

OBC Arc Fault Circuit Interrupter (AFCI) Receptacles

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Description

2-Pole, 3-Wire Grounding
15A, 125V/AC
20A, 125V/AC



5-15R



5-20R



TRAFCI15

Design features

- Protects against arc faults in wiring resulting from damaged insulation and other causes that can lead to electrical fires
- Outlet Branch Circuit (OBC) AFCI receptacles protect from series and parallel arcs downstream
- Outlet Branch Circuit (OBC) AFCI receptacles also provide protection from upstream series arcs (no AFCI receptacle from any manufacturer can protect from upstream parallel arcs)
- Tamper resistant products comply with 2017 and 2020 NEC® Article 406.12 for all dwelling units
- Black tamper resistant shutters create seamless look
- Meets and exceeds Short Circuit Testing and Underwriters Laboratories UL 1699A and UL 498 Safety standards
- Ground termination with backwire clamp provides secure wiring and reduces installation time
- Line side terminals are backed out and staked for fast installation
- When downstream receptacles are wired from load side, a 20 amp feed-through rating offers full protection
- Tri-combo head terminal and mounting screws

Table 1. Tamper resistant OBC AFCI receptacle, Back & Side Wire

Catalog No.	Description	Amps	Volts	Color Suffix
<input type="checkbox"/> TRAFCI15__	Tamper Resistant OBC AFCI Receptacle	15	125	A, B, BK, GY, LA, V, W
<input type="checkbox"/> TRAFCI20__	Tamper Resistant OBC AFCI Receptacle	20	125	A, B, BK, GY, LA, V, W

Compliances, specifications and availability are subject to change without notice.



Powering Business Worldwide

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Applications

Eaton's Wiring Devices Outlet Branch Circuit (OBC) AFCI receptacles provide protection against unseen arc faults that can result in electrical fires. With a 20A feed-through rating, arc fault protection extends to all down-stream devices and electrical cords when installed properly. Tamper Resistant shutters provide compliance with 2017 and 2020 NEC Article 406.12 that states that all receptacles installed in dwelling units must be tamper resistant. "TR" designation provides visual identification. Terminal screws are backed out and ready to wire. Durable impact-resistant thermoplastic face and back body are virtually unbreakable.

Table 2. Specifications

Catalog No.	TRAFCI15 & TRAFCI20 Series
Device Type	Outlet Branch Circuit Arc Fault Circuit Interrupter
Wiring Type	Back & side wire
Testing & Code Compliance	cULus Listed to UL1699A and UL498, File no. E341748 Meets all UL 1699A (AFCI) and UL498 (Receptacles) requirements and cULus to CEC part II and CSA C22.2 No. 0 and C22.2, No.42
Warranty	2-Year, Limited
Environmental Specifications	Flammability: Meets UL94 requirements; V2 rated Temperature Rating: -35°C to 66°C (-31°F to 150.8°F) Operating Areas: Indoor use Relative Humidity: 98% RH; non-condensing
Electrical Specifications	Dielectric Voltage: Withstands 2000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 100 cycles of overload @ 150% of rated current (DC) Trip Time: >110ms @ Series Arcs above 30A Frequency: 60 Hz; Voltage: 125V; Amperage: 15A/20A 20A Feed Through Short Circuit Testing: Meets and exceeds 10 kA Max. Interrupt Capacity: 20A
Mechanical Specifications	Terminal Accommodation: #14 - #10 AWG Voltage Ratings: Permanently marked on device

Table 3. Materials

Catalog No.	TRAFCI15 & TRAFCI20 Series
Top Housing	Thermoplastic, polycarbonate
Bottom Housing	PVC
Strap	Steel
Line Contacts	Brass
Ground Contact	Brass
Terminal Screws	#8-32 steel, brass plated; neutral screw nickel plated
Ground Screw	#8-32 steel, zinc plated, green

Table 4. Color Ordering Information

For ordering devices, include Cat. No. followed by the color code: A (Almond), B (Brown), BK (Black), GY (Gray) LA (Light Almond), V (Ivory), W (White)

A	B	BK	GY	LA	V	W
Almond	Brown	Black	Gray	Lt. Almond	Ivory	White

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Table 5. AFCI status indicator

Test indicator Amber LED	Rest button status	Diagnosis	Action
OFF	In	"Device is functioning properly OR branch circuit may have no power"	Manually press the TEST button to trip the device. Amber light should come ON <ul style="list-style-type: none"> • If Amber light does not come ON, check if there is power to the branch • If Amber light does come ON, manually press the RESET button to restore power the the device • If AFCI receptacle does NOT reset, replace AFCI receptacle • If AFCI receptacle receptacle does reset, device is functioning properly
ON	Out	Device is in tripped state (either from manually pressing TEST button or from AFCI trip)	Manually press the RESET button to restore power to the device <ul style="list-style-type: none"> • If AFCI receptacle does not reset, replace the AFCI receptacle

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Product Dimensions

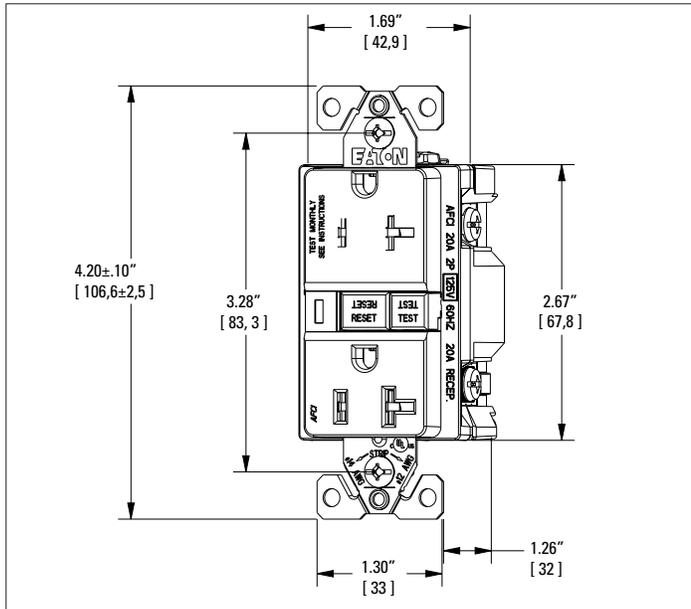


Figure 1. TRAFCI20

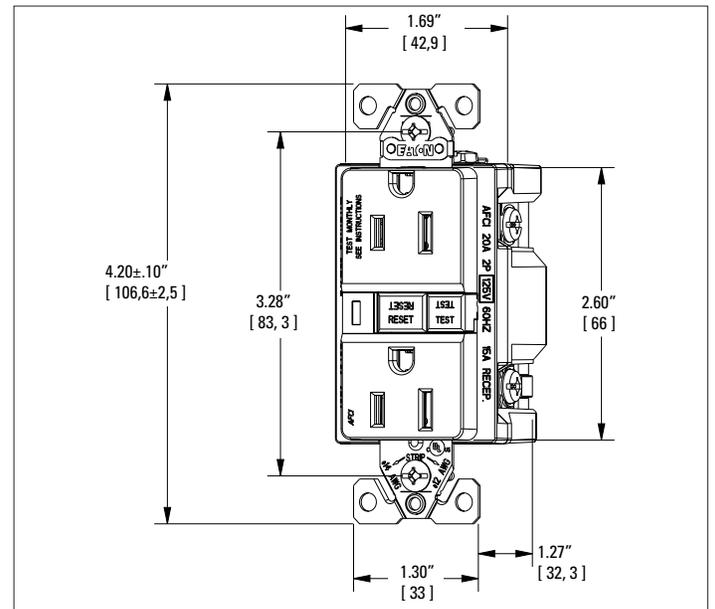


Figure 2. TRAFCI15

Wiring Diagrams

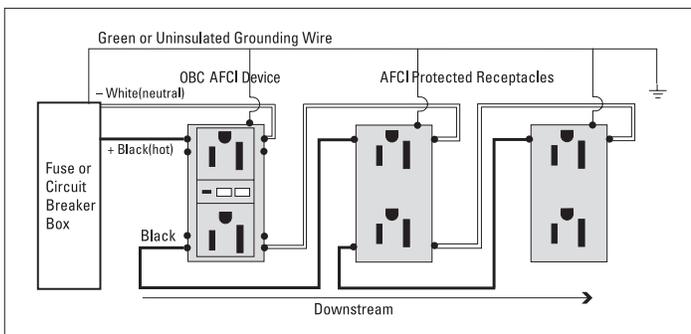


Figure 3. OBC AFCI: Feed-Through Installation with Protection Provided Downstream

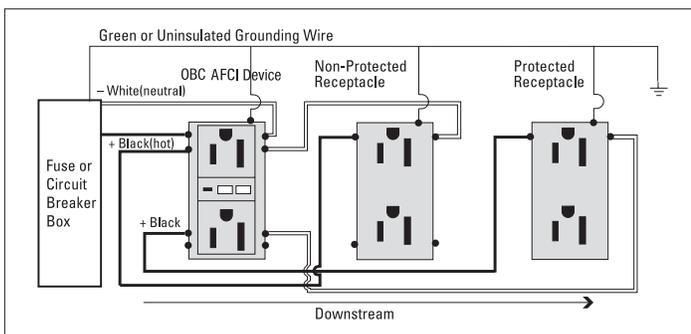


Figure 4. OBC AFCI: Feed-Through Installation with Both Protected and Non-Protected Receptacles Downstream

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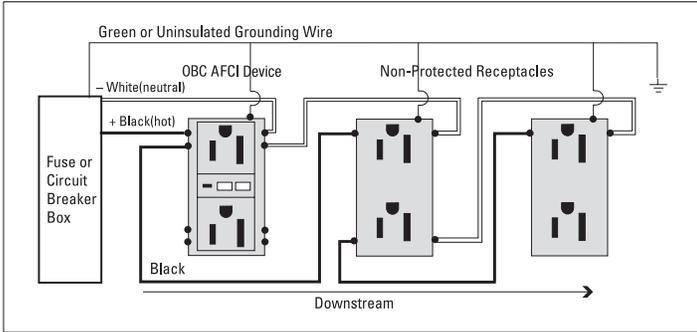


Figure 5. OBC AFCI: Feed-Through Installation with Non-Protected Receptacles Downstream

Certifications & Compliances

Catalog No.	cULus
TRAFCI15	•
TRAFCI20	•

KEY: cULus cULus

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