

The Eaton logo is displayed in a bold, white, sans-serif font against a dark background.The Cutler-Hammer logo is displayed in a bold, white, sans-serif font against a dark background.

Series G Molded Case Circuit Breakers

Product Aid

Space Savings
Global Ratings
Common Accessories

From the Inventor and World Leader in Molded Case Circuit Breakers — the Series G Global Line of MCCBs

Designed for OEMs serving domestic and export markets, “global” Series G Molded Case Circuit Breakers (MCCBs) have UL®, CSA®, IEC, CCC, CE and Kema Keur markings on all frame sizes through 2500 amperes. Newly designed EG, JG and LG Frames offer OEM-friendly accessories, space-saving footprints, advancements in electronic trip units, and demanding distribution panel performance. The NG and RG Frames are based on the proven Series C® ND and RD MCCBs with new global markings and metric threading for line and load conductors.



The New Space-Saving, Globally Listed Series G Line of MCCBs Covers 15 through 2500 Amperes

Advantages of the Series G Offering

Panel Space and Design Savings

Advancements in arc interruption allow high performance in smaller sizes.

- **1/3 less panel space** is needed for new Series G Frames up through 630 amperes (compared to Series C and most competitive offerings).
- **Only five frames** are needed to cover all current ranges through 2500 amperes.

Less Inventory and Expediting

The Series G offering is designed to simplify how OEMs buy breakers.

- **Common internal accessories** — The same UVRs, shunt trips and auxiliary contacts are used on EG, JG and LG breakers (15 through 630 amperes). No more stocking and expediting accessories for each breaker frame.
- **Global ratings** — CSA C22.2 No. 5, UL 489, IEC 60947-2, CCC, CE and Kema Keur markings are included on Series G labels. No more stocking/expediting breakers for the export market.
- **No rating plugs for electronic trip units** — JG and LG MCCBs (20 through 630 amperes) use only three-to-four interchangeable electronic trip units to cover all current ranges.

Faster Startup and Less Downtime

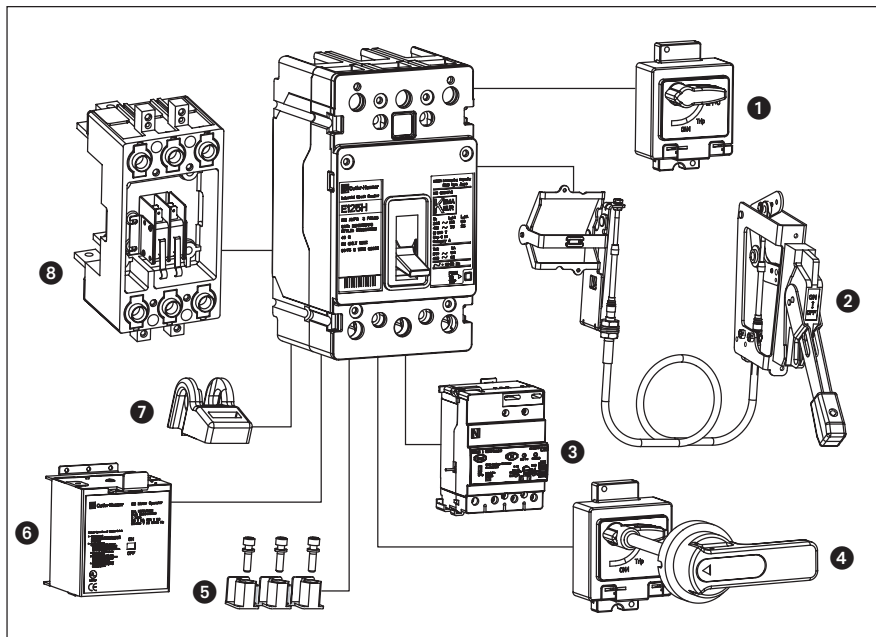
Series G accessories take less installation time and money than those of alternative MCCBs. Their electronic trip units and ground fault modules reduce the risk of equipment failure.

- **Field-installable internal accessories** on all frames.
- **World-class external accessories:** plug-in blocks, flexible shaft and rotary handle mechanisms, multiple conductor lugs, finger-safe shields, electrical operators, lock-offs and other accessories are designed for fast OEM installation.
- **Easy-to-use dials** adjust settings on electronic trip units. Tamper-resistant covers inhibit inadvertent adjustments of trip unit settings.
- **UL/CSA-listed 30 mA earth leakage modules** — For less installed cost than a ground fault relay system, 30 mA, field-installable ground fault modules allow precise ground fault coordination while reducing the risk of injury and equipment damage from grounding problems.
- **Built-in ground fault from 20 amperes** — The JG MCCB can cover ground fault applications from 20 through 250 amperes; larger frames cover up to 2500 amperes.
- **Improved coordination** — Digitrip 310+ electronic trip units are built to work in the most extreme conditions and applications. Their higher instantaneous pickup (14X) prevents nuisance tripping in high inrush applications, yet they are precise enough to work in highly coordinated systems with a “2X” setting to prevent widespread outages of power.

Features	
Continuous Current Protection —	15 – 2500 Amperes
Global Markings on Breaker —	UL 489, CSA C22.2 No. 5, IEC 60947-2, CCC [Ⓞ] and Kema Keur [Ⓞ]
1/3 Less Panel Space than Series C and Many Competitive Frames on EG, JG and LG Frames (15 – 630 Amperes)	
Common Internal Accessories on EG, JG and LG Frames (15 – 630 Amperes)	
Field-Installable Internal Accessories	
Electronic Trip Units: LS, LSI and LSIG on JG – RG Frames (20 – 2500 Amperes)	
No Rating Plugs Needed for Electronic Trip Units in JG – RG Frames (20 – 630 Amperes)	
HMCP Version (Motor Circuit Protector) EG – NG Frames (3 – 1200 Amperes)	
Molded Case Switch Version	

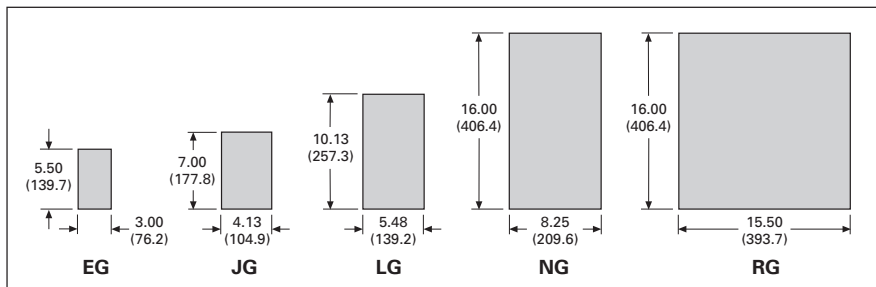
Accessories	Available
Shunt-Trip	All
Auxiliary Switch	All
Bell Alarm	All
Combination Alarm/Auxiliary Switch	All
Undervoltage Release	All
Handle Mechanism — Flange-Mounted Flex Shaft	All
Handle Mechanism — Through-the-Door Rotary	All
Handle Mechanism — Direct Mounted	All
Earth Leakage Module (Ground Fault Protector) UL/CSA Rated, Field-Installable, Pre-Trip Alarm	JG and LG Frames (15 – 630 Ampere)
Plug-in Blocks	EG – NG Frames (15 – 1200 Amperes)
Rear-Connecting Studs	EG – NG Frames (15 – 1200 Amperes)
Drawout Cassettes	JG – RG Frames [Ⓞ] (250 – 2500 Amperes)
Lock-Offs	All
Interlocks	All
Finger-Safe Shields and Interphase Barriers	EG, JG and LG Frames (15 – 630 Amperes)
Bus Extension and Spreaders	EG, JG and LG Frames (15 – 630 Amperes)
Multiple Conductor Terminals/Connectors	All
Electrical Operator	All [Ⓞ]

[Ⓞ] Not available for all frames until December 2004.



World-Class External Accessories Include (clock-wise) Close-coupled Handle Mechanisms 1, Flexible Shaft Handle Mechanisms 2, UL/CSA-Rated 30 mA Ground Fault Relays 3, NEMA[®] 4X Rotary Handle Mechanisms 4, End Cap Kits 5, Electrical Operators 6, Lock-Offs 7 and Plug-in Blocks 8

3-Pole Dimensions in Inches (mm)



Frame	Ampere Range	Maximum kAIC (UL 489, CSA C22.2 No. 5)				Maximum kAIC (IEC 60947-2 I _{cu})			Number of Poles	3-Poles Weight Lbs. (kg)
		240 Vac	480 Vac	600 Vac	250 Vdc	240 Vac	415 Vac	690 Vac		
EG	15 – 160 [Ⓞ]	100	65	—	42	100	70	6	1, 2, 3, 4	3.1 (1.4)
JG	20 – 250	200 [Ⓞ]	100 [Ⓞ]	50 [Ⓞ]	42	200 [Ⓞ]	100 [Ⓞ]	20 [Ⓞ]	2, 3, 4	11.4 (5.2)
LG	100 – 630 [Ⓞ]	200 [Ⓞ]	100 [Ⓞ]	50 [Ⓞ]	42	200 [Ⓞ]	100 [Ⓞ]	35 [Ⓞ]	3, 4	16.0 (7.3)
NG	400 – 1600 [Ⓞ]	200	100	50	—	200	100	35	3, 4	46.8 (21.2)
RG	800 – 2500	200	100	65	—	200	100	25	3, 4	103.0 (47.0)

[Ⓞ] 125 amperes UL/CSA.

[Ⓞ] 600 amperes UL/CSA.

[Ⓞ] 1200 amperes UL/CSA.

[Ⓞ] Only lower ratings may be available until December 2004.

UL is a federally registered trademark of Underwriters Laboratories Inc. CSA is a registered trademark of the Canadian Standards Association. NEMA is the registered trademark and service mark of the National Electrical Manufacturers Association.

Eaton Electrical Inc.
1000 Cherrington Parkway
Moon Township, PA 15108
United States
tel: 1-800-525-2000
www.EatonElectrical.com

EATON

Cutler-Hammer

©2004 Eaton Corporation
All Rights Reserved
Printed in USA
Publication No. PA01200004E / Z2551
August 2004