

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.

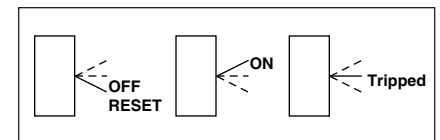


Figure 45-2. Positions of the Toggle Handle Drive

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.

Frame Sizes EG through LG

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	E	S	H	C	U	X							
Number of Poles	1	2, 3, 4	2, 3, 4		1	2, 3, 4		1	2, 3, 4		2, 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	65	85	100	200	200	200							
	480 Vac	—	18	25	—	35	—	65	100	25	35	65	100	150	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							
	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							
IEC 60947-2	220 – 240 Vac	<i>I_{CU}</i>	25	25	35	85	85	100	100	200	65	85	100	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	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		
		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)			—			—			—		
	3-Pole	—			3.00 (76.2)			—			—			—			—			10.13 (258.0)			5.48 (140.0)			4.09 (104.0)		
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						
	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												

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 —	Box Terminals 50 to 150 mm ² 35 to 120 mm ² —	Box Terminals 95 to 240 mm ² 70 to 150 mm ² —	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

JG-Frame



Eaton's Cutler-Hammer J250

Product Description

- JG breaker is HACR rated.

Technical Data and Specifications

Table 45-21. UL 489/IEC 60947-2 Interrupting Capacity Ratings

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes)								Volts dc ^①
		Volts ac (50/60 Hz)								
		220 – 240		380 – 415		480	600	690		
		I _{cu}	I _{cs}	I _{cu}	I _{cs}			I _{cu}	I _{cs}	
JGE250	2, 3, 4	65	65	25	25	25	18	12	6	10
JGS250	2, 3, 4	85	85	40	40	35	18	12	6	22
JGH250	2, 3, 4	100	100	70	70	65	25	14	7	22
JGC250	3, 4	200	200	100	100	100	35	16	12	42
JGU250	3, 4	200	200	150	150	150	50	18	14	50
JGX250	3, 4	200	200	200	200	200	50	18	14	50

- ① dc ratings apply to substantially non-inductive circuits.
- ② 2-pole circuit breaker, or two poles of 3-pole circuit breaker.
- ③ Time constant is 3 milliseconds minimum at 10 kA and 8 milliseconds minimum at 22 kA.

Dimensions/Weights

Table 45-22. Dimensions in Inches (mm)

Number of Poles	Width	Height	Depth
2/3	4.13 (104.9)	7.00 (177.8)	3.57 (90.7)
4	5.34 (135.6)	7.00 (177.8)	3.57 (90.7)

Table 45-23. Approximate Shipping Weight in Lbs. (kg)

Breaker Type	Number of Poles	
	2/3	4
JGE, JGS, JGH, JGC, JGU, JGX	6 (2.7)	8 (3.6)

Product Selection

Table 45-24. Main Catalog Numbering System

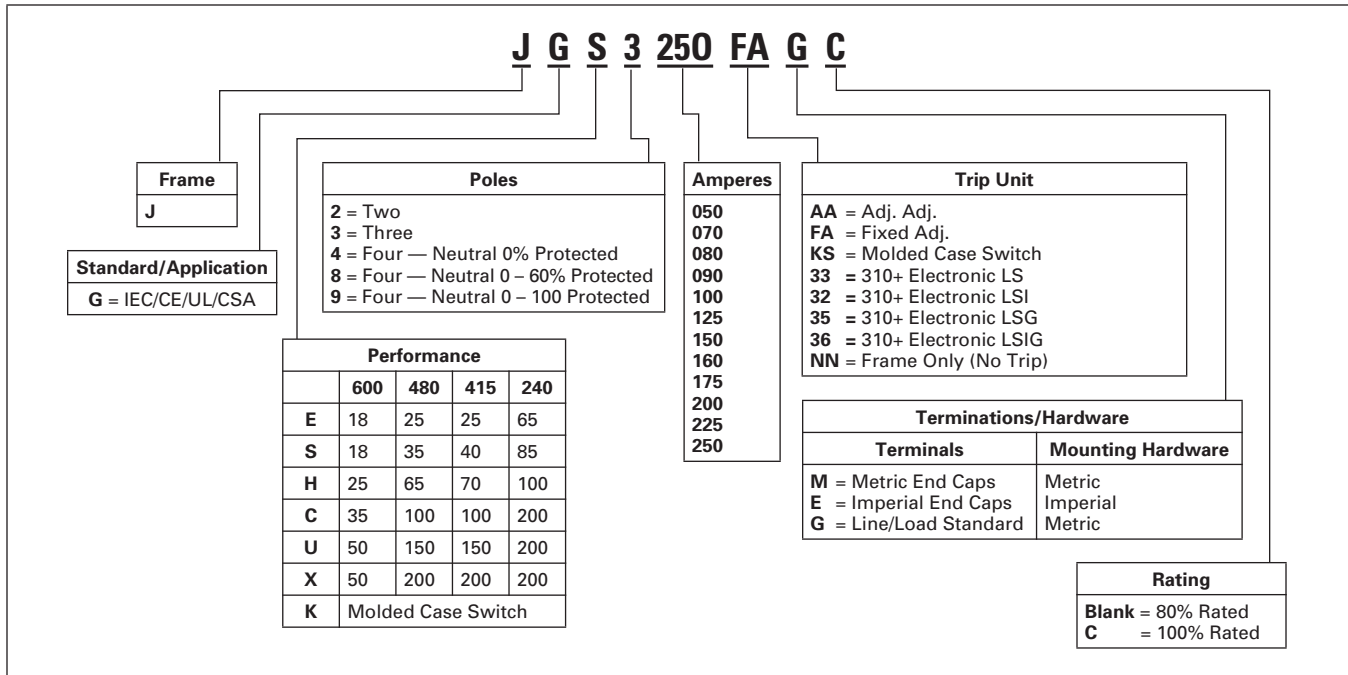
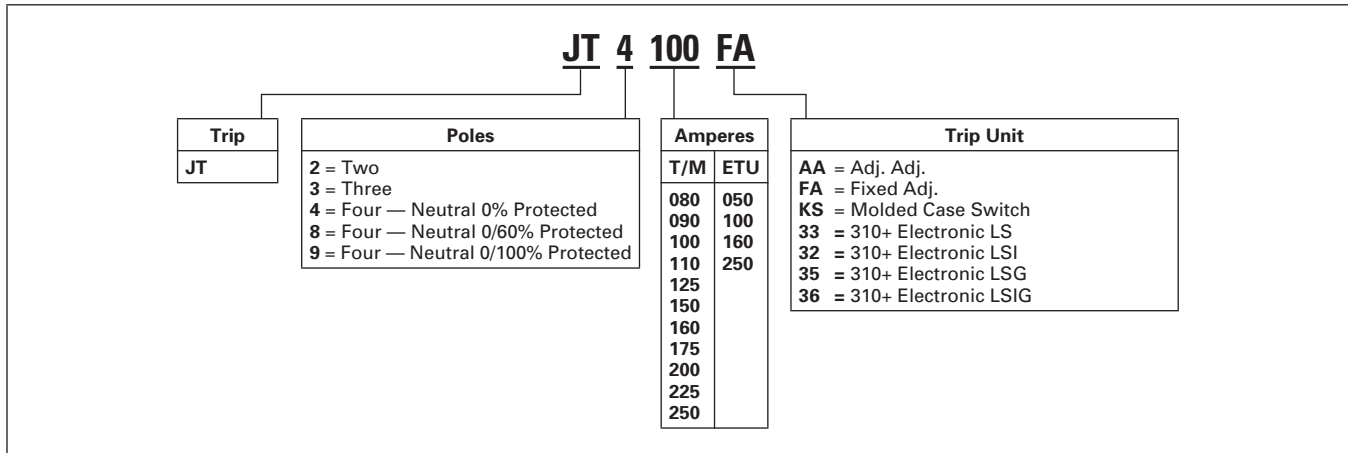


Table 45-25. Trip Unit Catalog Numbering System



Product Selection

Table 45-26. Complete Breaker (Includes Frame, Trip Unit, Standard Terminals and Mounting Hardware) — IC Rating at 415/480 Volts

Maximum Continuous Amperes	Magnetic Range	2-Pole		3-Pole			4-Pole 0% ①		
		Fixed Thermal Adjustable Magnetic		Fixed Thermal Adjustable Magnetic		Adjustable Thermal Adjustable Magnetic ②	Fixed Thermal Adjustable Magnetic		Adjustable Thermal Adjustable Magnetic ②
		Catalog Number		Catalog Number		Catalog Number	Catalog Number		Catalog Number
IEC/CE/UL/CSA 25/25									
70	350 – 700	JGE2070FAG		JGE3070FAG		—	JGE4070FAG		—
90	450 – 900	JGE2090FAG		JGE3090FAG		—	JGE4090FAG		—
100	500 – 1000	JGE2100FAG		JGE3100FAG		JGE3100AAG	JGE4100FAG		JGE4100AAG
125	625 – 1250	JGE2125FAG		JGE3125FAG		JGE3125AAG	JGE4125FAG		JGE4125AAG
150	750 – 1550	JGE2150FAG		JGE3150FAG		—	JGE4150FAG		—
160	800 – 1600	—		—		JGE3160AAG	—		JGE4160AAG
175	875 – 1750	JGE2175FAG		JGE3175FAG		—	JGE4175FAG		—
200	1000 – 2000	JGE2200FAG		JGE3200FAG		JGE3200AAG	JGE4200FAG		JGE4200AAG
225	1125 – 2250	JGE2225FAG		JGE3225FAG		—	JGE4225FAG		—
250	1250 – 2500	JGE2250FAG		JGE3250FAG		JGE3250AAG	JGE4250FAG		JGE4250AAG
IEC/CE/UL/CSA 40/35									
70	350 – 700	JGS2070FAG		JGS3070FAG		—	JGS4070FAG		—
90	450 – 900	JGS2090FAG		JGS3090FAG		—	JGS4090FAG		—
100	500 – 1000	JGS2100FAG		JGS3100FAG		JGS3100AAG	JGS4100FAG		JGS4100AAG
125	625 – 1250	JGS2125FAG		JGS3125FAG		JGS3125AAG	JGS4125FAG		JGS4125AAG
150	750 – 1550	JGS2150FAG		JGS3150FAG		—	JGS4150FAG		—
160	800 – 1600	—		—		JGS3160AAG	—		JGS4160AAG
175	875 – 1750	JGS2175FAG		JGS3175FAG		—	JGS4175FAG		—
200	1000 – 2000	JGS2200FAG		JGS3200FAG		JGS3200AAG	JGS4200FAG		JGS4200AAG
225	1125 – 2250	JGS2225FAG		JGS3225FAG		—	JGS4225FAG		—
250	1250 – 2500	JGS2250FAG		JGS3250FAG		JGS3250AAG	JGS4250FAG		JGS4250AAG
IEC/CE/UL/CSA 70/65									
70	350 – 700	JGH2070FAG		JGH3070FAG		—	JGH4070FAG		—
90	450 – 900	JGH2090FAG		JGH3090FAG		—	JGH4090FAG		—
100	500 – 1000	JGH2100FAG		JGH3100FAG		JGH3100AAG	JGH4100FAG		JGH4100AAG
125	625 – 1250	JGH2125FAG		JGH3125FAG		JGH3125AAG	JGH4125FAG		JGH4125AAG
150	750 – 1550	JGH2150FAG		JGH3150FAG		—	JGH4150FAG		—
160	800 – 1600	—		—		JGH3160AAG	—		JGH4160AAG
175	875 – 1750	JGH2175FAG		JGH3175FAG		—	JGH4175FAG		—
200	1000 – 2000	JGH2200FAG		JGH3200FAG		JGH3200AAG	JGH4200FAG		JGH4200AAG
225	1125 – 2250	JGH2225FAG		JGH3225FAG		—	JGH4225FAG		—
250	1250 – 2500	JGH2250FAG		JGH3250FAG		JGH3250AAG	JGH4250FAG		JGH4250AAG
IEC/CE/UL/CSA 100/100									
70	350 – 700	—		JGC3070FAG		—	JGC4070FAG		—
80	400 – 800	—		—		JGC3080AAG	—		JGC4080AAG
90	450 – 900	—		JGC3090FAG		—	JGC4090FAG		—
100	500 – 1000	—		JGC3100FAG		JGC3100AAG	JGC4100FAG		JGC4100AAG
125	625 – 1250	—		JGC3125FAG		JGC3125AAG	JGC4125FAG		JGC4125AAG
150	750 – 1550	—		JGC3150FAG		—	JGC4150FAG		—
160	800 – 1600	—		—		JGC3160AAG	—		JGC4160AAG
175	875 – 1750	—		JGC3175FAG		—	JGC4175FAG		—
200	1000 – 2000	—		JGC3200FAG		JGC3200AAG	JGC4200FAG		JGC4200AAG
225	1125 – 2250	—		JGC3225FAG		—	JGC4225FAG		—
250	1250 – 2500	—		JGC3250FAG		JGC3250AAG	JGC4250FAG		JGC4250AAG
IEC/CE/UL/CSA 150/150									
70	350 – 700	—		JGU3070FAG		—	JGU4070FAG		—
80	400 – 800	—		—		JGU3080AAG	—		JGU4080AAG
90	450 – 900	—		JGU3090FAG		—	JGU4090FAG		—
100	500 – 1000	—		JGU3100FAG		JGU3100AAG	JGU4100FAG		JGU4100AAG
125	625 – 1250	—		JGU3125FAG		JGU3125AAG	JGU4125FAG		JGU4125AAG
150	750 – 1550	—		JGU3150FAG		—	JGU4150FAG		—
160	800 – 1600	—		—		JGU3160AAG	—		JGU4160AAG
175	875 – 1750	—		JGU3175FAG		—	JGU4175FAG		—
200	1000 – 2000	—		JGU3200FAG		JGU3200AAG	JGU4200FAG		JGU4200AAG
225	1125 – 2250	—		JGU3225FAG		—	JGU4225FAG		—
250	1250 – 2500	—		JGU3250FAG		JGU3250AAG	JGU4250FAG		JGU4250AAG
IEC/CE/UL/CSA 200/200									
70	350 – 700	—		JGX3070FAG		—	JGX4070FAG		—
80	400 – 800	—		—		JGX3080AAG	—		JGX4080AAG
90	450 – 900	—		JGX3090FAG		—	JGX4090FAG		—
100	500 – 1000	—		JGX3100FAG		JGX3100AAG	JGX4100FAG		JGX4100AAG
125	625 – 1250	—		JGX3125FAG		JGX3125AAG	JGX4125FAG		JGX4125AAG
150	750 – 1550	—		JGX3150FAG		—	JGX4150FAG		—
160	800 – 1600	—		—		JGX3160AAG	—		JGX4160AAG
175	875 – 1750	—		JGX3175FAG		—	JGX4175FAG		—
200	1000 – 2000	—		JGX3200FAG		JGX3200AAG	JGX4200FAG		JGX4200AAG
225	1125 – 2250	—		JGX3225FAG		—	JGX4225FAG		—
250	1250 – 2500	—		JGX3250FAG		JGX3250AAG	JGX4250FAG		JGX4250AAG

① Change the fourth digit to 8 for adjustable 0 – 60% neutral protection, 9 for 0 – 100% neutral protection. Neutral is on LH side.

② IEC-EN 60947-2 only. Adjustment is .8 and 1.0.