### **Arc-Fault and Ground-Fault Breakers**

### 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	Ampere	10,000 A IR	22,000 A IR	65,000 A IR
Type	Rating	Catalog No. <sup>①</sup>	Catalog No. <sup>①</sup>	Catalog No. <sup>①</sup>
QAF2/QAFH2/HQAF2	15	QA115AFC <sup>2</sup>	QA115AFCH	QA115AFCHH■
1-Pole 120V AC	20	QA120AFC <sup>2</sup>	QA120AFCH	QA120AFCHH■
QAF2/QAFH2	15	Q215AFC	Q215AFCH■	_
2-Pole 120/240V AC	20	Q220AFC	Q220AFCH■	

#### Branch-Feeder AFCI

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

QAF2/QAFH2/HQAF2	15	QA115AF	QA115AFH■	QA115AFHH■
1-Pole 120V AC	20	QA120AF	QA120AFH■	QA120AFHH■

### 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.

QFGA2/QFGAH2/	15		Q115DFH■	Q115DFHH■
HQFGA2	20		Q120DFH	Q120DFHH■
1-Pole 120V AC		G.205.	Q.205	G.20511111 <b>2</b>

### 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.
ODE2/ODLIE2/HODE2	15	QF115A <sup>©</sup> 2	QF115AH■ <sup>①</sup>	QF115AHH■ <sup>①</sup>
QPF2/QPHF2/HQPF2	20	QF120A <sup>©</sup> 2	QF120AH■ <sup>①</sup>	QF120AHH■ <sup>①</sup>
1-Pole 120V AC Plug-in	30	QF130A <sup>①</sup>	QF130AH■ <sup>①</sup>	QF130AHH■ <sup>①</sup>
	15	QF215A	QF215AH■	_
	20	QF220A	QF220AH■	_
QPF/QPHF 2-Pole 120/240V AC Plug-in	30	QF230A	QF230AH■	_
	40	QF240A	QF240AH■	-
	50	QF250A	QF250AH■	-
	60	QF260A	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.

QE/QEH 1-Pole 120V AC Plug-in	15 20 30	QE115 <sup>①</sup> QE120 <sup>①</sup> QE130 <sup>①</sup>	QE115H <sup>①</sup> QE120H <sup>①</sup> QE130H <sup>①</sup>	_ _ _
QE/QEH 2-Pole 120/240V AC Plug-in	15 20 30 40 50	QE215© QE220© QE230© QE240© QE250© QE260©	QE215H <sup>©</sup> QE220H <sup>©</sup> QE230H <sup>©</sup> QE240H <sup>©</sup> QE250H <sup>©</sup> QE260H <sup>©</sup>	   

### **Selection/Wiring Diagrams**











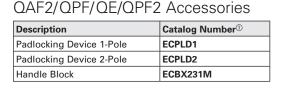






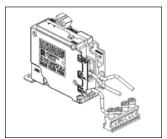


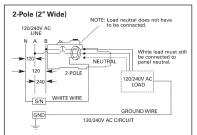
### Wiring Diagrams





© UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting. ® Add WG to the part number for the WireGuide version, see page 1-4 for full selection.





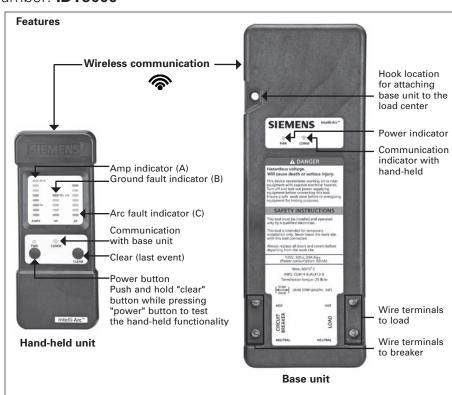
## **Circuit Breakers**

### **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

