

# QO® Loadcentres and Circuit Breakers

## QO® Special Breakers

### Plug-On Circuit Breakers - Amperes Interrupting Rating (AIR) in Amperes RMS Symmetrical



One Pole QO-CAFI(PON)    One Pole QO-DF(PON)    One Pole QO-GFI    Two Pole QO-GFI

#### QO-GFI

QWIK-GARD® circuit breakers provide overload and short circuit protection, combined with Class A ground fault protection. Class A denotes a ground fault circuit interrupter that will trip when a fault current to ground is 6 milliamperes or more, for people protection. Do not connect to more than 250 feet of load conductor for the total one-way run to prevent nuisance tripping.

Ampere Rating Δ	One Pole 120Vac		Two Pole-Common Trip 120/240Vac	Three Pole-Common Trip 120/240Vac
	10,000 AIR	22,000 AIR	10,000 AIR	10,000 AIR
15	QO115GFI	QO115VHGF1	QO215GFI	QO315GFI
20	QO120GFI	QO120VHGF1	QO220GFI	QO320GFI
25	QO125GFI	QO125VHGF1	QO225GFI	—
30	QO130GFI	QO130VHGF1	QO230GFI	QO330GFI
40	—	—	QO240GFI	QO340GFI
50	—	—	QO250GFI	QO350GFI
60	—	—	QO260GFI❖	—

❖ Suitable only for feeding 240Vac and 208Vac 2 wire loads. Does not contain load neutral connection.

#### QO-EPD QO Circuit Breakers With 30 mA Equipment Ground Fault Protection

Ampere Rating Δ	One Pole 120Vac	Two Pole-Common Trip 120/240Vac
	10,000 AIR	10,000 AIR
15	QO115EPD	QO215EPD
20	QO120EPD	QO220EPD
25	QO125EPD	QO225EPD
30	QO130EPD	QO230EPD
40	—	QO240EPD
50	—	QO250EPD
60	—	QO260EPD

#### QO-K

Key operated QO circuit breakers are available in single pole construction and can be mounted in any single pole space which will accept a standard QO. These circuit breakers can be turned ON or OFF or to RESET with a special key (Catalogue Number **QOK10**) included with the circuit breaker.

Ampere Rating Δ	One Pole 120Vac 10,000 AIR
10	QO110K
15	QO115K
20	QO120K
30	QO130K

#### QO-HM

QO circuit breaker with high magnetics to withstand higher inrush currents than standard QO breaker.

Ampere Rating	One Pole 120Vac 10,000 AIR
15	QO115HM
20	QO120HM

Note:

QO GFI, EPD, AFI, CAFI, and DF cannot be backfed.

#### QO Combination Arc-Fault Interrupter (CAFI)

QO Combination Arc-Fault Interrupter (CAFI) provides overload and short circuit protection, plus both series and parallel type arc protection as required in 2015 NEC. Integrated with Time Saver diagnostics, QO CAFI breaker improves circuit troubleshooting at the touch of a button.

Circuit Breaker Type	Ampere Rating	1P 120 Vac 10K AIR 1 Space Required	1P 120 Vac 22K AIR 1 Space Required	2P 120/240 Vac 10K AIR 2 Space Required	2P 120/240 Vac 22K AIR 2 Space Required
QO Pigtail Neutral CAFI	15	QO115CAFI	QO115VHCAFI	QO215CAFI*	QO215VHCAFI*
	20	QO120CAFI	QO120VHCAFI	QO220CAFI*	QO220VHCAFI*
QO Plug-on Neutral CAFI	15	QO115PCAFI	QO115VHPCAFI		
	20	QO120PCAFI	QO120VHPCAFI		

\* Rated for 120/240 ~60Hz, not for 208Y/120V

#### QO Dual Function Circuit Breaker

QO Dual Function (DF) breaker provides both combination arc-fault and ground-fault (5mA classA) protection in a single compact device. Integrated with Plug-on Neutral and Time Saver Diagnostics features, QO DF breaker offers maximum circuit protection and installation flexibility.

Circuit Breaker Type	Ampere Rating	1P 120 Vac 10k AIR 1 Space Required	1P 120 Vac 22k AIR 1 Space Required
QO Dual Function Circuit Breaker with Pigtail Neutral	15	QO115DF	QO115VHDF
	20	QO120DF	QO120VHDF
QO Plug-on Neutral Dual Function Circuit Breaker	15	QO115PDF	QO115VHPDF
	20	QO120PDF	QO120VHPDF

#### QO-HID QO-HID Circuit Breakers -

##### For Use on High Intensity Discharge Lighting Systems

HID circuit breakers are for use on circuits feeding fluorescent and High Intensity Discharge (HID) lighting systems such as mercury vapour, metal halide, or high pressure sodium. These circuit breakers are physically interchangeable with QO circuit breakers.

Ampere Rating Δ	One Pole 120/240Vac 10,000 AIR	Two Pole-Common Trip 120/240Vac 10,000 AIR	Three Pole-Common Trip 240Vac 10,000 AIR
	15	QO115HID▲	QO215HID
20	QO120HID▲	QO220HID	QO320HID
25	QO125HID	QO225HID	QO325HID
30	QO130HID	QO230HID	QO330HID
40	QO140HID	QO240HID	—
50	QO150HID	QO250HID	—

## Application Information

- VISI-TRIP indication on all QO breakers.
- QO, VISI-TRIP and QWIK-GARD are registered trademarks of Square D.
- For more information consult Schneider Electric.

### Circuit Breaker Wire Sizes

Breaker Type	Ampere Rating $\Delta$	Wire Size (AWG)	
		Aluminum	Copper
QO 1 Pole	10-30	#14-8	#14-8
	10-30	—	(2) #14-10
	35-70	#8-2	#8-2
QO 2 & 3 Pole	10-30	#14-8	#14-8
	35-70	#8-2	#8-2
	80-125	#12-2/0	#12-2/0
QOT	15-20	#12-8	#14-8
QO-GFI & QO-EPD	15-30	#12-8	#14-8
	40-60	#12-4	#14-6

### Main Breakers

Main Breaker Frame Size	Amperage $\oplus$	kAIC	Catalogue Number	Lug Wire Size AWG/KCMIL Al or Cu
QOM1 $\Delta$	30	10	QOM30L	#12-2/0
	40		QOM40L	
	50		QOM50L	
	60		QOM60L	
	50	22	QOM50VHL	
	60		QOM60VHL	
	70		QOM70VHL	
	80		QOM80VHL	
	100		QOM100VHL	
	125		QOM125VHL	
QOM2 $\Delta$	100	22	QOM2100VHL	#4-250
	125		QOM2125VHL	
	150		QOM2150VHL	
	175		QOM2175VHL	
	200		QOM2200VHL	
	225		QOM2225VHL	

- $\blacktriangle$  Add suffix - 1021 for 240Vac shunt trip. Factory Installed Accessory
- $\oplus$  Do not exceed the load centre mains rating.
- $\Delta$  Main Breakers include factory installed handle padlock attachment (padlock QOM main circuit breaker in the 'off' position).

### Circuit Breaker Factory Installed Accessories

Requires Additional Pole Space. Only one accessory per breaker. QO accessory terminals for (2) #14-12 Cu. Accessories are not available for Q2, QOM1, or QOB-VH (110-150 A) circuit breakers or QO molded case switches.

Factory Installed Accessories	Available On Breaker	Description	Add Suffix To Breaker Catalogue No.
Shunt Trip	QO	120Vac 208Vac 240Vac	1021
		12Vac 24Vdc 12Vdc 24Vac	1042
Auxiliary Switch	QO,-GFI,-EPD,	"A" Contact	1200
		"B" Contact	1201
Alarm Switch	QO,-GFI,-EPD,	120Vac	2100

- $\Delta$  10-30 ampere breakers are suitable for use with 60°C or 75°C conductors, 35-60 ampere breakers are suitable for use with 75°C conductors.
- $\blacktriangle$  SWD (switching duty) rated. Suitable for switching 120Vac fluorescent lighting loads.
- $*$  Combination AFI devices provide protection against both high-energy parallel arcing (same as existing branch/feeder AFCI's) and low energy (5A) series arcing.



QO One Pole with Shunt Trip



QOK Key Operated