

General Information

Cutler-Hammer® Series G Molded Case Circuit Breakers provide increased performance in considerably less space than standard circuit breakers or comparable fusible devices.

The “G” signifies global applications: Series G circuit breakers are marked with UL, CSA, CE, IEC and KEMA KEUR listings. Other advantages include:

- Field-fit accessories.
- Common accessories through 630 amperes.
- Electronic trip units from 20 to 2500 amperes.
- UL-listed and IEC-rated, 30 mA ground fault/earth leakage modules.
- Built-in ground fault protection down to 20 amperes.

The EG, JG and LG frames are designed around space-saving footprints. The NG and RG use the proven Cutler-Hammer Series C® ND and RD designs but use metric threading on their line and load conductors.

Cutler-Hammer Series G Circuit Breakers meet applicable UL 489 and IEC 60947-2 standards.

The Cutler-Hammer Series G family includes five frame sizes in ratings from 15 to 2500 amperes. Series G offers a choice of several interrupting capacities up to 200 kA at 480 volts ac (200 kA at 240 volts ac).

Standard calibration is 40°C. For applications in high ambient temperature conditions, 50°C factory calibration is available on thermal magnetic breakers (not UL).

The Most Logically Designed Contact Assembly

The flexibility and outstanding performance characteristics of Cutler-Hammer Circuit Breakers are made possible by the best contact designs in circuit breaker history. Our patented technology creates a high-speed “blow-open” action using the electromechanical forces produced by high-level fault currents.

Cutler-Hammer Circuit Breakers are operated by a toggle-type mechanism that is mechanically trip-free from the handle so that the contacts cannot be held closed against short circuit currents. Tripping due to overload or short circuits is clearly indicated by the position on the handle. This remarkably fast and dependable contact action is designed to enhance safety.

Thorough In-Plant Testing

The quality, dependability and reliability of every Cutler-Hammer Circuit Breaker is ensured by a thorough program of in-plant testing. Two calibration tests are conducted on every pole of every circuit breaker to verify the trip mechanism, operating mechanism, continuity and accuracy.

ISO Certification

Cutler-Hammer Circuit Breakers are manufactured in ISO® certified facilities.

Current Limiting Characteristics

Circuit breakers are current limiting because of their high repulsion contact arrangement and use of state-of-the-art arc extinguishing technology.

Eaton offers one of the most complete lines of current limiting breakers in the industry. The industrial breakers are available in current limiting versions with interrupting capacities up to 200 kA at 480 V without fuses in the same physical size as standard and high interrupting capacity breakers.

Operating Mechanisms

Cutler-Hammer Circuit Breakers have a toggle handle operating mechanism, which also serves as a switching position indicator. The indicator shows the positions of: ON, OFF and TRIPPED.

The toggle handle snaps into the TRIPPED position if the breaker is tripped by one of its overcurrent, short circuit, shunt or undervoltage releases. Before the circuit breaker can be reclosed following a trip-out, the toggle handle must be brought beyond the OFF position (RESET). The circuit breaker can then be reclosed.

As an additional switching position indicator for EG- to RG-Frame circuit breakers, there are two windows on the right and on the left of the toggle handle, in which the switching state is indicated by means of the colors red, green and white corresponding to the ON, OFF and TRIPPED positions respectively.

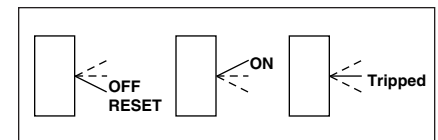


Figure 45-2. Positions of the Toggle Handle Drive

Standards and Certifications

Cutler-Hammer Molded Case Circuit Breakers from Eaton are designed to conform with the following international standards:

- Australian Standard AS 2184 and AS 3947-2 Molded Case Circuit Breakers.
- British Standards Institution Standard EN60947.2.
- International Electrotechnical Commission Recommendations IEC 60947.2 Circuit Breakers. **CE**
- Japanese T-Mark Standard Molded Case Circuit Breakers.
- National Electrical Manufacturers Association Standards Publication No. AB1-1993 Molded Case Circuit Breakers.
- South African Bureau of Standards, Standard SANS 156, Standard Specification for Molded Case Circuit Breakers.
- Swiss Electro-Technical Association Standard SEV 947.2, Safety Regulations for Circuit Breakers.
- Union Technique de l'Electricite Standard NF C 63-120, Low Voltage Switchgear and Control Gear Circuit Breaker Requirements.
- Verband Deutscher Elektrotechnike (Association of German Electrical Engineers) Standard VDE 0660, Low Voltage Switchgear and Control Gear, Circuit Breakers.

Global Third-Party Certification

Certification marks ensure product compliance with the total standard via the third party witnessing of tests by globally recognized independent certification organizations.

KEMA is a highly recognized, independent international organization that offers certification and inspection facilities for equipment in many industries. The KEMA-KEUR mark is the highest certification an electrical product can receive from KEMA. Our IEC 60947-2 Molded Case Circuit Breakers are KEMA tested and certified. These breakers are also listed in accordance with UL® 489, as well as CSA C22.2 No. 5-02.

KEMA, UL and CSA provide ongoing follow-up testing and inspections to ensure that Cutler-Hammer Molded Case Circuit Breakers continue to meet their exacting standards.

General Information




Eaton's electrical business, under the Cutler-Hammer brand, offers the widest variety of molded case circuit breakers available today. Designed for electrical and machinery OEMs serving a range of industries and applications, these proven designs incorporate the latest in innovation with the high reliability that has been our hallmark since the advent of the circuit breaker in the 1920s.

The Series C family ranges from 15 – 2500 amperes, and includes thermal-magnetic breakers, electronic trip breakers, molded case switches, motor circuit protectors, and specially designed breakers for Engine Generator, DC and mining applications.

The new Series G line features an average 35% size reduction, common field-installable internal accessories, and advanced trip unit functionality that eliminates the need for rating plugs. These breakers meet the requirements of UL, CSA, IEC, CCC and CE, allowing the OEM to standardize on a design that meets the needs of their global customer base.

Electrical Characteristics

Table 45-2. Electrical Characteristics

Maximum Rated Current (Amperes)	EG										JG						LG								
																									
	125, 160 ①										250						400, 630 ②								
Breaker Type	B		E		S		H		C		E		S		H		C		U		X				
Number of Poles	1	2, 3, 4	2, 3, 4	2, 3, 4	1	2, 3, 4	1	2, 3, 4	1	2, 3, 4	3, 4	2, 3, 4	2, 3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4			
Breaker Capacity (kA rms) ac 50 – 60 Hz																									
NEMA®, UL, CSA	240 Vac	25	25	35	85	85	100	100	200	65	85	100	200	200	200	200	65	85	100	200	200	200			
	480 Vac	—	18	25	—	35	—	65	100	25	35	65	100	150	200	200	35	50	65	100	150	200			
	600 Vac ③	—	—	18	—	22	—	25	35	18	18	25	35	50	50	18	25	35	50	65	65	65			
	125/250 Vdc ④	10 ⑥	10	10	35 ⑥	35	42 ⑥	42	42	10	22	22	42	50	50	22	22	42	42	50	50	50			
IEC 60947-2	220 – 240 Vac	<i>I_{CU}</i>	25	25	35	85	85	100	100	200	65	85	100	200	200	200	65	85	100	200	200	200			
		<i>I_{CS}</i>	25	25	35	43	43	50	50	200	65	85	100	200	200	200	65	85	100	200	200	200			
	380 – 415 Vac	<i>I_{CU}</i>	—	18	25	—	40	—	70	100	25	40	70	100	150	200	35	50	70	100	150	200			
		<i>I_{CS}</i>	—	18	25	—	30	—	35	100	25	40	70	100	150	200	35	50	70	100	150	200			
	660 – 690 Vac	<i>I_{CU}</i>	—	—	—	—	—	—	—	—	12	12	14	16	18	18	12	20	25	30	35	35			
		<i>I_{CS}</i>	—	—	—	—	—	—	—	—	6	6	7	12	14	14	6	10	13	15	18	18			
	125/250 Vdc ④	<i>I_{CU}</i>	10 ⑥	10	10	35 ⑥	35	42 ⑥	42	42	10	22	22	42	50	50	22	22	42	42	50	50			
		<i>I_{CS}</i>	10 ⑥	10	10	35 ⑥	35	42 ⑥	42	42	10	22	22	42	50	50	22	22	42	42	50	50			
Ampere Range	15 – 160 A ①										20 – 250 A						100 – 630 A ②								
Trip Units F = Fixed A = Adjustable T = Thermal M = Magnetic	FT-FM AT-FM										FT-AM AT-AM Electronic (Digitrip RMS 310)						FT-AM AT-AM Electronic (Digitrip RMS 310)								
Thermal Magnetic	Interchangeable	—										■						■							
	Built-in	■										■						■							
Thermal Magnetic	Fixed Thermal	■										■						■							
	Adjustable Thermal	■										■						■							
	Magnetic	Fixed										Adjustable						Adjustable							
Electronic rms ⑤	LS	—										■						■ ④							
	LSI	—										■						■ ④							
	LSG	—										■						■ ④							
	LSIG	—										■						■ ④							
Dimensions Inches (mm)	1-Pole	H		W		D		H		W		D		H		W		D		H		W		D	
		5.50 (139.7)		1.00 (25.4)		2.99 (76.0)		—		—		—		—		—		—		—		—		—	
	2-Pole	—		2.00 (50.8)		—		7.00 (177.8)		4.13 (105.0)		3.57 (87.4)		—		—		—		10.13 (258.0)		5.48 (140.0)		4.09 (104.0)	
	3-Pole	—		3.00 (76.2)		—		—		—		—		—		—		—		—		—		—	
4-Pole	—		4.00 (101.6)		—		—		—		5.34 (135.6)		—		—		—		—		7.22 (183.0)		—		
Weight (approximate) lbs. (kg)	1-Pole	2-Pole	3-Pole	4-Pole	2-Pole	3-Pole	4-Pole	2-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	3-Pole	4-Pole	
	0.85 (0.39)	1.57 (0.71)	2.28 (1.04)	2.85 (1.29)	11.3 (5.13)	5.06 (2.30) T/M 5.31 (2.41) ETU	6.76 (3.07) T/M 7.12 (3.23) ETU	12.36 (5.61) T/M 13.04 (5.92) ETU	16.27 (7.39) T/M 16.92 (7.68) ETU																
Utilization Category	A										A						A								

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① 125 amperes is the maximum UL and CSA rating for the EG.
 ② 630 amperes is not a UL or CSA listed rating. 600 amperes is the maximum UL and CSA listed rating for the LG.
 ③ EG breaker rated 600/347 Vac.
 ④ Two poles in series.
 ⑤ Not suitable for dc application. 4-pole ground fault not available.
 ⑥ 125 Vdc only for 1-pole breakers.

Frame Sizes EG through RG

Table 45-3. EG through RG Electrical Characteristics

Technical Data	EG		JG		LG		NG		RG	
Maximum Rated Current I_n Depending on the Version	160 A ^①		250 A		400, 630 A ^②		800, 1200, 1600 A ^③		1600, 2000, 2500 A	
Rated Insulation Voltage U, According to IEC 60947-2 Main Conducting Paths Auxiliary Circuits	500 Vac 500 Vac		750 Vac 690 Vac		750 Vac 690 Vac		750 Vac 690 Vac		750 Vac 690 Vac	
Rated Impulse Withstand Voltage U_{imp} Main Conducting Paths Auxiliary Circuits	6 kV 4 kV		8 kV 4 kV		8 kV 4 kV		8 kV 4 kV		8 kV 4 kV	
Rated Operational Voltage U_e IEC NEMA	690 Vac 600 Y/347 Vac		690 Vac 600 Vac		690 Vac 600 Vac		690 Vac 600 Vac		690 Vac 600 Vac	
UL and CSA Listed	Yes ^④		Yes ^④		Yes ^④		Yes ^④		Yes ^④	
Permissible Ambient Temperature	-20 to +70°C		-20 to +70°C		-20 to +70°C		-5 to +60°C		-5 to +60°C	
Permissible Load for Various Ambient Temperatures Close to the Circuit Breaker, Related to the Rated Current of the Circuit Breaker <ul style="list-style-type: none"> ■ Circuit Breakers for Plant Protection <ul style="list-style-type: none"> - At 40°C - At 50°C - At 55°C - At 60°C - At 70°C ■ Circuit Breakers for Motor Protection <ul style="list-style-type: none"> - At 40°C - At 50°C - At 55°C - At 60°C - At 70°C ■ Circuit Breakers for Starter Combinations and Isolating Circuit Breakers <ul style="list-style-type: none"> - At 40°C - At 50°C - At 55°C - At 60°C - At 70°C 	⑤	⑥	⑤	⑥	⑤	⑥	—	—	—	
	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	96%	92%	96%	94%	96%	91%	91%	91%	91%	
	93%	87%	94%	90%	93%	86%	85%	85%	85%	
91%	83%	92%	87%	90%	82%	81%	81%	81%		
86%	73%	88%	80%	84%	70%	—	—	—		
—	—	100%	100%	100%	100%	—	—	—		
—	—	100%	100%	100%	100%	—	—	—		
—	—	100%	100%	100%	100%	—	—	—		
—	—	100%	100%	100%	100%	—	—	—		
—	—	90%	90%	90%	90%	—	—	—		
100%	100%	100%	100%	100%	100%	100%	100%	100%		
100%	100%	100%	100%	100%	100%	91%	91%	91%		
96%	96%	96%	95%	95%	85%	85%	85%	85%		
91%	82%	82%	90%	82%	81%	81%	81%	81%		
86%	88%	88%	84%	84%	—	—	—	—		
Rated Short Circuit Breaking Capacity (dc) Not for Circuit Breakers for Motor Protection (Time Constant $\tau = 10$ rms) 2 Conducting Paths in Series For EG to LG up to 250 Vdc NEMA (Time Constant $\tau = 8$ rms) 2 Conducting Paths in Series 250 Vdc	42 kA Max.		42 kA Max.		42 kA Max.		⑦		⑦	
	42 kA Max.		42 kA Max.		42 kA Max.		⑦		⑦	
	42 kA Max.		42 kA Max.		42 kA Max.		⑦		⑦	
Main Switch Characteristics According to IEC 60947-2 in Combination with Lockable Rotary Drives	Yes		Yes		Yes		Yes		Yes	
Rated Short Circuit Breaking Capacity According to IEC 60947-2 (at ac 50/60 Hz)	Rated Short Circuit Breaking Capacity See Table 45-2 on Page 45-5									
Endurance (Operating Cycles)	10,000		10,000		8,000		3,000		3,000	
Maximum Switching Frequency	300 1/h		240 1/h		240 1/h		60 1/h		20 1/h	

^① 125 amperes is the maximum UL and CSA rating for the EG.

^② 630 amperes is not a UL or CSA listed rating. 600 amperes is the maximum UL and CSA rating for the LG.

^③ 1200 amperes is the maximum UL and CSA rating for the NG.

^④ See footnotes for exceptions.

^⑤ Thermal overload release set to the lower value.

^⑥ Thermal overload release set to the upper value.


^⑦ Not suitable for dc switching.

Frame Sizes EG through RG

Table 45-3. EG through RG Electrical Characteristics (Continued)

Technical Data	EG	JG	LG		NG	RG
Conductor Cross Sections and Terminal Types for Main Conductors <ul style="list-style-type: none"> ■ Solid or Stranded ■ Finely Stranded with End Sleeve ■ Bus Bar Tightening Torque for Box Terminals Tightening Torque for Bus Bar Connection Pieces	Box Terminals 2.5 to 95 mm ² 2.5 to 50/70 mm ² — 5.6 Nm 5.6 Nm	Box Terminals 50 to 150 mm ² 35 to 120 mm ² — 20 Nm 15 Nm	Box Terminals 95 to 240 mm ² 70 to 150 mm ² — 42 Nm 30 Nm	Flat Bar Terminals — — 600 A 31 Nm 6 Nm	Flat Bar Terminals — — Optional 31 Nm 50 Nm	Flat Bar Terminals — — Optional — 20 Nm
Conductor Cross Sections for Auxiliary Circuits with Terminal Connection or Terminal Strip <ul style="list-style-type: none"> ■ Solid ■ Finely Stranded with End Sleeve ■ With Brought-out Cable Ends ■ Tightening Torque for Fitting Screws 	0.75 to 2.5 mm ² 0.75 to 2.5 mm ²	0.75 to 2.5 mm ² 0.75 to 2.5 mm ² 0.82 (AWG 18) mm ² 0.8 to 1.4 Nm	0.75 to 2.5 mm ² 0.75 to 2.5 mm ² 0.82 (AWG 18) mm ² 0.8 to 1.4 Nm		Up to 2x4 mm ² Up to 2x2.5 mm ² 0.82 (AWG 18) mm ² 0.8 to 1.4 Nm	Up to 2x4 mm ² Up to 2x2.5 mm ² 0.82 (AWG 18) mm ² 0.8 to 1.4 Nm
Power Loss per Circuit Breaker at Maximum Rated Current I_n (The Power Losses of the Undervoltage Releases ("r" Releases) Must Be Observed if Necessary) at Three-Phase Symmetrical Load) <ul style="list-style-type: none"> ■ For Plant Protection ■ As Isolating Circuit Breaker ■ For Starter Combinations ■ For Motor Protection 	40 W 40 W 40 W —	45 W 45 W 45 W 45 W	400 A: 65 W 65 W 65 W 65 W	600 A: 120 W 120 W 120 W 120 W	87/210 W 87/210 W — —	220/270/400 W 220/270/400 W — —
Permissible Mounting Position						
Arc Spacing — Suitable for Reverse-Feed Applications	Yes (Except HMCPE)	Yes	Yes		Yes	Yes

Frame Sizes EG through RG
Table 45-3. EG through RG Electrical Characteristics (Continued)

Technical Data	EG	JG	LG	NG	RG
Auxiliary Switches					
Rated Thermal Current I_{th} Rated Making Capacity	6 A 20 A	6 A 20 A	6 A 20 A	6 A 20 A	6 A 20 A
ac (ac-15) ■ Rated Operational Voltage ■ Rated Operational Current	230/400/600 V 6/3/0.25 A	230/400/600 V 6/3/0.25 A	230/400/600 V 6/3/0.25 A	600 V 6 A	600 V 6 A
dc (dc-13) ■ Rated Operational Voltage ■ Rated Operational Current	125/250 V 0.5/0.25 A	125/250 V 0.5/0.15 A	125/250 V 0.5/0.15 A	125/250 V 0.5/0.25 A	125/250 V 0.5/0.25 A
Backup Fuse Miniature Circuit Breaker	6/4/4 A 6/4 A	4 6/4/4 A 6/4 A	4 6/4/4 A 6/4 A	4 6/4/4 A 6/4 A	4 6/4/4 A 6/4 A
Releases					
Undervoltage Releases ("r" Releases) Response Voltage: ■ Drop (Breaker Tripped) U_S ■ Pickup (Breaker May Be Switched on) U_S	35 – 70% 85 – 110%	35 – 70% 85 – 110%	35 – 70% 85 – 110%	35 – 70% 85 – 110%	35 – 70% 85 – 110%
Power Consumption in Continuous Operation at: ■ 50/60 Hz 12 Vac ■ 50/60 Hz 24 Vac ■ 50/60 Hz 48 – 60 Vac ■ 50/60 Hz 110 – 127 Vac ■ 50/60 Hz 208 – 240 Vac ■ 50/60 Hz 380 – 500 Vac ■ 50/60 Hz 525 – 600 Vac ■ 12 Vdc ■ 24 Vdc ■ 48 – 60 Vdc ■ 110 – 125 Vdc ■ 220 – 250 Vdc Maximum Opening Time	0.95 VA 0.72 VA 1.15 – 1.78 VA 0.96 – 1.25 VA 1.28 – 1.68 VA 2.2 – 3.9 VA 3.4 – 4.3 VA 0.88 W 0.70 W 1.12 – 1.76 W 0.94 – 1.21 W 1.45 – 1.86 W 50 ms	1.9 VA 3.9 VA 2.5 – 3.8 VA 1.8 – 2.4 VA 2.7 – 3.8 VA 3.4 – 5.8 VA 3.4 – 4.3 VA 1.6 W 3.1 W 2.0 – 3.1 W 1.6 – 2.2 W 3.1 – 4 W 50 ms	1.9 VA 3.9 VA 2.5 – 3.8 VA 1.8 – 2.4 VA 2.7 – 3.8 VA 3.4 – 5.8 VA 3.4 – 4.3 VA 1.6 W 3.1 W 2.0 – 3.1 W 1.6 – 2.2 W 3.1 – 4 W 50 ms	1.9 VA 2.4 VA 2.3 – 4.1 VA 3.4 – 4.2 VA 4.8 – 6.5 VA 6.8 – 12.0 VA — 2.6 W 3.6 W 3.5 – 5.5 W 2.9 – 3.6 W 4.8 – 6.3 W 62 ms	2.9 VA 3.1 VA 3.4 – 6.0 VA 3.3 – 3.8 VA 4.2 – 7.2 VA 3.8 – 10.0 VA — 3.4 W 4.3 W 4.8 – 7.2 W 3.3 – 3.8 W 6.6 – 7.5 W 62 ms
Shunt Trips					
Shunt Trips ("f" Releases) Response Voltage: ■ Pickup (Breaker Tripped) U_S	70 – 110%	70 – 110%	70 – 110%	70 – 110%	70 – 110%
Power Consumption in (Short Time) at: ■ 50/60 Hz 24 Vac ■ 50/60 Hz 48 – 60 Vac ■ 50/60 Hz 48 – 127 Vac ■ 50/60 Hz 110 – 240 Vac ■ 50/60 Hz 380 – 440 Vac ■ 50/60 Hz 380 – 600 Vac ■ 50/60 Hz 480 – 600 Vac ■ 12 – 24 Vdc ■ 48 – 60 Vdc ■ 110 – 125 Vdc ■ 220 – 250 Vdc	10 – 41 VA 139 – 210 VA — 83 – 360 VA — 418 – 1080 VA — 29 – 120 W 475 – 720 W 99 – 121 W —	87 – 405 VA 710 – 1105 VA — 66 – 432 VA 127 – 188 VA — 34 – 60 VA 164 – 631 W 830 – 1580 W 112 – 150 W 40 – 58 W	87 – 405 VA 710 – 1105 VA — 66 – 432 VA 127 – 188 VA — 34 – 60 VA 164 – 631 W 830 – 1580 W 112 – 150 W 40 – 58 W	98 – 475 VA 24 – 50 VA — 67 – 432 VA 76 – 110 VA — 19 – 42 VA 145 – 610 W 67 – 102 W 121 – 150 W 46 – 55 W	612 VA 403 – 666 VA — 396 – 1896 VA 1596 – 2156 VA — 230 – 384 VA 396 W 341 – 528 W 264 – 350 W 374 – 475 W
Maximum Load Duration	Interrupts Automatically				
Maximum Opening Time	50 ms	50 ms	50 ms	62 ms	62 ms
Molded Case Switch (with High Magnetic Trip)					
Unfused kAIC at 480 Vac (415 Vac) Self-Protected, Will Trip Above: 	65 (70) 1250 for EG125; 1600 for EG160	65 (70) 2500	65 (70) 4000/6300	65 (70) 12,500	65 (70) 20,000

EG-Frame



Eaton's Cutler-Hammer EG

Product Description

- EG breaker is HACR rated.

Technical Data and Specifications

Table 45-6. UL 489/IEC 60947-2 Interrupting Capacity Ratings

Circuit Breaker Type	Number of Poles	Interrupting Capacity (Symmetrical Amperes) (kA)															
		Volts ac (50/60 Hz)								Volts dc ^①							
		120	220 – 240		277	347	380 – 415		480	600Y/347	690 ^②		125		250 ^{③④}		
	I _{cu}	I _{cs}			I _{cu}	I _{cs}			I _{cu}	I _{cs}	I _{cu}	I _{cs}	I _{cu}	I _{cs}			
EGB125	1	35	25	25	18	—	—	—	—	—	—	—	—	10	10	—	—
	2, 3, 4	—	25	25	—	—	18	18	18	—	—	—	—	—	—	10	10
EGE125	2, 3, 4	—	35	35	—	—	25	25	25	18	—	—	—	—	—	10	10
	1	100	85	43	35	22	—	—	—	—	—	—	—	35	35	—	—
EGS125	2, 3, 4	—	85	43	—	—	40	30	35	22	—	—	—	—	—	35	35
	1	200	100	50	65	30	—	—	—	—	—	—	—	42	42	—	—
EGH125	2, 3, 4	—	100	50	—	—	70	35	65	25	—	—	—	—	—	42	42
	3, 4	—	200	200	—	—	100	100	100	35	—	—	—	—	—	42	42

① dc ratings apply to substantially non-inductive circuits.

② IEC only.

③ 2-pole circuit breaker, or two poles of 3-pole circuit breaker.

④ Time constant is 3 milliseconds minimum at 10 kA and 8 milliseconds minimum at 42 kA.

Dimensions/Weights

Table 45-7. Dimensions in Inches (mm)

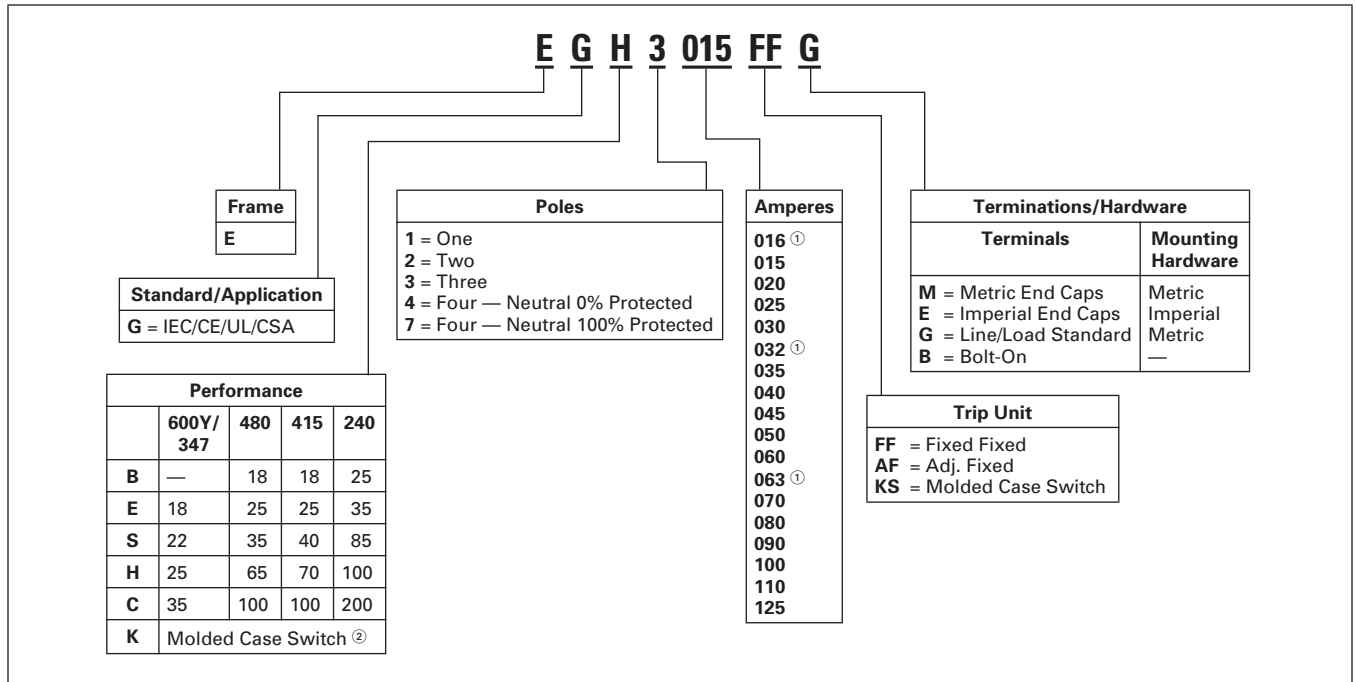
Number of Poles	Width	Height	Depth
1	1.00 (25.4)	5.50 (139.7)	2.99 (75.9)
2	2.00 (50.8)	5.50 (139.7)	2.99 (75.9)
3	3.00 (76.2)	5.50 (139.7)	2.99 (75.9)
4	4.00 (101.6)	5.50 (139.7)	2.99 (75.9)

Table 45-8. Approximate Shipping Weight in Lbs. (kg)

Breaker Type	Number of Poles			
	1	2	3	4
EGB125, EGE125, EGS125, EGH125, EGC125	1.5 (.68)	2.0 (.91)	3.0 (1.36)	4.9 (1.82)

Product Selection

Table 45-9. Main Catalog Numbering System



① Cannot be UL rated.

② Available only as 125 and 160 A sizes.

Product Selection

Table 45-10. Complete Breaker (Includes Frame, Trip Unit, Standard Terminals and Mounting Hardware) — IC Rating at 415/480 Volts

Max. Cont. Amps at 40°C ①	1-Pole		2-Pole		3-Pole		4-Pole 0% Protected Neutral ③				
	Fixed Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Adjustable ② Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Adjustable Thermal Fixed Magnetic
18/18											
15	EGB1015FFG		EGB2015FFG		EGB3015FFG		—		EGB4015FFG		—
16	EGB1016FFG		EGB2016FFG		EGB3016FFG		—		EGB4016FFG		—
20	EGB1020FFG		EGB2020FFG		EGB3020FFG		—		EGB4020FFG		EGB4020AFG
25	EGB1025FFG		EGB2025FFG		EGB3025FFG		EGB3025AFG		EGB4025FFG		EGB4025AFG
30	EGB1030FFG		EGB2030FFG		EGB3030FFG		—		EGB4030FFG		—
32	EGB1032FFG		EGB2032FFG		EGB3032FFG		EGB3032AFG		EGB4032FFG		EGB4032AFG
35	EGB1035FFG		EGB2035FFG		EGB3035FFG		—		EGB4035FFG		—
40	EGB1040FFG		EGB2040FFG		EGB3040FFG		EGB3040AFG		EGB4040FFG		EGB4040AFG
45	EGB1045FFG		EGB2045FFG		EGB3045FFG		—		EGB4045FFG		—
50	EGB1050FFG		EGB2050FFG		EGB3050FFG		EGB3050AFG		EGB4050FFG		EGB4050AFG
60	EGB1060FFG		EGB2060FFG		EGB3060FFG		—		EGB4060FFG		—
63	EGB1063FFG		EGB2063FFG		EGB3063FFG		EGB3063AFG		EGB4063FFG		EGB4063AFG
70	EGB1070FFG		EGB2070FFG		EGB3070FFG		—		EGB4070FFG		—
80	EGB1080FFG		EGB2080FFG		EGB3080FFG		EGB3080AFG		EGB4080FFG		EGB4080AFG
90	EGB1090FFG		EGB2090FFG		EGB3090FFG		—		EGB4090FFG		—
100	EGB1100FFG		EGB2100FFG		EGB3100FFG		EGB3100AFG		EGB4100FFG		EGB4100AFG
125	EGB1125FFG		EGB2125FFG		EGB3125FFG		EGB3125AFG		EGB4125FFG		EGB4125AFG
25/25											
15	—		EGE2015FFG		EGE3015FFG		—		EGE4015FFG		—
16	—		EGE2016FFG		EGE3016FFG		—		EGE4016FFG		—
20	—		EGE2020FFG		EGE3020FFG		—		EGE4020FFG		EGB4020AFG
25	—		EGE2025FFG		EGE3025FFG		EGB3025AFG		EGE4025FFG		EGE4025AFG
30	—		EGE2030FFG		EGE3030FFG		—		EGE4030FFG		—
32	—		EGE2032FFG		EGE3032FFG		EGB3032AFG		EGE4032FFG		EGB4032AFG
35	—		EGE2035FFG		EGE3035FFG		—		EGE4035FFG		—
40	—		EGE2040FFG		EGE3040FFG		EGB3040AFG		EGE4040FFG		EGB4040AFG
45	—		EGE2045FFG		EGE3045FFG		EGB3050AFG		EGE4045FFG		—
50	—		EGE2050FFG		EGE3050FFG		—		EGE4050FFG		EGB4050AFG
60	—		EGE2060FFG		EGE3060FFG		—		EGE4060FFG		—
63	—		EGE2063FFG		EGE3063FFG		EGB3063AFG		EGE4063FFG		EGB4063AFG
70	—		EGE2070FFG		EGE3070FFG		—		EGE4070FFG		—
80	—		EGE2080FFG		EGE3080FFG		EGB3080AFG		EGE4080FFG		EGB4080AFG
90	—		EGE2090FFG		EGE3090FFG		—		EGE4090FFG		—
100	—		EGE2100FFG		EGE3100FFG		EGB3100AFG		EGE4100FFG		EGB4100AFG
125	—		EGE2125FFG		EGE3125FFG		EGB3125AFG		EGE4125FFG		EGB4125AFG
40/35											
15	EGS1015FFG		EGS2015FFG		EGS3015FFG		—		EGS4015FFG		—
16	EGS1016FFG		EGS2016FFG		EGS3016FFG		—		EGS4016FFG		—
20	EGS1020FFG		EGS2020FFG		EGS3020FFG		—		EGS4020FFG		EGS4020AFG
25	EGS1025FFG		EGS2025FFG		EGS3025FFG		EGB3025AFG		EGS4025FFG		EGS4025AFG
30	EGS1030FFG		EGS2030FFG		EGS3030FFG		—		EGS4030FFG		—
32	EGS1032FFG		EGS2032FFG		EGS3032FFG		EGB3032AFG		EGS4032FFG		EGS4032AFG
35	EGS1035FFG		EGS2035FFG		EGS3035FFG		—		EGS4035FFG		—
40	EGS1040FFG		EGS2040FFG		EGS3040FFG		EGB3040AFG		EGS4040FFG		EGS4040AFG
45	EGS1045FFG		EGS2045FFG		EGS3045FFG		—		EGS4045FFG		—
50	EGS1050FFG		EGS2050FFG		EGS3050FFG		EGB3050AFG		EGS7050FFG		EGS4050AFG
60	EGS1060FFG		EGS2060FFG		EGS3060FFG		—		EGS7060FFG		—
63	EGS1063FFG		EGS2063FFG		EGS3063FFG		EGB3063AFG		EGS7063FFG		EGS4063AFG
70	EGS1070FFG		EGS2070FFG		EGS3070FFG		—		EGS7070FFG		—
80	EGS1080FFG		EGS2080FFG		EGS3080FFG		EGB3080AFG		EGS7080FFG		EGS4080AFG
90	EGS1090FFG		EGS2090FFG		EGS3090FFG		—		EGS7090FFG		—
100	EGS1100FFG		EGS2100FFG		EGS3100FFG		EGB3100AFG		EGS7100FFG		EGS4100AFG
125	EGS1125FFG		EGS2125FFG		EGS3125FFG		EGB3125AFG		EGS7125FFG		EGS4125AFG

① 16, 32, 63 A are not UL listed ratings.
 ② Adjustable thermal are not UL listed.
 ③ Change the fourth digit to 7 for 100% neutral protection. Neutral is on the LH side.

EG-Frame

Table 45-10. Complete Breaker (Includes Frame, Trip Unit, Standard Terminals and Mounting Hardware) — IC Rating at 415/480 Volts (Continued)

Max. Cont. Amps at 40°C ①	1-Pole		2-Pole		3-Pole			4-Pole 0% Protected Neutral ③				
	Fixed Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Adjustable ② Thermal Fixed Magnetic		Fixed Thermal Fixed Magnetic		Adjustable Thermal Fixed Magnetic	
70/65												
15	EGH1015FFG		EGH2015FFG		EGH3015FFG		—		EGH4015FFG		—	
16	EGH1016FFG		EGH2016FFG		EGH3016FFG		—		EGH4016FFG		—	
20	EGH1020FFG		EGH2020FFG		EGH3020FFG		EGH3020AFG		EGH4020FFG		EGH4020AFG	
25	EGH1025FFG		EGH2025FFG		EGH3025FFG		EGH3025AFG		EGH4025FFG		EGH4025AFG	
30	EGH1030FFG		EGH2030FFG		EGH3030FFG		—		EGH4030FFG		—	
32	EGH1032FFG		EGH2032FFG		EGH3032FFG		EGH3032AFG		EGH4032FFG		EGH4032AFG	
35	EGH1035FFG		EGH2035FFG		EGH3035FFG		—		EGH4035FFG		—	
40	EGH1040FFG		EGH2040FFG		EGH3040FFG		EGH3040AFG		EGH4040FFG		EGH4040AFG	
45	EGH1045FFG		EGH2045FFG		EGH3045FFG		—		EGH4045FFG		—	
50	EGH1050FFG		EGH2050FFG		EGH3050FFG		EGH3050AFG		EGH4050FFG		—	
60	EGH1060FFG		EGH2060FFG		EGH3060FFG		—		EGH4060FFG		—	
63	EGH1063FFG		EGH2063FFG		EGH3063FFG		EGH3063AFG		EGH4063FFG		EGH4063AFG	
70	EGH1070FFG		EGH2070FFG		EGH3070FFG		—		EGH4070FFG		—	
80	EGH1080FFG		EGH2080FFG		EGH3080FFG		EGH3080AFG		EGH4080FFG		EGH4080AFG	
90	EGH1090FFG		EGH2090FFG		EGH3090FFG		—		EGH4090FFG		—	
100	EGH1100FFG		EGH2100FFG		EGH3100FFG		EGH3100AFG		EGH4100FFG		EGH4100AFG	
125	EGH1125FFG		EGH2125FFG		EGH3125FFG		EGH3125AFG		EGH4125FFG		EGH4125AFG	
100/100												
15	—		—		EGC3015FFG		—		EGC7015FFG		—	
16	—		—		EGC3016FFG		—		EGC7016FFG		—	
20	—		—		EGC3020FFG		EGC3020AFG		EGC7020FFG		EGC7020AFG	
25	—		—		EGC3025FFG		EGC3025AFG		EGC7025FFG		EGC7025AFG	
30	—		—		EGC3030FFG		—		EGC7030FFG		—	
32	—		—		EGC3032FFG		EGC3032AFG		EGC7032FFG		EGC7032AFG	
35	—		—		EGC3035FFG		—		EGC7035FFG		—	
40	—		—		EGC3040FFG		EGC3040AFG		EGC7040FFG		EGC7040AFG	
45	—		—		EGC3045FFG		—		EGC7045FFG		—	
50	—		—		EGC3050FFG		EGC3050AFG		EGC7050FFG		EGC7050AFG	
60	—		—		EGC3060FFG		—		EGC7060FFG		—	
63	—		—		EGC3063FFG		EGC3063AFG		EGC7063FFG		EGC7063AFG	
70	—		—		EGC3070FFG		—		EGC7070FFG		—	
80	—		—		EGC3080FFG		EGC3080AFG		EGC7080FFG		EGC7080AFG	
90	—		—		EGC3090FFG		—		EGC7090FFG		—	
100	—		—		EGC3100FFG		EGC3100AFG		EGC7100FFG		EGC7100AFG	
125	—		—		EGC3125FFG		EGC3125AFG		EGC7125FFG		EGC7125AFG	

① 16, 32, 63 A are not UL listed ratings.
 ② Adjustable thermal is not UL listed.
 ③ Change the fourth digit to 7 for 100% neutral protection. Neutral is on LH side.

Table 45-11. Molded Case Switches

Catalog Number	
EGK2125KSG EGK3125KSG EGK4125KSG	

Note: Molded case switches may open above 1250 A.