

Molded Case Circuit Breaker Product Family

2



Contents

<i>Description</i>	<i>Page</i>
Product Overview	V4-T2-121
Standards and Certifications	V4-T2-122
Quick Reference	V4-T2-123
G-Frame (15–100 Amperes)	
Catalog Number Selection	V4-T2-127
Technical Data and Specifications	V4-T2-127
F-Frame (10–225 Amperes)	V4-T2-140
J-Frame (70–250 Amperes)	V4-T2-157
K-Frame (70–400 Amperes)	V4-T2-165
L-Frame (125–600 Amperes)	V4-T2-192
M-Frame (300–800 Amperes)	V4-T2-218
N-Frame (400–1200 Amperes)	V4-T2-229
R-Frame (800–2500 Amperes)	V4-T2-244
Motor Circuit Protectors (MCP)	V4-T2-263
Motor Protection Circuit Breakers (MPCB)	V4-T2-274
Type ELC Current Limiter Attachment (Size 0–4)	V4-T2-276
Current Limiting Circuit Breaker Module	V4-T2-277
Internal Accessories	V4-T2-281
External Accessories	V4-T2-312

G-Frame (15–100 Amperes)

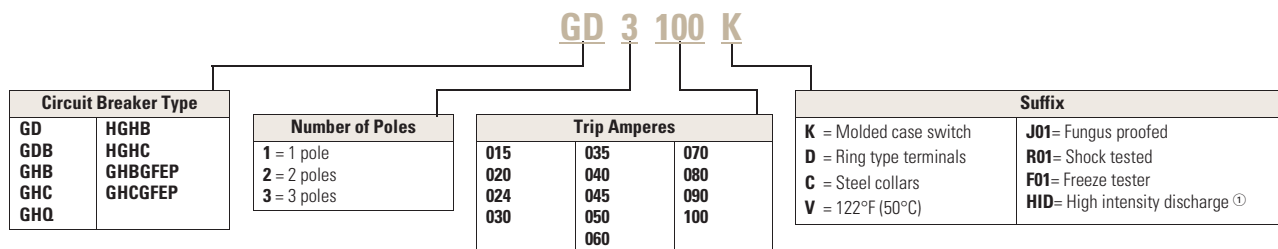
Product Description

- All two- and three-pole circuit breakers are of the common trip type. On all three-phase delta (240V) Grounded B phase applications, refer to Eaton
- 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

Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

Circuit Breaker/Frame



Technical Data and Specifications

UL 489 Interrupting Capacity Ratings

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)						
		Volts AC (50/60 Hz)					Volts DC	
		120	240	277	480	480Y/277	125	250 ②③
GDB	2, 3	—	—	—	14	—	—	10
GD	2	—	65	—	14	—	—	10
GD	3	—	65	—	22	—	—	10
GHQ	—	65	—	14	—	—	—	—
GHB	1	65	—	14	—	—	14	—
GHB	2, 3	—	65	—	—	14	14	—
HGHB	1	65	—	25	—	—	14	—
GHC	1	65	—	14	—	—	14	—
GHC	2, 3	—	65	—	—	14	14	—
HGHC	1	65	—	25	—	—	14	—

Terminal Types

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

Terminal Types

Circuit Breaker Amperes	Terminal Type Material	Screw Head Type	Wire Type	AWG Wire Range	Metric Wire Range (mm ²) ④
Standard					
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
Optional—GD Only					
15–100	Pressure (steel body)	Slotted	Cu	14–3	—

Notes

- ① HID suffix only applies to the GHB and GHC single-pole, 15–20A circuit breakers.
- ② Time constant is 8 milliseconds minimum.
- ③ Two poles of three-pole circuit breaker.
- ④ Not UL listed sizes.

Typical GHB



Contents

<i>Description</i>	<i>Page</i>
Product Overview	V4-T2-121
Standards and Certifications	V4-T2-122
Quick Reference	V4-T2-123
G-Frame (15–100 Amperes)	V4-T2-126
F-Frame (10–225 Amperes)	V4-T2-140
J-Frame (70–250 Amperes)	V4-T2-157
K-Frame (70–400 Amperes)	V4-T2-165
L-Frame (125–600 Amperes)	V4-T2-192
M-Frame (300–800 Amperes)	V4-T2-218
N-Frame (400–1200 Amperes)	V4-T2-229
R-Frame (800–2500 Amperes)	V4-T2-244
Motor Circuit Protectors (MCP)	V4-T2-263
Motor Protection Circuit Breakers (MPCB)	V4-T2-274
Type ELC Current Limiter Attachment (Size 0–4)	V4-T2-276
Current Limiting Circuit Breaker Module	V4-T2-277
Internal Accessories	V4-T2-281
External Accessories	V4-T2-312

Types GHB and HGHB Bolt-On Panelboard Circuit Breakers (15–100 Amperes)

Standards and Certifications

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

- Type GHB, 120 and 240V:
 - Single-pole: Class 11a
 - Two-, three-pole: Classes 10b, 11b, 12b, 14b, 15b
 - UL/CSA
- Type GHB, 277 and 480Y/277V:
 - Single-pole: Classes 12c, 13a
 - Two-, three-pole: Class 13b
 - Type HGHB 277V
 - Type GHQ 277V



Product Selection

2

Typical GHB



Type GHB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units ^①

Continuous Ampere Rating at 40°C	277/480 Vac Maximum, 125 Vdc Maximum ^②		277/480 Vac Maximum, 125/250 Vdc Maximum		277/480 Vac Maximum, 125/250 Vdc Maximum ^③	
	Single-Pole Catalog Number	Two-Pole Catalog Number	Single-Pole Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number	Three-Pole Catalog Number
15	GHB1015 ^{④⑤}	GHB2015 ^④	GHB1015 ^{④⑤}	GHB2015 ^④	GHB3015 ^④	GHB3015 ^④
20	GHB1020 ^{④⑤}	GHB2020 ^④	GHB1020 ^{④⑤}	GHB2020 ^④	GHB3020 ^④	GHB3020 ^④
25	GHB1025	GHB2025	GHB1025	GHB2025	GHB3025	GHB3025
30	GHB1030	GHB2030	GHB1030	GHB2030	GHB3030	GHB3030
35	GHB1035	GHB2035	GHB1035	GHB2035	GHB3035	GHB3035
40	GHB1040	GHB2040	GHB1040	GHB2040	GHB3040	GHB3040
45	GHB1045	GHB2045	GHB1045	GHB2045	GHB3045	GHB3045
50	GHB1050	GHB2050	GHB1050	GHB2050	GHB3050	GHB3050
60	GHB1060	GHB2060	GHB1060	GHB2060	GHB3060	GHB3060
70	GHB1070	GHB2070	GHB1070	GHB2070	GHB3070	GHB3070
80	GHB1080	GHB2080	GHB1080	GHB2080	GHB3080	GHB3080
90	GHB1090	GHB2090	GHB1090	GHB2090	GHB3090	GHB3090
100	GHB1100	GHB2100	GHB1100	GHB2100	GHB3100	GHB3100

Type HGHB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units

Continuous Ampere Rating at 40°C	277 Vac Maximum, 125 Vdc Maximum	
	Single-Pole Catalog Number	Three-Pole Catalog Number
15	HGHB1015 ^⑥	HGHB3015 ^⑥
20	HGHB1020 ^⑥	HGHB3020 ^⑥
25	HGHB1025	HGHB3025
30	HGHB1030	HGHB3030

Type GHQ Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units

Continuous Ampere Rating at 40°C	277 Vac Maximum 14 kAIC, No DC Rating (HID and SWD)	
	Single-Pole Catalog Number	Three-Pole Catalog Number
15	GHQ1015 ^⑦	GHQ3015 ^⑦
20	GHQ1020 ^⑦	GHQ3020 ^⑦

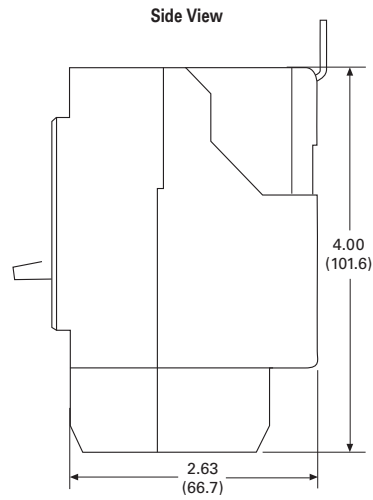
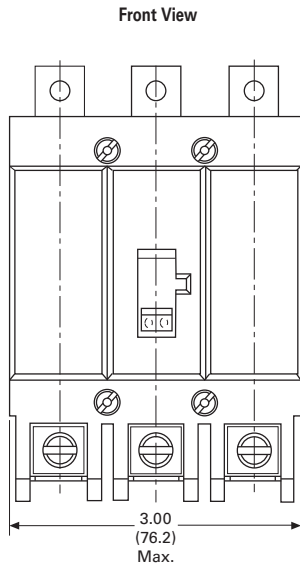
Notes

- ① 480Y/277V, circuit breakers (Type GHB) not suitable for three-phase delta (480V).
- ② 15 through 70 ampere circuit breakers only.
- ③ Use two outside poles.
- ④ Uses 0.190 (4.83) –32 screw type clamp terminals.
- ⑤ Add suffix HID for High Intensity Discharge (HID) applications. 15 and 20 ampere, single-pole are SWD rated.
- ⑥ 15 and 20 ampere, single-pole are SWD rated.
- ⑦ Includes 4A33462H01 load clip.

Dimensions

Approximate Dimensions in Inches (mm)

GDB-Frame, Three-Pole



EG Bolt-On Complete Breaker (Includes Frame, Trip Unit and Mounting Hardware)

2

EG-Frame**EG-Frame—18 kAIC at 480 Vac**

Maximum Continuous Amps at 40°C	Single-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^①	Two-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^②	Three-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^③
15	EGB1015FFB	EGB2015FFB	EGB3015FFB
20	EGB1020FFB	EGB2020FFB	EGB3020FFB
25	EGB1025FFB	EGB2025FFB	EGB3025FFB
30	EGB1030FFB	EGB2030FFB	EGB3030FFB
35	EGB1035FFB	EGB2035FFB	EGB3035FFB
40	EGB1040FFB	EGB2040FFB	EGB3040FFB
45	EGB1045FFB	EGB2045FFB	EGB3045FFB
50	EGB1050FFB	EGB2050FFB	EGB3050FFB
60	EGB1060FFB	EGB2060FFB	EGB3060FFB
70	EGB1070FFB	EGB2070FFB	EGB3070FFB
80	EGB1080FFB	EGB2080FFB	EGB3080FFB
90	EGB1090FFB	EGB2090FFB	EGB3090FFB
100	EGB1100FFB	EGB2100FFB	EGB3100FFB
110	EGB1110FFB	EGB2110FFB	EGB3110FFB
125	EGB1125FFB	EGB2125FFB	EGB3125FFB

EG-Frame**EG-Frame—35 kAIC at 480 Vac**

Maximum Continuous Amps at 40°C	Single-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^①	Two-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^②	Three-Pole Fixed Thermal, Fixed Magnetic Catalog Number ^③
15	EGS1015FFB	EGS2015FFB	EGS3015FFB
20	EGS1020FFB	EGS2020FFB	EGS3020FFB
25	EGS1025FFB	EGS2025FFB	EGS3025FFB
30	EGS1030FFB	EGS2030FFB	EGS3030FFB
35	EGS1035FFB	EGS2035FFB	EGS3035FFB
40	EGS1040FFB	EGS2040FFB	EGS3040FFB
45	EGS1045FFB	EGS2045FFB	EGS3045FFB
50	EGS1050FFB	EGS2050FFB	EGS3050FFB
60	EGS1060FFB	EGS2060FFB	EGS3060FFB
70	EGS1070FFB	EGS2070FFB	EGS3070FFB
80	EGS1080FFB	EGS2080FFB	EGS3080FFB
90	EGS1090FFB	EGS2090FFB	EGS3090FFB
100	EGS1100FFB	EGS2100FFB	EGS3100FFB
110	EGS1110FFB	EGS2110FFB	EGS3110FFB
125	EGS1125FFB	EGS2125FFB	EGS3125FFB

Notes

^① For bulk pack 24, add suffix BP24 and order quantities of 24.

^② For bulk pack 12, add suffix BP12 and order quantities of 12.

^③ For bulk pack 8, add suffix BP8 and order quantities of 8.