

## SmartlockPro® Outlet Branch Circuit AFCI Devices



# Advanced technology helps protect against electrical fires resulting from arc-faults.

Whole house electrical safety is a tall order, but our expanded line of SmartlockPro Outlet Branch Circuit (OBC) Arc Fault Circuit Interrupter (AFCI) Devices provides a convenient way to help add protection from dangerous arc-faults to any room of your home.

Leviton OBC AFCI Devices are designed to identify potentially dangerous arc-faults and respond by interrupting power to help prevent an electrical fire. They may be used on any wiring system as specified in the National Electrical Code® (NEC®) and are easy to install as replacement devices or in new construction.



#### Slim Design Impact-Resistant Terminals Withstand **High-Torque** Patented Reset Lockout Back and Tamper-Side Wire Resistant (External Back Shutters Wire Clamp) Dual Function Standard Indicator Light Self-Ground Clip Meets latest UL Requirements

#### **Lockout Action**

As an additional safeguard, Leviton AFCI Devices feature a lockout function which prevents the device from being reset if:

- it is not functioning properly
- protection has been compromised
- line and load wires were reversed during installation

#### Test and Reset buttons on device face

Convenient local test and reset - no need to visit the panel.

#### Features and Benefits - AFCI Receptacle shown

## What are Arc-Faults?

An arc-fault is an unintentional arcing condition in a circuit. Arcing creates high intensity heating at the point of the arc resulting in burning particles that can exceed 10,000 degrees Fahrenheit and may over time ignite surrounding material such as wood framing or insulation. There are two types of potentially dangerous arcs – parallel arcs and series arcs. The illustrations (right) depict the dangerous current flow as it occurs in both events.

#### Parallel arc







## What Causes Arc-Faults?

Often unseen, arc-faults can occur anywhere in the home's electrical system including:



Through old or cracked wires or cords



Within walls from nails, screws or staples inadvertently driven into wires



Within electrical cords accidentally damaged by furniture resting or pressing upon them



At loose electrical connections or cords damaged by doors closing on them

The U.S. Fire Administration (USFA) National Fire Incident Reporting System reported that in 2018, an estimated 25,700 home structure fires reported to U.S. fire departments involved some type of electrical failure or malfunction as a factor contributing to ignition. These fires resulted in 255 deaths, 825 injuries and dollar losses topping one billion. In line with this, the National Fire Protection Association (NFPA) noted that arc-faults are "the principle electrical failure mode resulting in fire".



## AFCI vs. GFCI

	AFCI	GFCI
What is it?	Provides protection from electrical fires that could result from arc-faults	Protects people from shocks and electrocution
What does it do?	Detects potentially hazardous arc-faults and quickly cuts off power	Interrupts power if a ground fault is detected
Where would I use it?	Required by the NEC* in: kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry rooms or similar rooms or areas. Also required in college dormitories.	Required by the NEC in wet or damp locations such as kitchens, bathrooms, basements, laundry rooms, garages, porches and any other areas where water may be present.

\*For AFCIs, the Code applies to new construction and for branch circuit modifications, extensions or replacement receptacles.

## **OBC AFCI Devices**



#### Outlet Branch Circuit AFCI with LED Indicator

15A-125V @ Receptacle 20A-125V @ Feed-Through

20A-125V @ Receptacle 20A-125V @ Feed-Through

Provides feed-through protection and can detect parallel and series downstream arc-faults as well as upstream series arc-faults.

#### Cat. No. AFTR1 (15A) Cat. No. AFTR2 (20A)

Available in White, Ivory, Light Almond, Gray, Brown and Black.

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#### AFCI Receptacle with Bluetooth® Connectivity

15A-125V @ Receptacle 20A-125V @ Feed-Through

#### 20A-125V @ Receptacle 20A-125V @ Feed-Through

Designed to receive firmware updates to ensure the latest arc-fault protection and detection technology for improved home safety.

Cat. No. AFBL1 (15A) Cat. No. AFBL2 (20A) Available in White only.

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#### Combination AFCI/Switch 15A-125V @ Receptacle 20A-125V @ Feed-Through

The convenience of a single pole switch to control the lights combined with AFCI protection. May be used for new circuits or modifications to existing circuits where a switch is the first outlet on a branch circuit.

#### Cat. No. ASFW1

Available in White, Ivory and Light Almond.

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## Blank Face Outlet Branch Circuit AFCI with LED Indicator

#### 20A-125V @ Feed-Through

Ideal solution on circuits feeding lighting loads and/or other loads such as smoke detectors where a receptacle is not used.

#### Cat. No. AFRBF

Available in White, Ivory and Light Almond.



#### Leviton Manufacturing Co., Inc.

Tech Line: 1-800-824-3005 Mon-Fri 8am-10pm EST, Saturday 9am-7pm EST For 24/7 product support visit **www.leviton.com/support** 

#### Visit us online: www.leviton.com/AFCI

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