  | —        | 14       | —       |

③ 15 through 70A breakers only.

**Terminal Types**

For line and load-side. Terminals are UL listed as suitable for wire type and size given below.

**Table 12-4. Terminal Types**

| Circuit Breaker Amperes   | Terminal Type Material   | Screw Head Type | Wire Type | AWG Wire Range | Metric Wire ④ Range (mm <sup>2</sup> ) |
|---------------------------|--------------------------|-----------------|-----------|----------------|--|
| <b>Standard</b>           |                          |                 |           |                |  |
| 15 – 20                   | Clamp (Plated Steel)     | Slotted         | Cu/Al     | 14 – 10        | 2.5 – 4                                |
| 25 – 100                  | Pressure (Aluminum Body) | Slotted         | Cu/Al     | 10 – 1/0       | 4 – 50                                 |
| <b>Optional — GD Only</b> |                          |                 |           |                |  |
| 15 – 100                  | Pressure (Steel Body)    | Slotted         | Cu        | 14 – 3         | —                                      |

④ Not UL listed sizes.

G-Frame

Types GB, GHB and HGHB Bolt-On Panelboard Circuit Breakers



Typical GB

Standards and Certifications

These breakers meet the requirements of Federal Specification W-C-375b as follows:

- Types GB, GHB, 120 and 240V:
  - 1 Pole: Class 11a
  - 2, 3 Poles: Classes 10b, 11b, 12b, 14b, 15b
- Type GHB, 277 and 480Y/277V:
  - 1 Pole: Classes 12c, 13a
  - 2, 3 Poles: Class 13b
- Type HGHB 277V
- Type GQ 277V

Product Selection

Table 12-8. Type GB Thermal-Magnetic Circuit Breakers with Non-interchangeable Trip Units

| Continuous Ampere Rating @ 40°C | 120V AC Maximum, 125V DC Maximum ① |               | 240V AC Maximum, 125/250V DC Maximum |               | 240V AC Maximum, 125/250V DC Maximum ② |               |
|---------------------------------|------------------------------------|---------------|--------------------------------------|---------------|--|---------------|
|                                 | 1-Pole                             |               | 2-Pole                               |               | 3-Pole                                 |               |
|                                 | Catalog Number                     | Price U.S. \$ | Catalog Number                       | Price U.S. \$ | Catalog Number                         | Price U.S. \$ |
| 15                              | GB1015 ③                           | 77.50         | GB2015 ③                             | 199.00        | GB3015 ③                               | 304.00        |
| 20                              | GB1020 ③                           | 77.50         | GB2020 ③                             | 199.00        | GB3020 ③                               | 304.00        |
| 25                              | GB1025                             | 77.50         | GB2025                               | 199.00        | GB3025                                 | 304.00        |
| 30                              | GB1030                             | 77.50         | GB2030                               | 199.00        | GB3030                                 | 304.00        |
| 35                              | GB1035                             | 77.50         | GB2035                               | 199.00        | GB3035                                 | 304.00        |
| 40                              | GB1040                             | 77.50         | GB2040                               | 199.00        | GB3040                                 | 304.00        |
| 45                              | GB1045                             | 77.50         | GB2045                               | 199.00        | GB3045                                 | 271.00        |
| 50                              | GB1050                             | 77.50         | GB2050                               | 199.00        | GB3050                                 | 304.00        |
| 60                              | GB1060                             | 77.50         | GB2060                               | 199.00        | GB3060                                 | 304.00        |
| 70                              | GB1070                             | 157.00        | GB2070                               | 316.00        | GB3070                                 | 430.00        |
| 80                              | GB1080                             | 157.00        | GB2080                               | 316.00        | GB3080                                 | 430.00        |
| 90                              | GB1090                             | 157.00        | GB2090                               | 316.00        | GB3090                                 | 430.00        |
| 100                             | GB1100                             | 157.00        | GB2100                               | 316.00        | GB3100                                 | 430.00        |

① 15 through 70 ampere circuit breakers only.  
 ② Use (2) outside poles.  
 ③ Uses .190-32 screw type clamp terminals.

Table 12-9. Type GHB Thermal-Magnetic Circuit Breakers with Non-interchangeable Trip Units ⑦

| Continuous Ampere Rating @ 40°C | 277/480V AC Maximum, 125V DC Maximum ④ |               | 277/480V AC Maximum, 125/250V DC Maximum |               | 277/480V AC Maximum, 125/250V DC Maximum ⑤ |               |
|---------------------------------|--|---------------|--|---------------|--|---------------|
|                                 | 1-Pole                                 |               | 2-Pole                                   |               | 3-Pole                                     |               |
|                                 | Catalog Number                         | Price U.S. \$ | Catalog Number                           | Price U.S. \$ | Catalog Number                             | Price U.S. \$ |
| 15                              | GHB1015 ⑥                              | 93.00         | GHB2015 ⑥                                | 232.00        | GHB3015 ⑥                                  | 409.00        |
| 20                              | GHB1020 ⑥                              | 93.00         | GHB2020 ⑥                                | 232.00        | GHB3020 ⑥                                  | 409.00        |
| 25                              | GHB1025                                | 93.00         | GHB2025                                  | 232.00        | GHB3025                                    | 409.00        |
| 30                              | GHB1030                                | 93.00         | GHB2030                                  | 232.00        | GHB3030                                    | 409.00        |
| 35                              | GHB1035                                | 94.00         | GHB2035                                  | 232.00        | GHB3035                                    | 409.00        |
| 40                              | GHB1040                                | 94.00         | GHB2040                                  | 232.00        | GHB3040                                    | 409.00        |
| 45                              | GHB1045                                | 94.00         | GHB2045                                  | 232.00        | GHB3045                                    | 409.00        |
| 50                              | GHB1050                                | 94.00         | GHB2050                                  | 232.00        | GHB3050                                    | 409.00        |
| 60                              | GHB1060                                | 94.00         | GHB2060                                  | 232.00        | GHB3060                                    | 409.00        |
| 70                              | GHB1070                                | 196.00        | GHB2070                                  | 463.00        | GHB3070                                    | 560.00        |
| 80                              | GHB1080                                | 196.00        | GHB2080                                  | 463.00        | GHB3080                                    | 560.00        |
| 90                              | GHB1090                                | 196.00        | GHB2090                                  | 463.00        | GHB3090                                    | 560.00        |
| 100                             | GHB1100                                | 196.00        | GHB2100                                  | 463.00        | GHB3100                                    | 560.00        |

④ 15 through 70 ampere circuit breakers only.  
 ⑤ Use (2) outside poles.  
 ⑥ Uses .190 (4.83) -32 screw type clamp terminals.  
 ⑦ 480Y/277V, circuit breakers (Type GHB) not suitable for 3-phase Delta (480V).

Note: Instruction Leaflet/FRED Number 15547

Table 12-10. Type HGHB Thermal-Magnetic Circuit Breakers with Non-interchangeable Trip Units

| Continuous Ampere Rating @ 40°C | 277V AC Maximum, 125V DC Maximum |               |
|---------------------------------|----------------------------------|---------------|
|                                 | 1-Pole                           |               |
|                                 | Catalog Number                   | Price U.S. \$ |
| 15                              | HGHB1015                         | 116.00        |
| 20                              | HGHB1020                         | 116.00        |
| 25                              | HGHB1025                         | 116.00        |
| 30                              | HGHB1030                         | 116.00        |

Note: Instruction Leaflet/FRED Number 15547

Table 12-11. Type GQ Thermal-Magnetic Circuit Breakers with Non-interchangeable Trip Units

| Continuous Ampere Rating @ 40°C | 277V AC Maximum, No DC Rating |               |
|---------------------------------|-------------------------------|---------------|
|                                 | 1-Pole                        |               |
|                                 | Catalog Number                | Price U.S. \$ |
| 15                              | GQ1015                        | ⑧ 93.00       |
| 20                              | GQ1020                        | ⑧ 93.00       |

⑧ Contact factory for availability.

Discount Symbol ..... CB-2



# AB DE-ION Circuit Breakers

## Types GB, GHB, GC, GHC 15-100 Amperes, 2 and 3 Poles

