

Square D brand QO miniature circuit breakers are plug-on products for use in QO load centers, NQOD and NQ panelboards, NQOD and NQ OEM interiors or Speed-D™ switchboard distribution panels. Bolt-on QOB circuit breakers are for use in NQOD and NQ panelboards or interiors.▲ The Square D exclusive Qwik-Open™ mechanism, with a trip reaction within 1/60th of a second, is standard on all 1P 15 A and 20 A QO circuit breakers.

LOAD CENTERS



Table 1.1: Plug-On Circuit Breakers

Amperes Rating ■	1P—120/240 Vac		2P—120/240 Vac Common Trip		2P—240 Vac ♦ Common Trip		3P—240 Vac Common Trip	
	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price
10 k AIR								
10 A	QO110	29.10	QO210	67.00	—	—	QO310	248.00
15 A	QO115*▼	29.10	QO215*	67.00	QO215H	200.00	QO315*	248.00
20 A	QO120*▼	29.10	QO220*	67.00	QO220H	200.00	QO320*	248.00
25 A	QO125*	29.10	QO225*	67.00	QO225H	200.00	QO325*	248.00
30 A	QO130*	29.10	QO230*	67.00	QO230H	200.00	QO330*	248.00
35 A	QO135*	29.10	QO235*	67.00	—	—	QO335*	248.00
40 A	QO140*	29.10	QO240*	67.00	QO240H	200.00	QO340*	248.00
45 A	QO145*	29.10	QO245*	67.00	—	—	QO345*	248.00
50 A	QO150*	29.10	QO250*	67.00	QO250H	200.00	QO350*	248.00
60 A	QO160*	29.10	QO260*	67.00	QO260H	200.00	QO360*	248.00
70 A	QO170*	67.00	QO270*	134.00	QO270H	224.00	QO370*	315.00
80 A	—	—	QO280*	189.00	QO280H	315.00	QO380*	366.00
90 A	—	—	QO290*	189.00	QO290H	315.00	QO390*	366.00
100 A	—	—	QO2100*	189.00	QO2100H	315.00	QO3100*	366.00
110 A	—	—	QO2110*	428.00	—	—	—	—
125 A	—	—	QO2125*	428.00	—	—	—	—
150 A	—	—	QO2150*△◇	491.00	—	—	—	—
175 A	—	—	QO2175*△◇	491.00	—	—	—	—
200 A	—	—	QO2200*△◇	491.00	—	—	—	—
Molded Case Switch 60 A max.—240 Vac		—	—	—	QO200	70.00	QO300	248.00
Molded Case Switch 100 A max.—240 Vac		—	—	—	QO2000*	200.00	QO3000*	366.00
22 k AIR*								
15 A	QO115VH ▼	63.00	QO215VH □	146.00	—	—	QO315VH □	371.00
20 A	QO120VH ▼	63.00	QO220VH □	146.00	—	—	QO320VH □	371.00
25 A	QO125VH	73.00	QO225VH □	146.00	—	—	QO325VH □	371.00
30 A	QO130VH	73.00	QO230VH □	146.00	—	—	QO330VH □	371.00
40 A	QO140VH	73.00	QO240VH □	146.00	—	—	QO340VH □	371.00
50 A	QO150VH	73.00	QO250VH □	146.00	—	—	QO350VH □	371.00
60 A	QO160VH	73.00	QO260VH □	146.00	—	—	QO360VH □	371.00
70 A	QO170VH	112.00	QO270VH □	224.00	—	—	QO370VH □	477.00
80 A	—	—	QO280VH □	315.00	—	—	QO380VH □	530.00
90 A	—	—	QO290VH □	315.00	—	—	QO390VH □	530.00
100 A	—	—	QO2100VH ◇	315.00	—	—	QO3100VH □	530.00
110 A	—	—	QO2110VH ◇	1034.00	—	—	—	—
125 A	—	—	QO2125VH ◇	1034.00	—	—	—	—
150 A	—	—	QO2150VH △◇	1061.00	—	—	—	—
175 A	—	—	QO2175VH △◇	1061.00	—	—	—	—
200 A	—	—	QO2200VH △◇	1061.00	—	—	—	—
42 k AIR*								
40 A	—	—	QOH240*	317.00	—	—	—	—
45 A	—	—	QOH245*	317.00	—	—	—	—
50 A	—	—	QOH250*	317.00	—	—	—	—
60 A	—	—	QOH260*	317.00	—	—	—	—
70 A	—	—	QOH270	528.00	—	—	—	—
80 A	—	—	QOH280	651.00	—	—	—	—
90 A	—	—	QOH290	651.00	—	—	—	—
100 A	—	—	QOH2100	651.00	—	—	—	—
110 A	—	—	QOH2110*	1389.00	—	—	—	—
125 A	—	—	QOH2125	1389.00	—	—	—	—
65 k AIR*								
15 A	QH115▼	117.00	QH215	293.00	—	—	QH315*	507.00
20 A	QH120▼	117.00	QH220	293.00	—	—	QH320	507.00
25 A	QH125*	117.00	QH225*	293.00	—	—	QH325*	507.00
30 A	QH130	117.00	QH230	293.00	—	—	QH330	507.00

- ▲ See Digest Section 1 for load centers, and Section 9 for panelboards and interiors.
- 10–30 A circuit breakers are suitable for use with 60°C or 75°C conductors. 35–125 A circuit breakers are suitable for use with 75°C conductors.
- ◆ UL Listed 5 k AIR on corner grounded Delta systems.
- ★ UL Listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers.
- ▼ UL Listed as SWD (switching duty) rated. Suitable for switching 120 Vac fluorescent lighting loads.
- △ Requires four spaces (1 AWG–300 kcmil Al/Cu.) Suitable for switching 120 Vac fluorescent lighting loads to permit their application at 22 kA fault level.
- UL Listed for use ahead of QO, QO-GFI, QO-EPD, QOT, QO-AFI, and QO-PL 10 k AIR circuit breakers
- ◇ 100 A maximum branch mounted opposite.
- ☆ Order only. Contact your local Field Office.
- ▼ Includes two circuit breakers (one QO2030 and one QO3020) and handle tie QOTHT.
- Not suitable for use in 3Ø panels. Use only in 1Ø panel rated 150 A or greater.

Table 1.2: QO/QOB Ring Terminal

(20% \$ Price Adder)—Factory-installed only

Ampere Rating	Poles	Suffix
10–30 A	1, 2, 3	5237
35–60 A	1,2	5238
35–50 A	3	
70–110 A	2	5273
60–100 A	3	

Table 1.3: Wire Sizes ■

Circuit Breaker Type	Ampere Rating	Wire Size (AWG/kcmil)
QO 1P	10–30 A	14–8 Al/Cu
	10–30 A	(2) 14–10 Cu
	35–70 A	8–2 Al/Cu
QO 2P	10–30 A	14–8 Al/Cu
	10–30 A	(2) 14–10 Cu
	35–70 A	8–2 Al/Cu
	80–125 A	4–2/0 Al/Cu
QO 3P	10–30 A	14–8 Al/Cu, (2) 14–10 Cu
	35–70 A	8–2 Al/Cu
QOB-VH	80–125 A	4–2/0 Al/Cu
	110–150 A	4–300 Al/Cu
QOT	15–20 A	12–8 Al 14–8 Cu
QO-AFI, QO-GFI or QO-EPD	15–30 A	12–8 Al 14–8 Cu
	40, 50, 60 A	12–4 Al 14–6 Cu
QO-PL	10–60 A	12–2 Al 14–2 Cu

Table 1.4: QOT Tandem Circuit Breakers

Ampere Rating ■	Cat. No.*	\$ Price
1P—120/240 Vac		
15 A and 15 A	QOT1515	58.00
15 A and 20 A	QOT1520	58.00
20 A and 20 A	QOT2020	58.00
2P—120/240 Vac Common Trip		

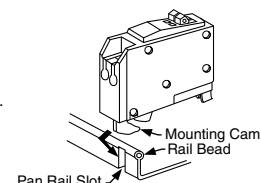
Order two QOT1515 or QOT2020 circuit breakers and handle tie QOTHT for common switching of center two poles.

Table 1.5: Replacement Tandem Circuit Breakers

For use in Old Style Non-CLASS CTL
QO Load Centers—10 k AIR

Ampere Rating ■	Cat. No.*	\$ Price
1P—120/240 Vac—1 Space Required		
15 A and 15 A	QO1515	73.00
15 A and 20 A	QO1520	73.00
20 A and 20 A	QO2020	73.00
20 A and 30 A	QO2030	73.00
30 A and 20 A	QO3020	73.00
Two 1P Individual Trip—120/240 Vac—2 Spaces Required		
15 A and 15 A	Order Two QO1515 or QO2020 circuit breakers and handle tie QOTHT	—
15 A and 20 A		
20 A and 20 A	—	—
20 A and 30 A	QO20303020▼	134.00
30 A and 20 A	—	—

QOT Tandem



Current limiting QOT tandem circuit breakers have a mounting cam as shown. Installation into a QO load center can only be made in those positions having a mounting pan rail slot. Meets Paragraph 408.15 of the NEC®. UL Listed as Class CTL

QO Arc-Fault Circuit Breaker

QO arc-fault circuit breakers provide protection for Series and Parallel Type Arcing as required by the NEC and local code adoption, and comply with UL1699.

Table 1.6: QO Arc Fault Circuit Breakers▲

Circuit Breaker Type	Ampere Rating	1P 120 Vac		1P 120 Vac	
		10 k AIR		22 k AIR	
		1 Space Required		1 Space Required	
		Cat. No.	\$ Price	Cat. No.	\$ Price
Combination Arc-fault Interrupter (Pigtail Neutral)	15	QO115CAFI	282.00	QO115VHCAFI	534.00
	20	QO120CAFI	282.00	QO120VHCAFI	534.00
Plug-On Neutral Combination Arc-fault Interrupter	15	QO115PCAFI	282.00	QO115VHPCAFI	534.00
	20	QO120PCAFI	282.00	QO120VHPCAFI	534.00

NOTE: QO Dual Function (Combination Arc Fault and Ground Fault Circuit Interrupter) breakers are on page 1-27.

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 mA 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.

Table 1.7: QO-GFI Circuit Breakers *New!*

Qwik-Gard Circuit Breakers With Ground Fault Circuit Interrupter								
Ampere Rating	1P 120 Vac		2P Common Trip 120/240 Vac		3P Common Trip 208Y/120 Vac			
	10 k AIR		10 k AIR		10 k AIR			
	1 Space Required		2 Spaces Required		3 Spaces Required			
	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price
15	QO115GFI	233.	QO115VHGFI	482.	QO215GFI	413.	QO315GFI	791.
20	QO120GFI	233.	QO120VHGFI	482.	QO220GFI	413.	QO320GFI	791.
25	QO125GFI	233.	QO125VHGFI	482.	QO225GFI	413.	—	—
30	QO130GFI	233.	QO130VHGFI	482.	QO230GFI	413.	QO330GFI	791.
40	—	—	—	—	QO240GFI	413.	QO340GFI	791.
50	—	—	—	—	QO250GFI	413.	QO350GFI	791.
60	—	—	—	—	QO260GFI★	413.	—	—

QO-EPD/EPE

QO-EPD/EPE circuit breakers provide overload and short circuit protection combined with Class B ground fault protection. They are designed to provide ground fault protection of equipment at a 30 mA level (EPD) or 100 mA level (EPE). They are not designed to protect people from electrical shock.

Table 1.8: QO-EPD Circuit Breakers *New!*

Ampere Rating	1P 120 Vac		2P Common Trip 120/240 Vac		3P Common Trip 240 Vac			
	10 k AIR		10 k AIR		10 k AIR			
	1 Space Required		2 Spaces Required		3 Spaces Required			
	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price
15	QO115EPD	410.	QO215EPD	660.	QO315EPD▼	1077.	QO315EPE▼	1077.
20	QO120EPD	410.	QO220EPD	660.	QO320EPD▼	1077.	QO320EPE▼	1077.
25	QO125EPD	410.	QO225EPD	660.	—	—	—	—
30	QO130EPD	410.	QO230EPD	660.	QO330EPD▼	1077.	QO330EPE▼	1077.
40	—	—	QO240EPD	660.	QO340EPD▼	1077.	QO340EPE▼	1077.
50	—	—	QO250EPD	660.	QO350EPD▼	1077.	QO350EPE▼	1077.
60	—	—	QO260EPD★	660.	—	—	—	—

QO-SWN

Switch Neutral Common Trip 2008 NEC® 514.11

Table 1.9: QO-SWN Circuit Breakers

Ampere Rating	2 Wire 120 Vac		3 Wire 120/240 Vac	
	10 k AIR		10 k AIR	
	2 Spaces Required		3 Spaces Required	
	Cat. No.	\$ Price	Cat. No.	\$ Price
10	QO210SWN	95.00	QO310SWN	143.00
15	QO215SWN	95.00	QO315SWN	143.00
20	QO220SWN	95.00	QO320SWN	143.00
25	QO225SWN	95.00	QO325SWN	143.00
30	QO230SWN	95.00	QO330SWN	143.00
40	QO240SWN	95.00	QO340SWN	143.00
50	QO250SWN	95.00	QO350SWN	143.00

QO-HID

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

Table 1.10: QO-HID Circuit Breakers

Ampere Rating	1P 120/240 Vac		2P Common Trip 120/240 Vac		3P Common Trip 240 Vac	
	10 k AIR		10 k AIR		10 k AIR	
	1 Space Required		2 Spaces Required		3 Spaces Required	
	Cat. No.	\$ Price	Cat. No.	\$ Price	Cat. No.	\$ Price
15	QO115HID	38.10	QO215HID	87.00	QO315HID	300.00
20	QO120HID	38.10	QO220HID	87.00	QO320HID	300.00
25	QO125HID	38.10	QO225HID	87.00	QO325HID	300.00
30	QO130HID	38.10	QO230HID	87.00	QO330HID	300.00
40	QO140HID	38.10	QO240HID	87.00	—	—
50	QO150HID	38.10	QO250HID	87.00	—	—

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 (catalog number QOK10) included with the circuit breaker. These circuit breakers are UL Listed and available as shown in the table.

Table 1.11: QO-K Circuit Breakers

120 Vac—10 k AIR (1 Space Required)		
Ampere Rating	Cat. No.	\$ Price
10	QO110K	164.00
15	QO115K	164.00
20	QO120K	164.00
25	QO125K	164.00
30	QO130K	164.00

QO-HM

High magnetic trip circuit breakers are recommended for applications where high initial inrush may occur and for individual dimmer applications.

Table 1.12: QO-HM Circuit Breakers

120 Vac—10 k AIR		
Ampere Rating	1P	
	Cat. No.	\$ Price
15 A	QO115HM▲	30.60
20 A	QO120HM▲	30.60

Non-automatic (Standard) Miniature Switches

Miniature non-automatic switches have the same physical packaging as miniature circuit breakers, but open only when the handle is switched to the OFF position.

Non-automatic switches provide no overcurrent protection or short circuit protection. They must not be used on systems that have an available fault current greater than the values listed in the table.

Non-automatic switches are UL Listed per UL 1087 and are CSA certified.

Table 1.13: QO Non-Automatic Miniature Switches, 240 Vac 10 kA

Ampere Rating	2P		3P	
	Cat. No.	\$ Price	Cat. No.	\$ Price
60	QO200	70.00	QO300	248.00
100	QO2000	200.00	QO3000	366.00

- ▲ UL Listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers.
- UL Listed as SWD (switching duty) rated. Suitable for switching 120 Vac fluorescent lighting loads.
- ◆ 10–30 A circuit breakers are suitable for use with 60°C or 75°C conductors. 35–60 A circuit breakers are suitable for use with 75°C conductors.
- ★ Suitable only for feeding 240 Vac and 208 Vac two-wire loads. Does not contain load neutral connection.
- ▼ See note in Instruction Bulletin when using in an enclosure with a QO403 or QON prefix.

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