

OBC AF/GF duplex receptacle

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

Description

2-pole, 3-wire grounding
15A, 125V/AC
20A, 125V/AC



5-15P



5-20P



TRAFGF15W



TRAFGF20LA

Design features

- Provides both arc fault protection per UL1699A and ground fault protection per UL943 in one convenient device
- Protects from both series and parallel arcs downstream from the Outlet Branch Circuit (OBC) AF/GF receptacle
- OBC AF/GF receptacles also protect from upstream series arcs
- Trip indicators make it easy to diagnose arc and ground faults
- Device self-tests periodically to ensure proper function of both the ground fault and arc fault protection elements
- Meets and exceeds 10ka short circuit testing and Underwriters Laboratories (UL) UL943 safety standards
- Ground termination with backwire clamp provides secure wiring and reduces installation time
- Automatic grounding system eliminates the need for bonding jumper in grounded metal enclosure; provides redundant measure of ground continuity when jumper is used
- Tapered backwire openings handle multiple wire sizes and types for applications up to #10 AWG solid or standard wire
- When downstream receptacles are wired from load side, a 20A feed-through rating offers full protection
- Lock-out functionality prevents miswired line-load connections and GFCI/AFCI circuitry damage
- Visual indicator light provides quick visual reference of a tripped or "end of life" condition
- Tamper resistant (TR) shutters comply with 2014 NEC Article 406.12
- Terminal screws backed out and ready to wire
- Matching standard size thermoplastic wallplate included

Table 1. Specification grade AF/GF duplex receptacles

Catalog no.	Description	Rating		NEMA	Color suffix
		A	V/AC		
☐ TRAFGF15___	Duplex self test AF/GF with standard-size wallplate, back & side wire	15	125	5-15R	A, B, BK, GY, LA, V, W
☐ TRAFGF20___	Duplex self test AF/GF with standard-size wallplate, back & side wire	20	125	5-20R	A, B, BK, GY, LA, V, W

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Applications

AF/GF receptacles are designed with the safety of the user in mind. Eaton's AF/GF receptacles protect against both unexpected paths to ground and unseen arc faults that can result in electrical fires. The NEC requires GFCI or AFCI protection on certain circuits in residential, commercial, and industrial – in some cases both AFCI and GFCI protection are required on the same circuit. These receptacles are UL Listed and fully compliant with all of the latest UL943 Class A GFCI and UL1699A requirements. Eaton's AF/GF receptacles include tamper resistant shutters to provide compliance with the 2014 NEC Article 406.12 that states that all receptacles installed in dwelling units must be tamper resistant. Additionally, these AF/GF receptacles incorporate lock-out functionality to protect against mis-wired line-load connections and damage the AFCI/GFCI circuitry.

Table 2. Specifications

Catalog no.	TRAFGF15, TRAFGF20
Device type	OBC AFCI/GFCI duplex receptacle
Wiring type	Back & side wire
Testing & code compliance	- cULus Listed to UL 498 and UL 943, file no. E482200 - Meets all UL 943 (GFCI), UL 498 (receptacles), UL1699A and applicable CSA requirements - NOM certified
Environmental specifications	Flammability: Meets UL 94 requirements; V2 rated Temperature rating: -35°C to 66°C (-31°F to 150.8°F)
Electrical specifications	Dielectric voltage: Withstands 2000V per UL 498 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: 0.025 seconds (Class A) Frequency: 60 Hz; Voltage: 125V; Amperage: 15A/20A 20A feed-through Short circuit testing: Meets and exceeds 10 kA Maximum interrupting capacity: 20 Amps
Mechanical specifications	Terminal accommodation: #14 - 10 AWG Voltage ratings: Permanently marked on device

Table 3. Materials

Catalog no.	TRAFGF15, TRAFGF20
Top housing	Thermoplastic, polypropylene
Bottom housing	Thermoplastic, PVC
Strap	0.047" thick steel, zinc-plated
Line contacts	0.030" thick brass
Ground contact	Brass
Terminal & ground screws	#8-32 steel, brass-plated; neutral screw nickel-plated, ground screw green
Terminal clamps	0.070" thick steel

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

Table 5. AF/GF status indicator

Test indicator Red LED	Test indicator Amber LED	Reset button status	Diagnosis	Action
OFF	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 - 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 AF/GF receptacle does NOT reset, replace AF/GF receptacle - If AF/GF receptacle does reset, device is functioning properly
OFF	ON	Out	Device is in tripped state (either from manually pressing TEST button or from GFCI trip)	Manually press the RESET button to restore power to the device If AF/GF receptacle does not reset, replace the AF/GF receptacle
OFF	2 Blinks	Out	GENERAL SERIES ARC	Manually press the RESET button to restore power to the device If AF/GF receptacle continues to trip, contact an electrician to locate and repair the low current arc fault
OFF	3 Blinks	Out	PARALLEL ARC	Manually press the RESET button to restore power to the device If AF/GF receptacle continues to trip, contact an electrician to locate and repair the parallel arc fault
OFF	4 Blinks	Out	OVERVOLTAGE	Manually press the RESET button to restore power to the device If AF/GF receptacle continues to trip, contact an electrician to locate and repair the overcurrent condition
OFF	5 Blinks	Out	AFCI self-test failure	Manually press the RESET button to restore power to the device If it does not reset and/or the blinking continues, replace the AF/GF receptacle
Blinking	ON or OFF	In or Out	GFCI self-test failure	Manually press the RESET button to restore power to the device If it does not reset and/or the blinking continues, replace the AF/GF receptacle

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Product dimensions

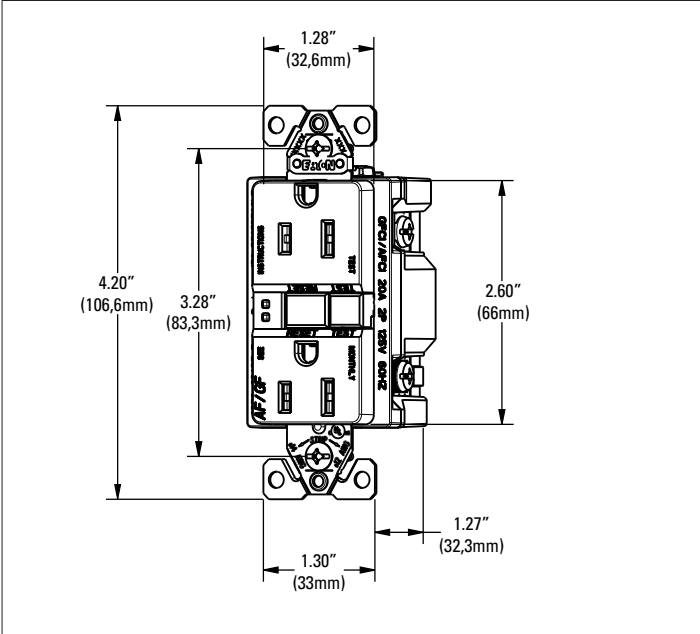


Figure 1. OBC TRAFGF 15A Line art with dimensions

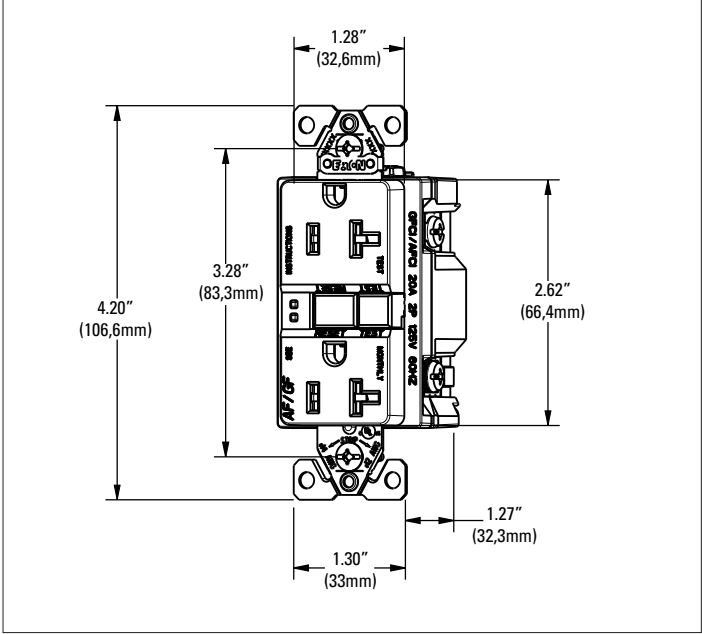


Figure 2. OBC TRAFGF 20A Line art with dimensions

Certifications & compliances

Catalog no.	cULus	NOM 426
TRAFGF15	•	•
TRAFGA20	•	•

KEY: cULus cULus NOM 426 NOM

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Blinking	ON or OFF	In or Out	GFCI self-test failure	Manually press the RESET button to restore power to the device If it does not reset and/or the blinking continues, replace the AF/GF receptacle

Project Name:	Prepared By:
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Catalog Number:	Type:

Product dimensions

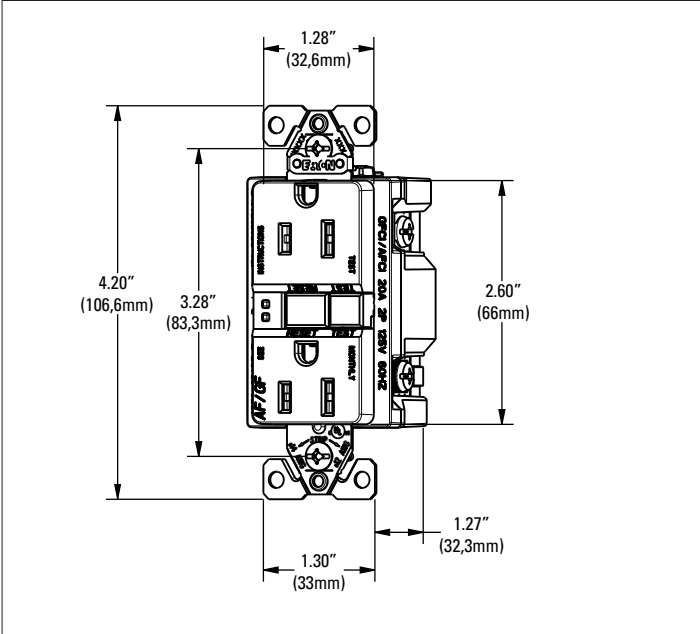


Figure 1. OBC TRAFGF 15A Line art with dimensions

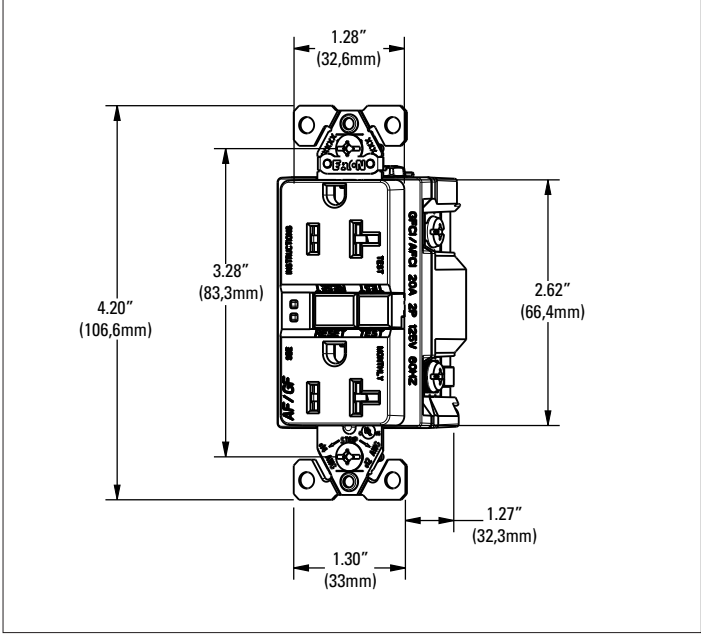


Figure 2. OBC TRAFGF 20A Line art with dimensions

Certifications & compliances

Catalog no.	cULus	NOM 426
TRAFGF15	•	•
TRAFGA20	•	•

KEY: cULus cULus NOM 426 NOM

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