Proven technology and performance with a full line of standard features



Introducing the Series G[®] 2500A R-Frame 310+ breaker, featuring zone selective interlocking (ZSI), cause of trip, ground fault alarm (no trip) and Arcflash Reduction Maintenance System.[™] The breaker is NEMA,[®] UL,[®] CSA[®] and IEC listed with electronic trip unit.



Benefits of the R-Frame 310+ breaker

- No DIP switches or rating plugs needed. The 310+ has adjustable trip settings integral to the electronic trip unit
- Remote Arcflash Reduction Maintenance System is an available feature. This feature increases worker safety by providing an accelerated instantaneous trip to reduce arc flash potential
- Ground fault alarm, no trip, is an option. In addition to offering ground fault and high load alarms, the 310+ allows for ground fault alarm, no trip. This is essential for critical applications that must stay online when a ground fault is present
- ZSI is available. This feature enables the breaker to communicate with the immediate upstream or downstream ZSI-enabled breakers to clear faults in the shortest amount of time using the breaker closest to the fault
- Available for aftermarket replacement of any R-Frame with 310, 510 and 610 trip units when zone selective interlocking, cause of trip, ground fault alarm only or Arcflash Reduction Maintenance System is needed

A full range of world-class accessories

- Uses the same internal accessories as the standard R-Frame, from auxiliary switches to undervoltage relays
- Choose from a range of external accessories, including handle lock-offs, flex shafts, plug-in adapters and drawout cassettes
- In addition to integrated cause of trip, the RG 310+ built-in test port allows compatibility with Eaton's ammeter/cause of trip display, panelmount ammeter/cause of trip display and cause of trip LED module

Zone selective interlocking

Zone selective interlocking uses a communication scheme to connect line and load breaker trip units together. When a fault occurs, the trip units communicate to determine which load-side breaker is closest to the fault. The trip unit in the breaker closest to the fault overrides any customer-defined delay and opens instantaneously, clearing the fault and allowing line-side breakers to remain closed.

Arcflash Reduction Maintenance System

This system uses a separate analog trip circuit that provides faster interruption times than the standard digital instantaneous protection. Work locations downstream of a circuit breaker with an Arcflash Reduction Maintenance System unit will have a significantly lower incident energy level.



RGH and RGC Rating and Ampere Range

Specification		Descrip	tion			
Breaker type		RGH		RGC		
Short-circuit current ratings (kA rms) AC 50–60 Hz						
NEMA UL 489	240 Vac	100		200		
	480 Vac	65		100		
	600 Vac	35		50		
Number of poles		3, 4		3, 4		
Adjustable long-time pickup CSA 22.2 No. 5	1600A		A = 800, B = 900, C = 1000, D = 1100, E = 1200, F = 1400, G = 1500, H = 1600			
	2000A		A = 1000, B = 1200, C = 1400, D = 1600, E = 1700, F = 1800, G = 1900, H = 2000			
	2500A		A = 1600, B = 1700, C = 1800, D = 2000, E = 2100, F = 2200, G = 2400, H = 2500			
Electronic rms		LS, LSI, L	LS, LSI, LSG, LSIG, ALSI, ALSIG			
Dimensions in inches (mm)		Н	W	D		
	Three-pole	16.00 (406.4)	15.50 (393.7)	9.00 (228.6)		
	Four-pole	16.00 (406.4)	20.00 (508.0)	9.00 (228.6)		
Weight (approximate) lbs (kg)	Three-pole	103.0 (47.0)				
	Four-pole	118.4 (54.0)				

Current Sensor for Ground Fault

Catalog Number ①	Breaker Ampere Range	
RGFCT160A	800–1600	
RGFCT200A	1000–2000	
RGFCT250A	1600–2500	

Suffix A = aluminum.

Cause of Trip Indication

Catalog Number	Description	
DIGIVIEW	Digiview ammeter with cause of trip indication	
DIGIVIEWR06	Panelmount Digiview with 6-foot wire harness	
TRIP-LED	LED cause of trip indication	

Breaker features

- UL 489, CSA C22.2 No. 5, IEC 60947-2
- Shunt trip
- · Auxiliary switch
- Bell alarm
- · Combination alarm/auxiliary switch
- Undervoltage release
- · Handle mechanism
- · Rear-connecting studs
- · Drawout cassettes
- Lock-offs
- Interlocks
- · Finger-safe shields and interphase barriers
- · Electrical operator



- No rating plug required
- Available with LS, LSI, LSG, LSIG and Arcflash Reduction Maintenance System via ALSI, ALSIG
- Trip units are factory installed and are available in these ranges:
 - 800–1600A
- 1000–2000A
- 1600–2500A
- Time current curves referenced in document TC01210019E
- · Adjustable long-time delay
- · Adjustable short-time delay
- Adjustable instantaneous
- · Status indicator and no trip test indicator LEDs
- Push-to-trip button
- · Integral cause of trip
- · Optional devices that interface with the test port
 - Test kit
- Ammeter/cause of trip display (DIGIVIEW)
- Panelmount ammeter/cause of trip display (DIGIVIEWR06)
- Cause of trip LED module (TRIP-LED) •

Catalog Numbering System RG Н 3 250 39 ZG Е <u>C</u> Rating Frame RG **Blank** = 80% rated С = 100% Performance Poles rated at 480 Vac 3 = Three $\mathbf{H} = 65 \text{ kAIC}$ 4 = Four **C** = 100 kAIC Terminations M = Metric tapped line/ Amperes load conductors **160** = 1600 **E** = Imperial tapped **200** = 2000 line/load **250** = 2500 conductors **Trip Unit** Feature 33 = 310+ Electronic LS Blank = No feature = 310+ Electronic LSI 32 **B20** = High load alarm 35 = 310+ Electronic LSG **B21** = Ground fault alarm 35B22 = 310+ Electronic LS(A), GFA, no trip ZG = Zone selective 36 = 310+ Electronic LSIG interlocking 36B22 = 310+ Electronic LSI(A), GFA, no trip 38 = 310+ Electronic ALSI w/ Maintenance Mode 39 = 310+ Electronic ALSIG

For more information, please call 877-ETN-CARE (877-386-2273)

Eaton is a registered trademark of Eaton Corporation.

w/ Maintenance Mode 39B22 = 310+ Electronic ALSI(A)

w/ Maintenance Mode and GFA, no trip

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Eaton Corporation Electrical Sector 1111 Superior Avenue Cleveland, OH 44114 USA Eaton.com

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