

# Record Plus\* Circuit Breakers with PremEon\* S Trip Unit Fact Sheet



## Enhanced Performance for FE250 and FG600 Molded Case Circuit Breakers

Record Plus FE250 and FG600 circuit breakers are now available with the new PremEon S trip unit, which replaces the SMR1 trip unit. The new PremEon S is an advanced electronic trip unit platform designed to offer reliability in all network environments. It features an adjustable amp dial to set the long-time pickup and eliminates the need for rating plugs. The Record Plus with PremEon S is a solid solution for applications requiring selectivity, coordination, performance, reliability and improved system protection without a high degree of complexity.

## Controlled Adjustment

The integrated adjustable amp dial (adjustable long-time pickup) on the trip unit allows the user to set the rated current from 30 - 100% of the current sensor rating ordered in the frame. For added protection against unauthorized adjustment, the dial requires a Tamper-Resistant Torx T15 tool, which is readily available at industrial supply companies. The trip unit also features a sealable cover, satisfying the NEC 2011, Article 240.6(C) requirement. If the circuit breaker is ordered through the Accessorized Circuit Breaker Configurator or through SPEEDI, it will come already adjusted.

## Selectivity Ratings Intact

Record Plus circuit breakers with PremEon S trip units are also suitable for applications requiring selective coordination. The instantaneous selectivity ratings for both the FE250 and FG600 circuit breakers remain intact.

## Improved TCC Shaping and Accuracy

Instantaneous adjustment with tracking short-time is standard on the PremEon S, improving time-current curve shaping capability. This means better coordination and non-instantaneous selectivity for your system's needs. In addition, the advanced electronics reduce the tolerance band on expected tripping currents to +/-10% for improved accuracy.

## More Protection

Optional ground fault trip pickup (LIG) and delay function is now available on both the FE and FG circuit breakers. Ground fault pickup can be set from 0.4 to 1 times the chosen trip unit rating and used with multiple delay and/or I2T settings. PremEon S also features a standard 3-position switch for neutral protection setting (Off-50%-100%).

## Motor Circuit Protection (MCP) Available

Mag only motor circuit protection options are available for both FE and FG circuit breakers. In addition, MCP circuit breakers are also available with ground fault.

## Integrated Test Kit

The testing process allows for easier system commissioning. Using just a standard mobile phone charger with a micro USB connection, a user can connect to the micro USB port in the PremEon S, and the "TEST" button becomes live. Depress the button and it checks the full electronic circuit and then trips the connected circuit breaker.

## Diagnostics

The LED status indicator alerts users when an overload trip is imminent and also indicates when the self-diagnostic system senses any defects. The USB port also functions as an event data access port, allowing users to verify circuit breaker settings, view and recover data on last ten fault occurrences, and view waveform data for the last fault event.

## Accessories

All existing Record Plus internal accessories (shunt trip, undervoltage release, auxiliary contacts, bell alarm) are UL Listed for field installation and are suitable for use with the entire line of Record Plus circuit breakers.

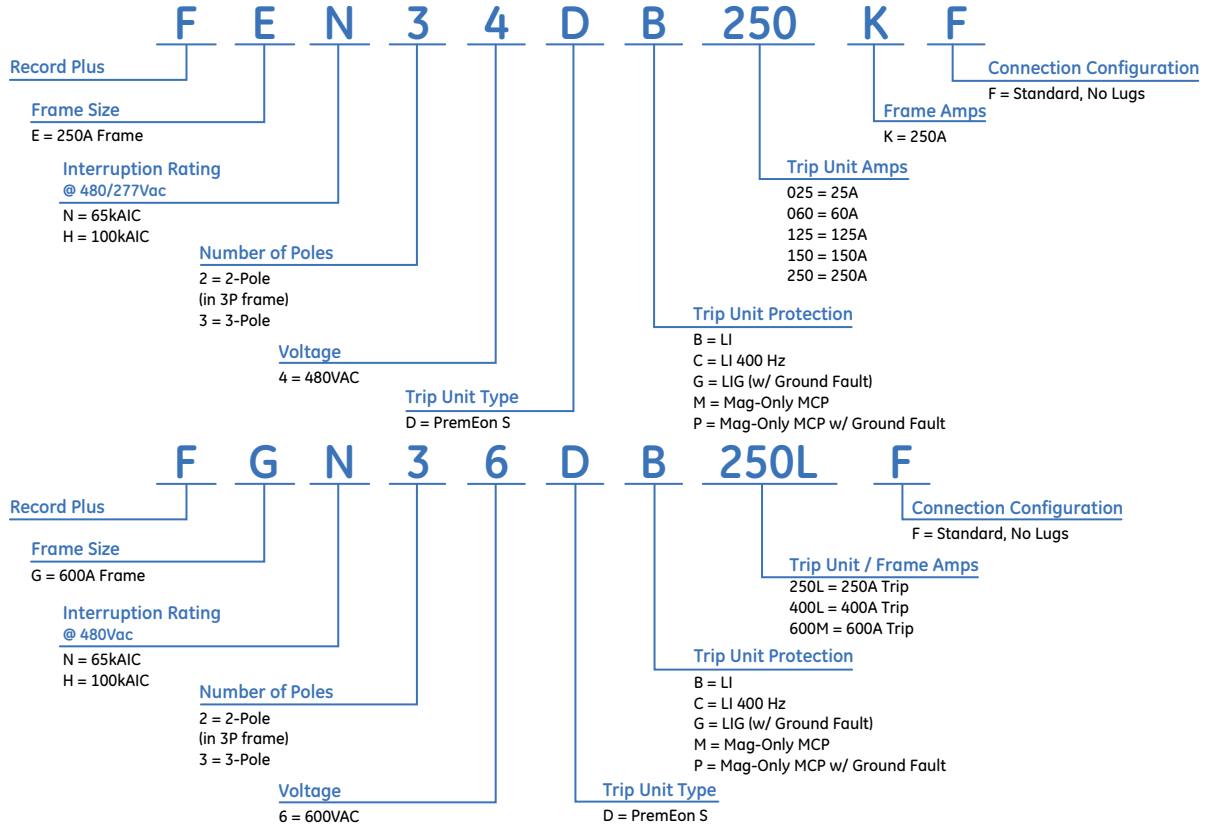
## Standard Features

Adjustable Long-Time Pickup  
 Adjustable Instantaneous Pickup with Short-Time Tracking  
 Integrated Test  
 LED Indicator  
 Neutral Protection  
 Event Data Log

## Optional Features

Adjustable Ground Fault Pickup and Delay  
 MCP Mag Only Trip Unit  
 400Hz Application ETU (Not UL listed)

## Catalog Number Structure for Record Plus<sup>®</sup> Circuit Breakers with PremEon<sup>®</sup> S Trip Unit



## Standards and Approvals

UL/cUL File E-11592      IEC EN 60947-2  
 HACR Type                      Naval  
 Current Limiting                Suitable for Reverse Feed

## Capabilities by Equipment for Record Plus<sup>®</sup> Circuit Breakers with PremEon<sup>®</sup> S Trip Unit

	A-Series Main	Spectra Panelboard	Spectra Switchboard
<b>Standard Protection I(SI)</b>	X	X	X
<b>Advanced Protection With Ground Fault</b>			X

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