

Circuit Breakers

• Revised •
10/26/15

Arc-Fault and Ground-Fault Breakers

Selection/Wiring Diagrams

LOAD CENTERS &
CIRCUIT BREAKERS
1

Arc-Fault Circuit Interrupters (AFCI)

AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected.

Combination Type AFCI

Detects all three possible types of arc faults: line-to-ground, line-to-neutral, and series.

Breaker Type	Ampere Rating	10,000 A IR Catalog No.①	22,000 A IR Catalog No.①	65,000 A IR Catalog No.①
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15 20	QA115AFC② QA120AFC②	QA115AFCH QA120AFCH	QA115AFCHH■ QA120AFCHH■
QAF2/QAFH2 2-Pole 120/240V AC	15 20	Q215AFC Q220AFC	Q215AFCH■ Q220AFCH■	— —

Branch-Feeder AFCI

Detects line-to-ground and line-to neutral arcs.

Breaker Type	Ampere Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15 20	QA115AF QA120AF	QA115AFH■ QA120AFH■	QA115AFHH■ QA120AFHH■

NEW Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and GFCI, protecting against both Arc Faults and (5mA) Ground Faults. The device includes the Self Test and Lockout feature, making it the first in class in electrical safety for homeowners.

Breaker Type	Ampere Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QFGA2/QFGAH2/HQFGA2 1-Pole 120V AC	15 20	Q115DF② Q120DF②	Q115DFH■ Q120DFH	Q115DFHH■ Q120DFHH■

Ground-Fault Circuit Interrupters (GFCI)

Provides Class A (5mA) ground fault protection. Intended for personnel protection. Includes Self Test as an added safety feature.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QPF2/QPHF2/HQPF2 1-Pole 120V AC Plug-in	15 20 30	QF115A②③ QF120A②③ QF130A①	QF115AH■① QF120AH■① QF130AH■①	QF115AHH■① QF120AHH■① QF130AHH■①
QPF/QPHF 2-Pole 120/240V AC Plug-in	15 20 30 40 50 60	QF215A QF220A QF230A QF240A QF250A QF260A	QF215AH■ QF220AH■ QF230AH■ QF240AH■ QF250AH■ QF260AH■	— — — — — —

Ground Fault Equipment Protection (30mA)

Provides protection of equipment from damaging line-to-ground faults currents. De-energizes the circuit for all ungrounded conductors of the circuit.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QE/QEH 1-Pole 120V AC Plug-in	15 20 30	QE115① QE120① QE130①	QE115H① QE120H① QE130H①	— — —
QE/QEH 2-Pole 120/240V AC Plug-in	15 20 30 40 50 60	QE215① QE220① QE230① QE240① QE250① QE260①	QE215H① QE220H① QE230H① QE240H① QE250H① QE260H①	— — — — — —

QAF2/QPF/QE/QPF2 Accessories

Description	Catalog Number①
Padlocking Device 1-Pole	ECPLD1
Padlocking Device 2-Pole	ECPLD2
Handle Block	ECBX231M

■ Built to order. Allow 8 -10 weeks for delivery.

① UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

② Add WG to the part number for the WireGuide version, see page 1-4 for full selection.



1-Pole Combination Type AFCI



2-Pole Combination Type AFCI



1-Pole Branch Feeder AFCI



1-Pole Dual Function AFCI/GFCI



1-Pole GFCI



2-Pole GFCI

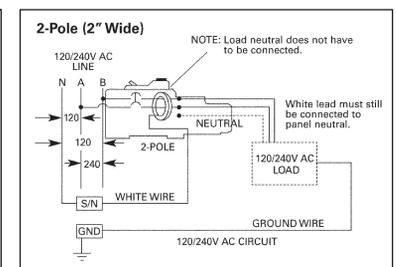
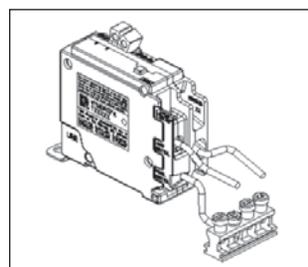


1-Pole Equipment Protection



2-Pole Equipment Protection

Wiring Diagrams



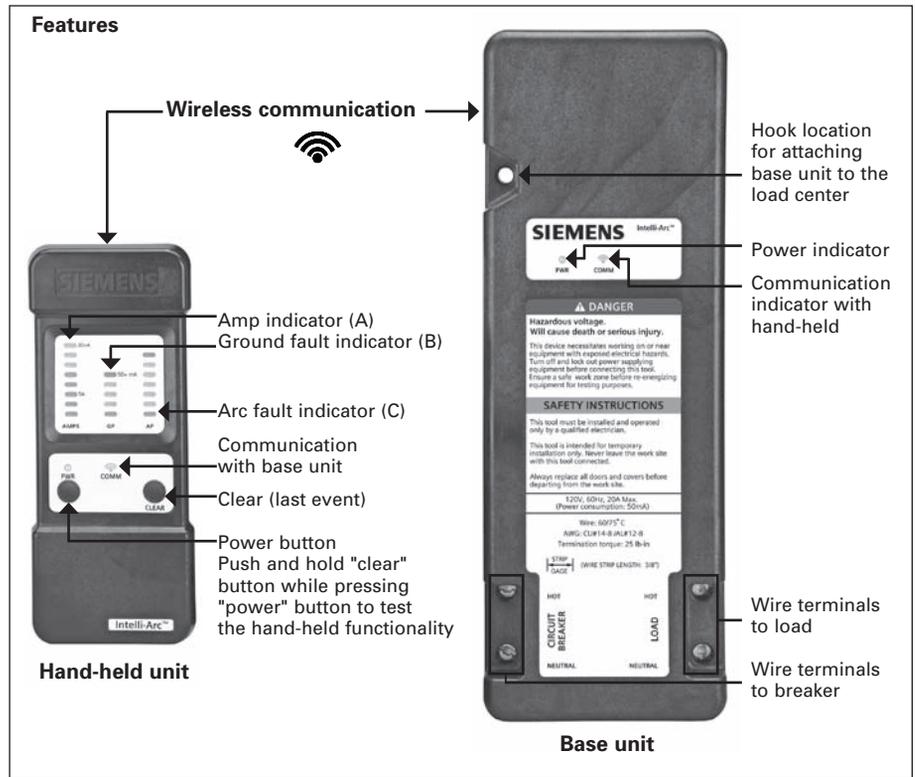
Circuit Breakers

Intelli-Arc Diagnostic Tool

Intelli-Arc Diagnostic Tool, Part Number: IDT5000

The Siemens Intelli-Arc Diagnostic Tool helps to accurately diagnose the circuit in which a fault has occurred. When used in conjunction with good troubleshooting techniques, this tool allows the electrical contractor to determine and locate the root cause or source of the fault. The Intelli-Arc Diagnostic Tool presents information as to the type and magnitude of fault. Since the fault may not cause an AFCI to trip for various reasons, i.e. duration too short, current level too low, the tool provides an indication showing how close an event is to causing an AFCI to trip.

The goal of the diagnostic tool is to speed the troubleshooting process for the electrical contractor. The device drastically improves the accuracy of the troubleshooting process. This, in turn, will significantly reduce the number of visits to the problem site. Every intent of this device is directed as saving the electrical contractor time for each branch circuit that must be evaluated. The Intelli-Arc Diagnostic Tool can be used with any circuit breaker regardless of brand.



Two state-of-the-art technologies combined in one device! Dual Function Circuit Breakers: QFGA2/QFGAH2/HQFGA2

Introducing the Dual Function Circuit Breaker that provides Arc Fault and Ground Fault protection in one device. The 2014 National Electric Code requires Arc Fault protection on Kitchen and Laundry circuits where Ground fault protection is currently a requirement. One solution to meet this code is to pair an AFCI circuit breaker with a GFCI receptacle. The Dual function breaker will replace the Arc fault breaker and the Ground Fault receptacle. Additionally, the breaker will help eliminate the use of two separate devices and improve cost savings.

Features

- Plug-in or bolt-on branch circuit breakers for Siemens single phase load centers
- Self Test and Lockout feature as required by UL 1699 effective June 2015
- Saving time – ease of installation – only One product to install vs. Two
- Saving money – Two safety devices combined into One.
- LED trip indicator – a Siemens exclusive!
- Available with interrupting rating of 10kA, 22kA or 65kA
- UL Listed
- Torque rating: 25 lb. in.
- Padlocking device available, use catalog number ECPLD1
- Both lugs at the same angle - for easier wiring

