

## Outlet Branch Circuit AFCI Devices

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

Fire Administrations across North America report that thousands of home structure fires involved some type of electrical failure or malfunction as a factor contributing to ignition. Arc-faults were cited as “the principle electrical failure mode resulting in fire”. Arc Fault Circuit Interrupters (AFCI) were developed to help combat the problems associated with arc-faults.

- AFCIs are designed to detect a wide range of arc-faults to help reduce the likelihood of the electrical system being an ignition source of a fire.
- Often unseen, arc-faults can occur anywhere in the home’s electrical system.
- AFCIs function by cutting power to the circuit downstream of the device from which an arc-fault is detected, which could help prevent ignition and a resultant fire.

Often unseen, arc-faults can occur anywhere in the home’s electrical system. Leviton Outlet Branch Circuit (OBC) AFCI Devices are designed to identify hazardous arc-faults and to respond by interrupting power to help prevent arc-faults from leading to a fire.



#### AFCI Devices

Leviton Outlet Branch Circuit (OBC) AFCI Receptacles address the dangers associated with both types of potentially hazardous arcing – parallel and series. Leviton AFCI receptacles provide feed-through as well as upstream series on the branch which they are installed. As an added benefit, AFCI receptacles offer the convenience of localized TEST and RESET on the face of the device.



In addition to the standard AFCI receptacle, Leviton offers a selection of specialty models:



#### Tamper-Resistant AFCI with Bluetooth® Connectivity

Representing the latest in AFCI innovation, the AFCI Receptacle with Bluetooth Connectivity is designed to receive firmware updates via the Leviton Decora Digital® app so customers always have the latest arc-fault protection and detection technology for improved home safety.

Updating AFCI firmware helps ensure accurate detection between dangerous arcing faults and the normal operation of other appliances and common electrical loads that do not require power interruption. The result is improved home safety for customers, and fewer callbacks for professionals.

Additionally, users can easily send trip event information to Leviton via the app so firmware can be updated appropriately to help navigate future arc-fault occurrences.



### Blank Face AFCI

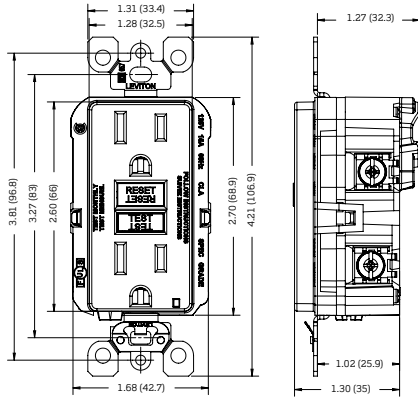
Offers the ideal solution for outlet branch circuits where AFCI protection is desired but located where a receptacle is not needed. It may be used on circuits feeding lighting loads and/or other loads such as smoke detectors where a receptacle is not used.



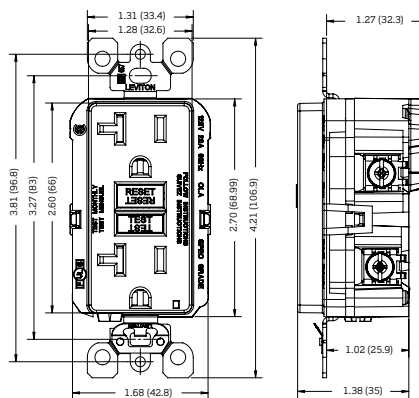
### Combination AFCI/Switch

Provides AFCI protection plus the convenience of a single pole switch to control lights. The AFCI/ Switch may be used for new circuits or modifications to existing circuits where a switch is the first outlet on a branch circuit.

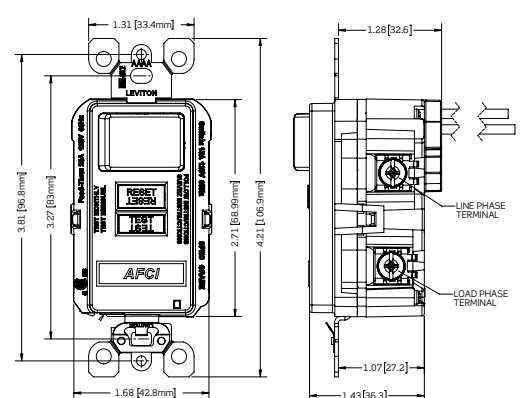
## Dimensional Drawings



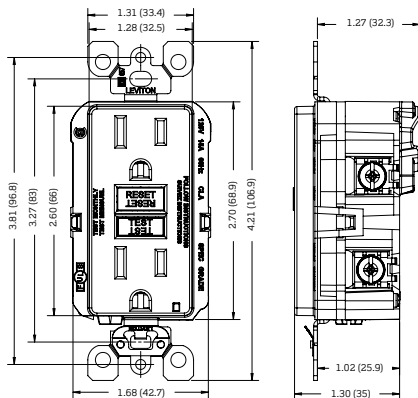
**AFTR1, AFRBF**  
(AFTR1 shown)



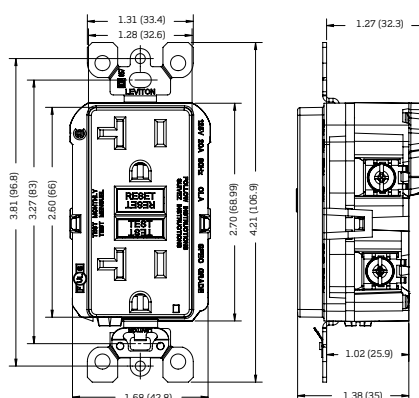
**AFTR2**



**AFSW**



**AFBL**



**AFBL2**

## Features and Benefits

### General

- Use of TEST and RESET buttons is similar to familiar traditional GFCI receptacles. This translates into greater acceptance of the technology and a user-friendly platform
- Leviton AFCIs are designed to detect a wide range of potentially hazardous arc-faults and interrupt power to help reduce the likelihood of electrical fires
- Meets or exceeds UL requirements for tripping time on both series and parallel arcs
- Device design reduces nuisance tripping
- Impact-resistant thermoplastic cover and body
- Superior resistance to electrical surges and over-voltages
- Expanded wiring options with nine back-wire holes (two for each line and load connection plus one for ground with an internal clamp)
- Silver alloy contacts
- Compatible with all Decora® devices and wallplates; available in select colors
- Packed with coordinating wallplate (except AFRBF)
- Backed by Leviton's Limited Two-Year Product Warranty

### Lockout Action

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

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

### AFCI Receptacle

- Tamper-resistant to comply with the latest requirements for tamper-resistant receptacles in residences and childcare facilities

### Tamper-Resistant AFCI with Bluetooth® Connectivity

- Features the latest arc-fault detection firmware with updates using Bluetooth connectivity.
- Access device status, including trip events using the Decora Digital app. Local connection only.
- Firmware updates designed to improve protection and responsiveness to potentially hazardous arcs for more accurate arc-fault detection
- LED Indicator light displays power and protection status at-a-glance

### Blank Face

- May be used for outlet branch circuits where AFCI protection is desired but is located where an outlet is not needed
- Ideal for installing in locations to make AFCI protection "readily accessible" per NEC requirements
- May be used on circuits feeding lighting loads as well as other loads such as smoke detectors where a receptacle is not used

### AFCI Switch

- Combination AFCI and single pole switch
- Use for new circuits or modifications to existing circuits where a switch is the first outlet in a branch circuit

## Key Specifications

- **Amperage:** Switch 15 Amp; Receptacle 15 Amp and 20 Amp
- **Voltage:** 125 Volt
- **Feed-through:** 20 Amp protection
- **NEMA:** 5-15R, 5-20R
- **Pole:** 2
- **Wire:** 3
- **Indicators:** Reverse wiring/power
- **Termination:** Back & Side
- **Strap Material:** Galvanized Steel
- **Warranty:** 2-Year Limited





## Specification Details

AC Horsepower Ratings	Electrical Specifications	Environmental Specifications	Material Specifications	Mechanical Specifications	Standards and Certifications
<b>At Rated Voltage:</b> 1 HP	<b>Dielectric Voltage:</b> Withstands 1250VAC per UL 1699A <b>Temperature Rise at terminals:</b> <b>AFTR1/AFTR2:</b> Max 30°C after 250 cycles OL at 200 percent rated current <b>AFRBF/AFSW1:</b> Max 35° C	<b>Flammability:</b> Rated V-2 per UL94 <b>Operating Temperature:</b> -35°C to +66°C	<b>Face Material:</b> Thermoplastic <b>Body Material:</b> Polycarbonate <b>Line Contacts:</b> Brass Double-Wipe .031 Thick* <b>Terminal Screws:</b> Plated Steel <b>Grounding:</b> Self-Ground Clip <b>Grounding Screw:</b> Plated Steel <b>Yoke:</b> Zinc-Plated Steel <b>Clamps:</b> Brass	<b>Terminal ID:</b> Brass-Hot, Green-Ground, Silver-Neutral <b>Terminal:</b> 14-10 AWG <b>Product ID:</b> Ratings are permanently marked on device <b>Wiring:</b> Use with copper or copper-clad wire. No aluminum wiring	<b>NEMA*:</b> WD-6 <b>ANSI*:</b> C-73 <b>UL498*</b> <b>NOM:</b> 003 <b>UL1699A:</b> File E342815 <b>UL Fed Spec WC-596*</b> <b>CSA Standard C22.2 No 42</b> <b>CSA Technical Information Letter No. M-02A</b>

\*Only AFTR1 and AFTR2

## Ordering Information

### SmartlockPro Outlet Branch Circuit AFCI Devices

Description	Rating	Cat. No.	Color
AFCI Receptacle with Bluetooth Connectivity	15A-125V @ Receptacle, 20A-125V Feed-Through,  NEMA 5-15R 	AFBL1-W	White
AFCI Receptacle with Bluetooth Connectivity	20A-125V @ Receptacle, 20A-125V Feed-Through,  NEMA 5-20R 	AFBL2-W	White
Tamper-Resistant Outlet Branch Circuit AFCI Receptacle with LED Indicator	15A-125V @ Receptacle, 20A-125V Feed-Through  NEMA 5-15R 	AFTR1-W AFTR1-I AFTR1-T AFTR1-GY AFTR1-E AFTR1	White Ivory Light Almond Gray Black Brown
Tamper-Resistant Outlet Branch Circuit AFCI Receptacle with LED Indicator	20A-125V @ Receptacle, 20A-125V Feed-Through  NEMA 5-20R 	AFTR2-W AFTR2-I AFTR2-T AFTR2-GY AFTR2-E AFTR2	White Ivory Light Almond Gray Black Brown
Outlet Branch Circuit Combination AFCI/Switch with LED Indicator	15A-120V Switch	AFSW1-W AFSW1-I AFSW1-T	White Ivory Light Almond
Blank Face Outlet Branch Circuit AFCI Receptacle with LED Indicator	20A-125V Feed-Through	AFRBF-W AFRBF-I AFRBF-T	White Ivory Light Almond



Decora Digital

Available for download at



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For 24/7 product support visit [www.leviton.com/support](http://www.leviton.com/support)

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