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

| 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 | 1 | QA115AFC ① ② QA120AFC ① ② | | QA115AFCHH■ ① QA120AFCHH■ ① |
| QAF/QAFH 2-Pole 120/240V AC | 15 20 | Q215AFC ① ② Q220AFC ① ② | Q215AFCH■ ① Q220AFCH■ ① | _ |

Branch-Feeder AFCI

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

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

■ 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 feature, making it the first in class in electrical safety for homeowners.

| QFGA2/QFGAH2/ | 15 | Q115DF ①② | Q115DFH■ ① | Q115DFHH■ ① |
|--------------------------|----|------------|------------|-------------|
| HQFGA2 1-Pole 120V AC | 20 | Q120DF ① ② | Q120DFH ① | Q120DFHH■ ① |

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 | 15 | QF115A [©] 2 | QF115AH■ ^① | QF115AHH■ ^① |
| | 20 | QF120A ^{①②} | QF120AH■ ^① | QF120AHH■ ^① |
| 1-Pole 120V AC Plug-in | 30 | QF130A ^① | QF130AH■ ^① | QF130AHH■ ^① |
| QPF/QPHF 2-Pole 120/240V AC Plug-in | 15 | QF215A | QF215AH■ | _ |
| | 20 | QF220A | QF220AH■ | _ |
| | 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

| De chergizes the circuit for all angrounded conductors of the circuit. | | | | |
|--|----|-------|---------|------------|
| 05/05!! | 15 | QE115 | QE115H■ | - |
| QE/QEH | 20 | QE120 | QE120H■ | _ |
| 1-Pole 120V AC Plug-in | 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/QPF2 Accessories

| Description | Catalog Number ^① |
|--------------------------|-----------------------------|
| 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.

UL Listed

• HACR Rated



Type AFCI





1-Pole Branch Feeder AFCI



1-Pole Dual Function AFCI/GFC



2-Pole GFCI



1-Pole Equipment Protection



2-Pole Equipment Protection

Wiring Diagrams



