Current Limiting Circuit Breaker Module

Meeting the protection requirements of high-fault currents just became easier.

Description

The current limiting breaker modules use a special contact design to enhance system protection. These breakers have continuous current capabilities up to 250A with protection up to 200 kA at 600 VAC and 70 kA at 690 VAC.

Applications

Typical loads include lighting, power distribution, and motor control applications. Current Limiting breakers are commonly applied when very high-fault levels are available, and the current limiting capability is used upstream of the final load to limit current to the load.

Benefits

Best in class circuit breaker protection plus:

- Increased uptime with post-fault auto reset of the limiter
- Extended ratings for enhanced coordination
- Reduced cost of ownership, no fuses or modules to replace

Table 1. High Performance Ratings

Type	Ampere	480Vac (UL)	600Vac (UL)	415Vac (IEC)		690Vac (IEC)	
				Icu	Ics	Icu	Ics
JG 3P Thermal Magnetic + Limiter	70-225	200	20	200	150	70	18
JG 3P Electronic + Limiter	100-250	200	200	200	150	70	18

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Table 2. IC Rating: 200kAIC @ 600VAC and 70kAIC @ 690VAC

Ampere Rating	Magnetic Range	UL Listed, IEC Rated Breaker with Line Side Mounted Current Limiter ❶	UL Listed, IEC Rated Breaker with Load Side Mounted Current Limiter ❷	EC Rated Breaker with Load Side Mounted Current Limiter ❶	IEC Rated Breaker with Load Side Mounted Current Limiter ❷
		Fixed Thermal, Adjustable Magnetic		Adjustable Thermal, Adjustable Magnetic	
70	350–700	JGH3070FAGQ01	JGH3070FAGQ02	—	—
90	450–900	JGH3090FAGQ01	JGH3090FAGQ02	—	—
100	500–1000	JGH3100FAGQ01	JGH3100FAGQ02	JGH3100AAGQ01	JGH3100AAGQ02
125	625–1250	JGH3125FAGQ01	JGH3125FAGQ02	JGH3125AAGQ01	JGH3125AAGQ02
150	750–1550	JGH3150FAGQ01	JGH3150FAGQ02	—	—
160	800–1600	—	—	JGH3160AAGQ01	JGH3160AAGQ02
175	875–1750	JGH3175FAGQ01	JGH3175FAGQ02	—	—
200	1000–2000	JGH3200FAGQ01	JGH3200FAGQ02	JGH3200AAGQ01	JGH3200AAGQ02
225	1125–2250	JGH3225FAGQ01	JGH3225FAGQ02	—	—
		Electronic Trip LS			
250	—	JGH325033GQ01	JGH325033GQ02	—	—
		Electronic Trip LSI			
250	—	JGH325032GQ01	JGH325032GQ02	—	—
		Electronic Trip LSG			
250	—	JGH325035GQ01	JGH325035GQ02	—	—
		Electronic Trip LSIG			
250	—	JGH325036GQ01	JGH325036GQ02	—	—

❶ Two interphase barriers provided, mounted on line end if limiter (included).

❷ Four interphase barriers provided, (2) line end of breaker (2) load end of limiter (included).

Table 3. Eaton Series G HMCP

Ampere Rating	Motor Circuit Protector Breaker with Line Side Mounted Current Limiter	Breaker with Load Side Mounted Current Limiter
250	HMCPJ250D5LQ01	HMCPJ250D5LQ02
250	HMCPJ250F5LQ01	HMCPJ250F5LQ02
250	HMCPJ250G5LQ01	HMCPJ250G5LQ02
250	HMCPJ250J5LQ01	HMCPJ250J5LQ02
250	HMCPJ250K5LQ01	HMCPJ250K5LQ02
250	HMCPJ250L5LQ01	HMCPJ250L5LQ02

Table 4. Breaker Load and Line Terminals

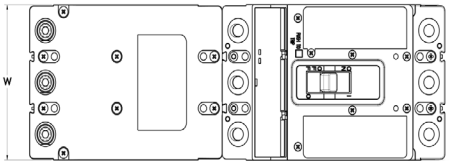
Maximum Breaker Amperes	Terminal Body Material	Wire Type	Metric Wire Range mm²	AWG Range / Number of Conductors	Catalog Number
		Standard Pressure Type Terminals			
250	Aluminum	Cu/Al	10-185	#8-350(1)	TA250FJ

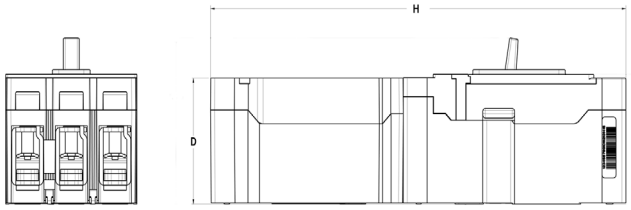
Line and Load terminations included.
Interphase barriers included with product, catalog FJIPBK.

Table 5. Assembled Breaker and Current Limiting Module

Frame	Height	Width	Depth	Weight in lbs (kg)
JG + Limiter	13.06 (331.7)	4.13 (104.9)	3.44 (87.4)	9.87 (4.48)
HMCP	13.06 (331.7)	4.13 (104.9)	3.44 (87.4)	9.87 (4.48)

Approximate dimensions in inches (mm).





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