

Competitive comparison for arc energy reduction solutions

Below are the current alternative solutions in the market with regards to how our competition addresses the changes within the 2017 NEC 240.87 code requirements. This segment of the code is titled "Arc Energy Reduction," and effectively states "Where the highest continuous current trip setting for which the actual overcurrent device installed in a circuit breaker is rated or can be adjusted is 1200 A or higher, (A) and (B) shall apply."

- A) Documentation shall be available to those who design, install, operate or inspect the installation
- B) One of 7 approved methods to reduce clearing time for an arc:
 - a. Zone-selective interlocking
 - b. Differential relaying
 - c. Energy-reducing maintenance switching with local status indicator
 - d. Energy-reducing active arc flash mitigation system
 - e. An instantaneous trip setting that is less than the available arcing current
 - f. An instantaneous override that is less than the available arcing current
 - g. An approved equivalent means.

Listed below are different technologies employed by our competition on the market today.

	Eaton	Schneider/SqD	Siemens	General Electric
NEC 240.87 Code Options				
Zone-selective interlocking	YES – 310+ Trip Units	✓	✓	✓
Differential relaying	YES – E-Series Relays	✓	✓	✓
Energy-reducing maintenance switching with local status indicator	YES – Arcflash Reduction Maintenance Switch (ARMS)	NO	NO – Dynamic Arc Sentry (DAS) + status light on air circuit breakers (ACBs) only	YES – Reduced Energy Let-through (RELT) – Based on ARMS trip unit*
Energy-reducing active arc flash mitigation system	YES – Arc Flash Relay	✓	✓	✓
An instantaneous trip setting that is less than the available arcing current	YES – 310+ Trip Units	✓	✓	✓
An instantaneous override that is less than the available arcing current	YES – All MCCB Breakers	✓	✓	✓



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