

Circuit Breakers

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 fault: line-to-ground, line-to-neutral, and series.

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15	QA115AFC [Ⓢ]	QA115AFCH [■] [Ⓢ]	QA115AFCHH
	20	QA120AFC [Ⓢ]	QA120AFCH [■] [Ⓢ]	QA120AFCHH
QAF2/QAFH2 2-Pole 120/240V AC	15	Q215AFC [Ⓢ]	Q215AFCH [■] [Ⓢ]	—
	20	Q220AFC [Ⓢ]	Q220AFCH [■] [Ⓢ]	—

Branch-Feeder AFCI

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

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15	QA115AF [Ⓢ]	QA115AFH [■] [Ⓢ]	QA115AFHH
	20	QA120AF [Ⓢ]	QA120AFH [■] [Ⓢ]	QA120AFHH

NEW Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and GFCI, protecting against both Arc Faults and 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 Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QFGA2/QFGAH2/HQFGA2 1-Pole 120V AC	15	Q115DF	Q115DFH	Q115DFHH
	20	Q120DF	Q120DFH	Q120DFHH

Ground-Fault Circuit Interrupters (GFCI)

Provides Class A (5mA) ground fault protection. Intended for personnel protection. 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.
QPF/QPHF 1-Pole 120V AC Plug-in	15	QF115 [Ⓢ]	QF115H [Ⓢ]
	20	QF120 [Ⓢ]	QF120H [■] [Ⓢ]
	25	QF125 [■]	—
	30	QF130	QF130H
QPF/QPHF 2-Pole 120/240V AC Plug-in	15	QF215	QF215H
	20	QF220	QF220H
	30	QF230	QF230H
	40	QF240	QF240H
	50	QF250	QF250H
	60	QF260	QF260H

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.

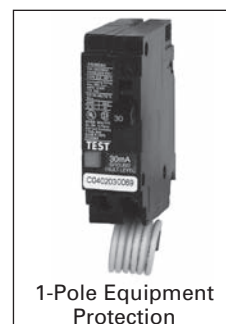
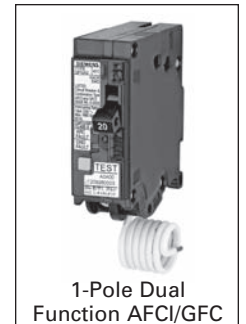
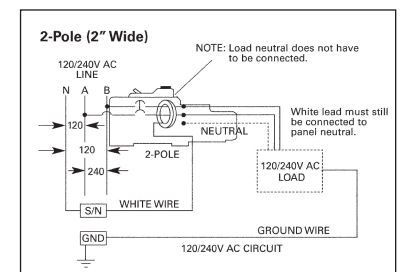
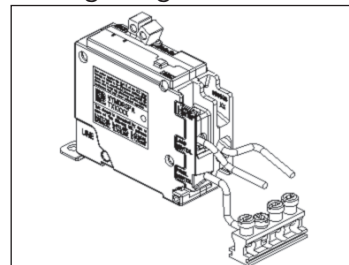
Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.
QE/QEH 1-Pole 120V AC Plug-in	15	QE115 [Ⓢ]	QE115H [Ⓢ]
	20	QE120 [Ⓢ]	QE120H [Ⓢ]
	30	QE130	QE130H
QE/QEH 2-Pole 120/240V AC Plug-in	15	QE215	QE215H
	20	QE220	QE220H
	30	QE230	QE230H
	40	QE240	QE240H
	50	QE250	QE250H
	60	QE260 [■]	QE260H [■]

QAF2/QPF/QE Accessories

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

■ Built to order. Allow 2-3 weeks for delivery.
Ⓢ UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

Wiring Diagrams



Circuit Breakers

Arc-Fault and Ground-Fault Breakers

Selection/Wiring Diagrams

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 fault: line-to-ground, line-to-neutral, and series.

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15	QA115AFC [Ⓢ]	QA115AFCH [■] [Ⓢ]	QA115AFCHH
	20	QA120AFC [Ⓢ]	QA120AFCH [■] [Ⓢ]	QA120AFCHH
QAF2/QAF2H 2-Pole 120/240V AC	15	Q215AFC [Ⓢ]	Q215AFCH [■] [Ⓢ]	—
	20	Q220AFC [Ⓢ]	Q220AFCH [■] [Ⓢ]	—

Branch-Feeder AFCI

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

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QAF2/QAFH2/HQAF2 1-Pole 120V AC	15	QA115AF [Ⓢ]	QA115AFH [■] [Ⓢ]	QA115AFHH
	20	QA120AF [Ⓢ]	QA120AFH [■] [Ⓢ]	QA120AFHH

NEW Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and GFCI, protecting against both Arc Faults and 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 Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
QFGA2/QFGAH2/HQFGA2 1-Pole 120V AC	15	QA115DF	Q115DFH	Q115DFHH
	20	QA120DF	Q120DFH	Q120DFHH

Ground-Fault Circuit Interrupters (GFCI)

Provides Class A (5mA) ground fault protection. Intended for personnel protection. 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.
QPF/QPHF 1-Pole 120V AC Plug-in	15	QF115 [Ⓢ]	QF115H [Ⓢ]
	20	QF120 [Ⓢ]	QF120H [■] [Ⓢ]
	25	QF125 [■]	—
	30	QF130	QF130H
QPF/QPHF 2-Pole 120/240V AC Plug-in	15	QF215	QF215H
	20	QF220	QF220H
	30	QF230	QF230H
	40	QF240	QF240H
	50	QF250	QF250H
	60	QF260	QF260H

Ground Fault Equipment Protection (30mA)

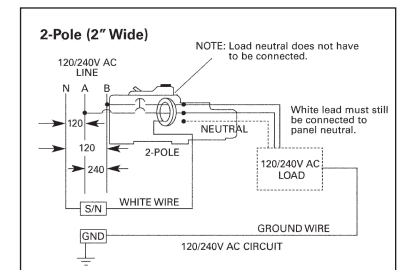
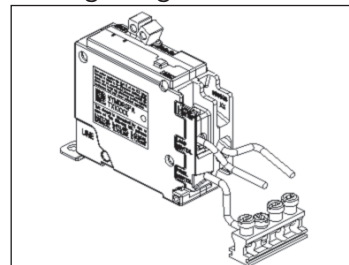
Provides protection of equipment from damaging line-to-ground faults currents. De-energizes the circuit for all ungrounded conductors of the circuit.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.
QE/QEH 1-Pole 120V AC Plug-in	15	QE115 [Ⓢ]	QE115H [Ⓢ]
	20	QE120 [Ⓢ]	QE120H [Ⓢ]
	30	QE130	QE130H
QE/QEH 2-Pole 120/240V AC Plug-in	15	QE215	QE215H
	20	QE220	QE220H
	30	QE230	QE230H
	40	QE240	QE240H
	50	QE250	QE250H
	60	QE260 [■]	QE260H [■]

QAF2/QPF/QE Accessories

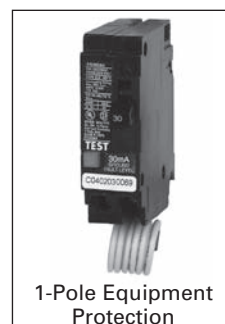
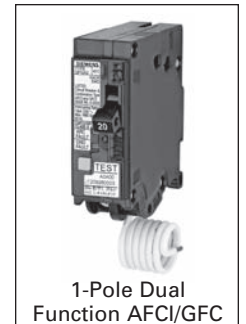
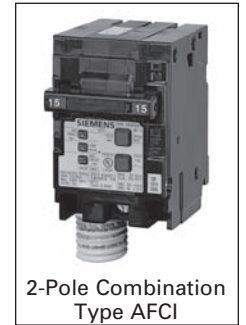
Description	Catalog Number
Padlocking Device 1-Pole	ECPLD1
Padlocking Device 2-Pole	ECPLD2
Handle Block	ECBX231M

Wiring Diagrams



■ Built to order. Allow 2-3 weeks for delivery.

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

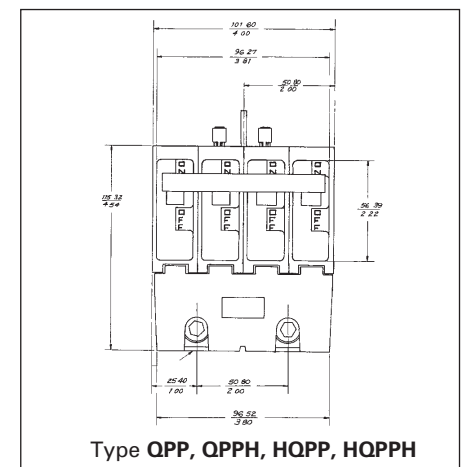
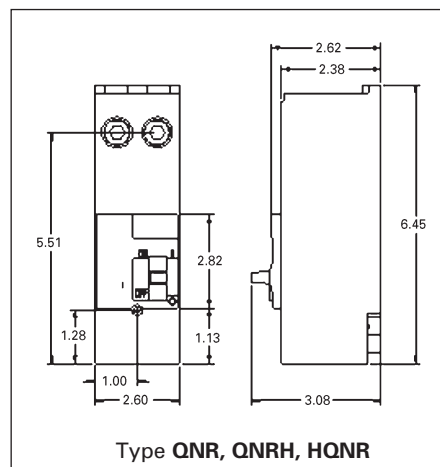
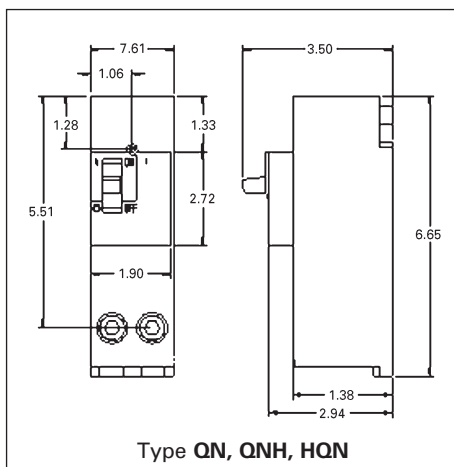
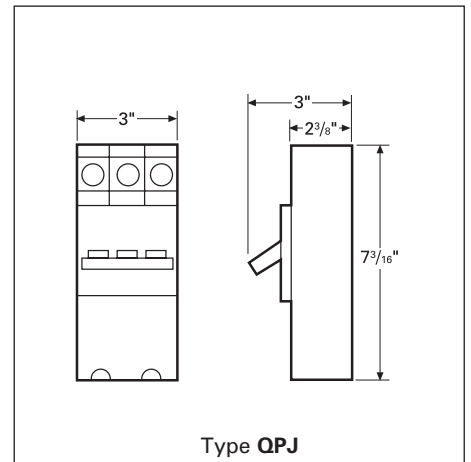
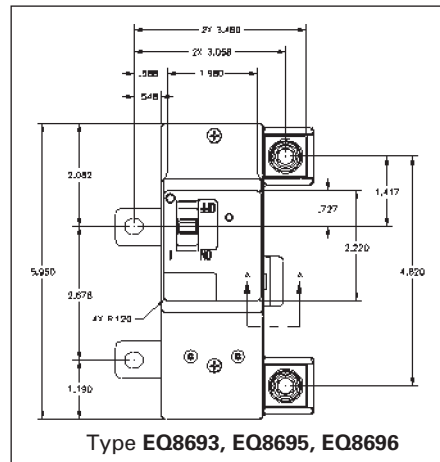
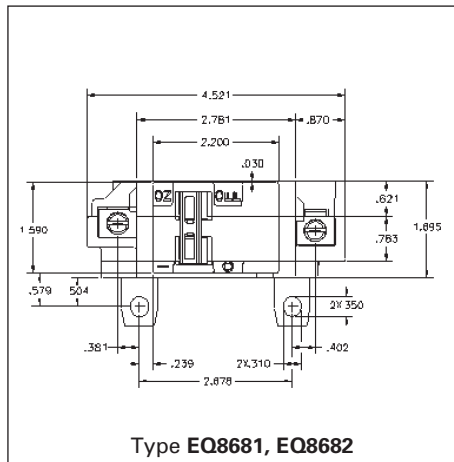
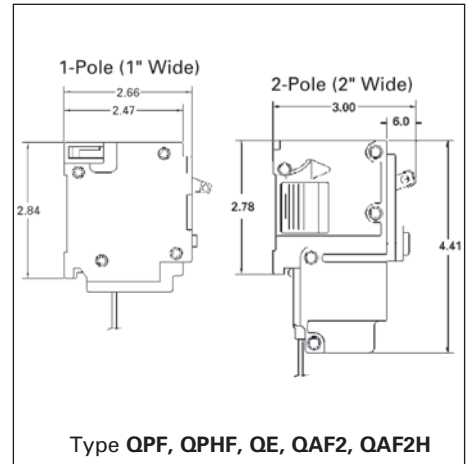
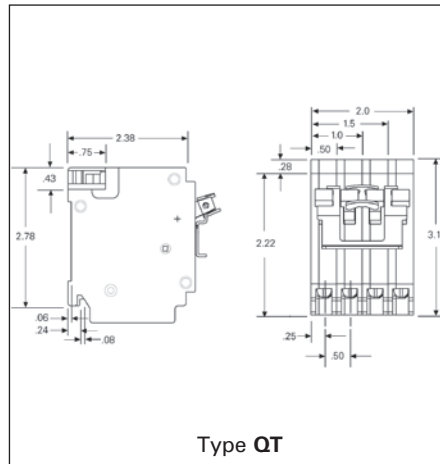
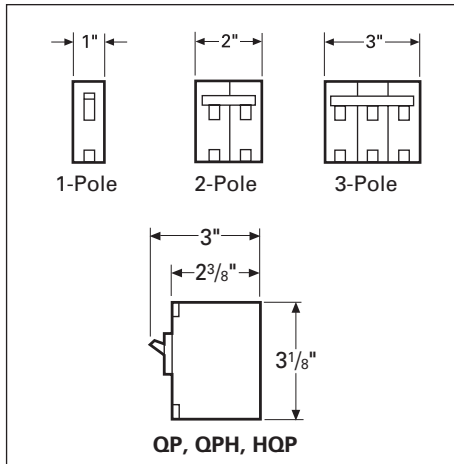


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MOLDED CASE
CIRCUIT BREAKERS

Circuit Breakers

Line Diagrams

Dimension Drawings



Ⓢ All standard circuit breakers are calibrated to 40°C maximum ambient application.

Circuit Breakers

• Revised •
06/13/14

Lug Data

Reference

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	LOAD SIDE		
QP, QPH, HQP, Plug-in	10	2	#14-#16 AWG Cu
	15-35	1	#14-#6 AWG Cu
		1	#14-#6 AWG Al
	40-50	1	#8-#6 AWG Cu
1		#8-#4 AWG Al	
55-125	1	#8-#2/0 AWG Cu	
	1	#8-#2/0 AWG Al	
QT	15-35	1	#14-#6 AWG Cu
		1	#14-#6 AWG Al
	40	1	#8 AWG CU-AL
40-50	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QPF, QPHF	15-30	1	#14-#10 AWG Cu
		1	#12-#8 AWG Al
40-60	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QAF2, QAFH2, QFGA2, QFGAH2	15-20	1	#14-#12 AWG Cu
		1	#12-#10 AWG Al
QD	15-20	2	#14-#8 AWG Cu Only
	15-20	1	#14-#12 AWG Cu
		1	#12-#10 AWG Al
	25-35	1	#10-#8 AWG Cu
1		#10-#6 AWG Al	
40-60	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QN, QNH, HQN	150-200	1	#1-300kcmil Cu-Al
QS, QSH, QSHH, HQS, HQSH	100-225	1	#3-300kcmil Cu-Al
EQ8681-Ultimate	100	1	#4-3/0 AWG Cu-Al
EQ8682-Ultimate	125	1	#4-3/0 AWG Cu-Al
EQ8693-Ultimate	150	1	#1-300kcmil Cu-Al
EQ8695-Ultimate	200	1	#1-300kcmil Cu-Al
EQ8696-Ultimate	225	1	#1-300kcmil Cu-Al
QPP, QPPH, HQPP, HQPPH	125	1	#1 AWG Cu
		1	#2/0 AWG Al
	150	1	#1/0 AWG Cu
		1	#3/0 AWG Al
	175	1	#2/0 AWG Cu
1		#4/0 AWG Al	
200	1	#3/0 AWG Cu	
	1	250kcmil AWG Al	
225	1	#4/0 AWG Cu	
	1	300kcmil AWG Al	
EQ9675-EQIII	100	1	#8-#2/0 AWG Cu
		1	#8-#2/0 AWG Al
EQ9677-EQIII	125	1	#8-#2/0 AWG Cu
		1	#8-#2/0 AWG Al
EQ9683-EQIII	150	1	#1/0 AWG Cu
		1	#3/0 AWG Al
EQ9684	175	1	#3/0 AWG Cu
		1	250kcmil AWG AL
EQ9685-EQIII	200	1	#3/0 AWG Cu
		1	250kcmil AWG Al
EQ9686-EQIII	225	1	#4/0 AWG Cu
		1	300kcmil AWG Al
QPJ	125-200	1	#2-300kcmil Cu-Al

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