



Residential Products Webinar Next Generation AFCI

EATON

© 2008 Eaton Corporation. All rights reserved

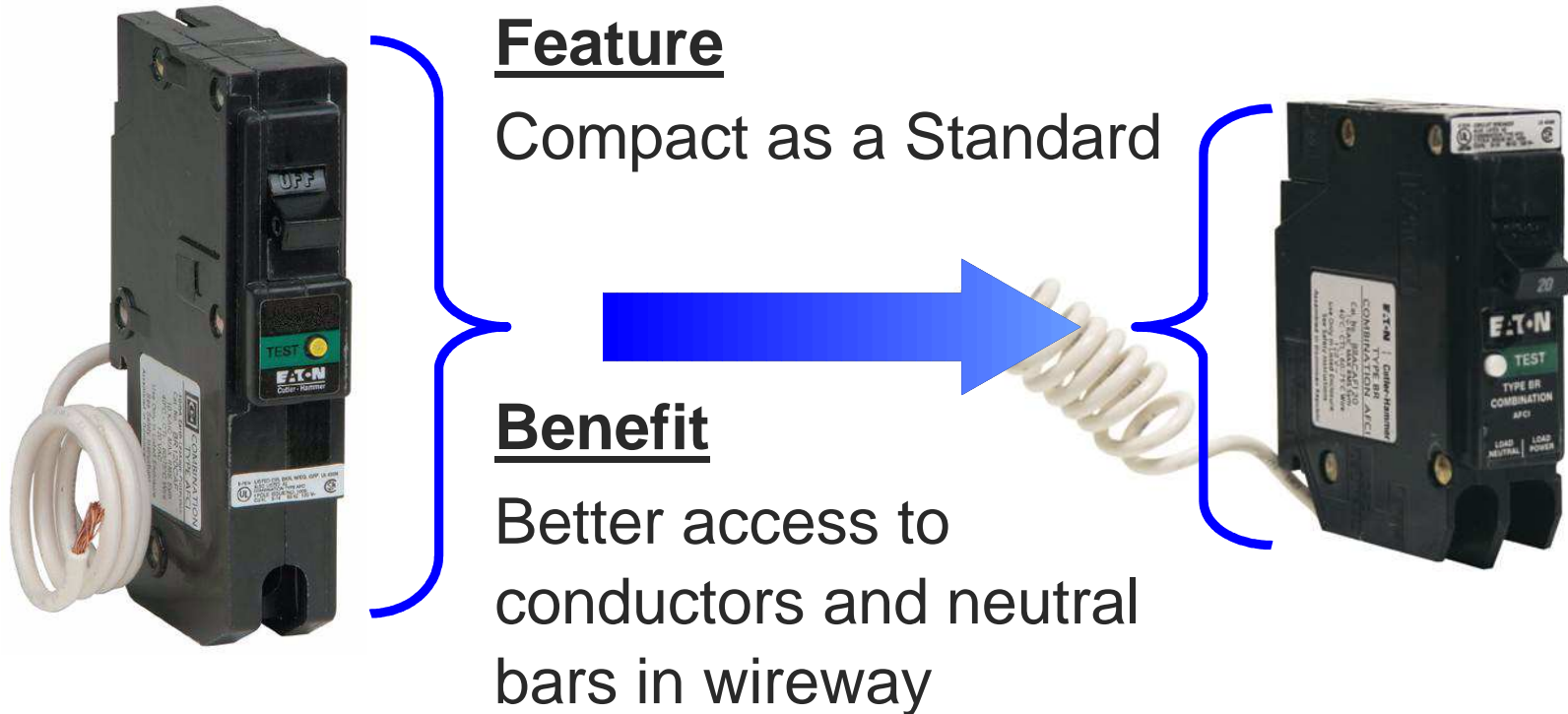
Next Generation AFCI

Redesigned BR (1") and
CH (3/4") Continues to
Position Eaton as the
Leader in Arc F
Technology



EATON

Next Generation BR (1") Compact Footprint



Next Generation BR (1") and CH (3/4") Updated Electronics

Feature

Redesigned Electronic
Hardware and Software

Benefit

Highly resistant to
unwanted tripping due to
non-compliant devices



Next Generation BR (1") and CH (3/4") Diagnostic LED

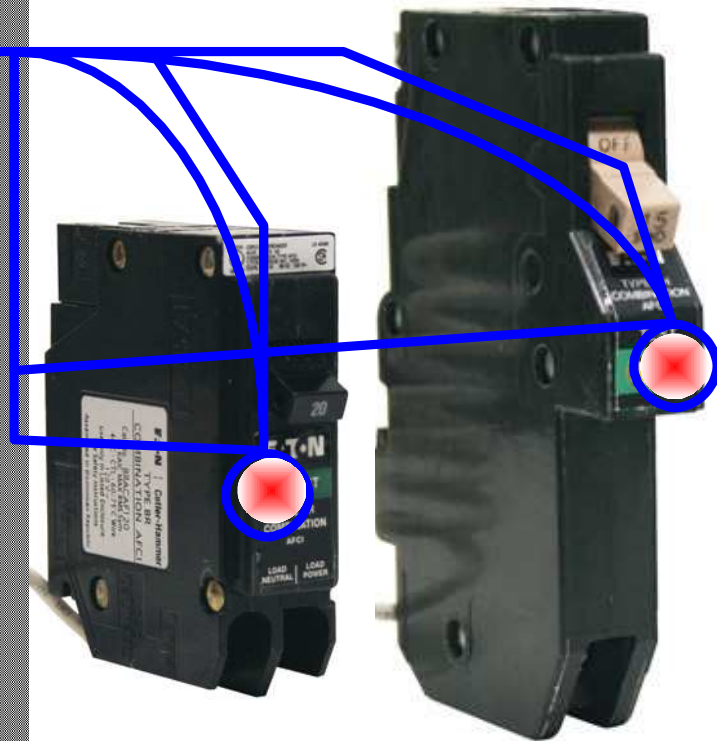
Feature

Diagnostic LED Signals
up to 7 Trip Codes

Benefit

Immediate feedback to
diagnose and resolve
tripping

- Standard Feature in CH
- Optional Feature in BR



Next Generation BR (1") and CH (3/4") Lifetime Trip Code Retention

Feature

Memory Retains +300
Electronic Trip Codes

Benefit

Historic Summary of Trip
Codes for Diagnostic and
Investigation Purposes



Diagnostic Trip Codes

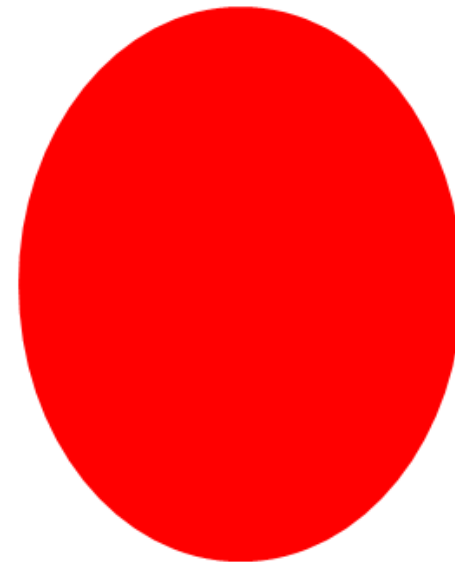
Blink Pattern	Description	Resolution
0	<u>Mechanical Disconnect</u> The breaker has detected an overload, short circuit or was manually turned off	Remove excessive loads from the circuit / Identify the location of the short circuit.
1	<u>Series Arc</u> A low current arc has been detected within one of the current pathways. Series arcs are typically found in worn or degraded appliance and extension cords, poor connections in appliances or fixtures, or in contacts within equipment	Identify the equipment causing tripping and repair or replace
2	<u>Parallel Arc</u> A high current arc has been detected between two conductors. Parallel arcs are usually found in installed wiring where the wire has been compromised by a nail or screw, tight staple, damaged insulation.	Locate fault location and replace wire

Diagnostic Trip Codes

Blink Pattern	Description	Resolution
3	<u>Short Delay</u> Short delay is an electronic backup to the short circuit mechanism	Identify and location of the short circuit and repair
4	<u>Overvoltage</u> The breaker will trip if it experiences voltage of 160V RMS or greater. The breaker can be reset and the "TEST" button can be pushed to verify the breaker is working properly	Investigate utility power for imbalance in the phases or loss of neutral.
5	<u>Ground Fault</u> Current has found an alternate path to ground which could cause harm to people or property.	Determine location of leakage current and repair
6	<u>Self Test Failure</u> The breaker continually tests the internal electronics and software to ensure the arc fault detection technology is working properly. If the self diagnostics fail, the breaker will trip.	Replace the breaker

Diagnostic Trip Code Recovery

- Diagnostic LED blinks 30 patterns
- To recover previous trip:
 - Turn Breaker “OFF”
 - Hold Down TEST Button
 - Turn Breaker “ON”
 - Release TEST Button



BR (1") Transition

Legacy BR AFCI

BR (1") Longbody

- BR115CAF
- BR115CAFA

BR (1") Compact

- BRC115CAF
- BRC115CAFA



Next Generation BR

BR (1") Standard

- BRCAF115

BR (1") Diagnostic

- BRACAF115



CH (3/4") Transition

Legacy CH AFCI

CH (3/4") Pigtail

- CH115CAF
- CH115CAFA

CH (3/4") Plug-on Neutral

- CH115CAFPN

Next Generation CH

CH (3/4") Standard w/ LED

- CHCAF115

CH (3/4") Plug-on Neutral

- CHCAF115PN



EATON

Eaton's Residential Applications Team

Phone: **1.800.326.9513**

↳Option 1: Technical Support

↳Option 1: Arc Fault Circuit Interrupter

↳Option 2: Ground Fault Circuit Interrupter

Email: resiapps@eaton.com

24/7/365 Support

Eaton's application technicians are available around the clock to support any issue.

US Based Support Staff

Eaton's support staff is located in the United States and is trained in US and Canadian electrical codes and standard wiring practices.

Real World Experience

Eaton's support staff is comprised of degreed engineers with industry experience as well as accredited electricians, each familiar with real world field issues and solutions.



EATON

Powering Business Worldwide