

**QO/QOB Ring Terminal**

**Table 1.2: QO/QOB Ring Terminal—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	
60–100 A	3	5273

**Wire Sizes for QO/QOB Circuit Breakers**

**Table 1.3: Wire Sizes**

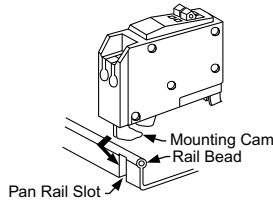
Circuit Breaker Type	Ampere Rating [11]	Wire Size (AWG/kcmil)
QO 1P	10–30 A	14–8 Al/Cu
	10–30 A	(2) 14–10 Cu
	35–70 A	8–2 Al/Cu
QO 2P	10–30 A	14–8 Al/Cu
	10–30 A	(2) 14–10 Cu
	35–70 A	8–2 Al/Cu
	80–125 A	4–2/0 Al/Cu
	150–200 A	4–300 Al/Cu
QO 3P	10–30 A	14–8 Al/Cu, (2) 14–10 Cu
	35–70 A	8–2 Al/Cu
	80–125 A	4–2/0 Al/Cu
QOB-VH	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

**QOT Tandem Circuit Breakers**

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



QOT 1P Tandem  
1 Space Required



**Table 1.4: QOT Tandem Circuit Breakers**

Ampere Rating [12]	Cat. No. [13]
<b>1P—120/240 Vac</b>	
15 A and 15 A	QOT1515
15 A and 20 A	QOT1520
20 A and 20 A	QOT2020

**2P—120/240 Vac Common Trip**  
Order two QOT1515 or QOT2020 circuit breakers and handle tie QOTHT for common switching of center two poles.

**Replacement Tandem Circuit Breakers** Includes two circuit breakers (one QO2030 and one QO3020) and handle tie QOTHT.

**Table 1.5: Replacement Tandem Circuit Breakers**

Ampere Rating [12]	Cat. No. [13]
<b>1P—120/240 Vac—1 Space Required</b>	
15 A and 15 A	QO1515
15 A and 20 A	QO1520
20 A and 20 A	QO2020
20 A and 30 A	QO2030
30 A and 20 A	QO3020
<b>Two 1P Individual Trip—120/240 Vac—2 Spaces Required</b>	
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 [14]
30 A and 20 A	—

[11] 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.

[12] 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.

[13] 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.

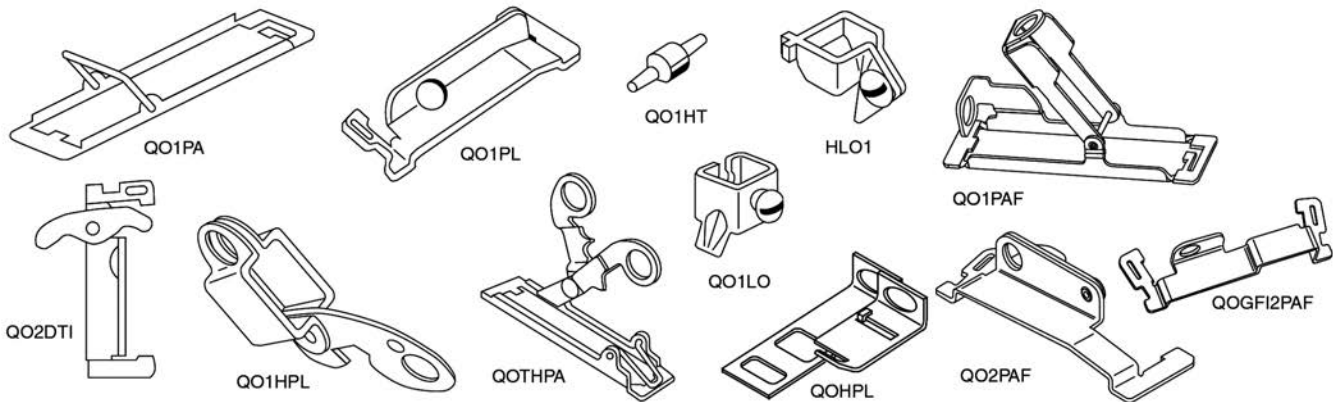
[14] Includes two circuit breakers (one QO2030 and one QO3020) and handle tie QOTHT.

Accessories for QO/QOB Circuit Breakers

Table 1.15: Accessories for use with QO and QOB Miniature Circuit Breakers

Description		Cat. No.	Schedule
<b>Handle Attachments</b>			
Handle Tie	Converts any two adjacent 120/240 Vac 1P QO circuit breakers to independent trip 2P Converts any two adjacent 120/240 Vac 1P side-by-side QOT circuit breakers to independent trip 2P	QO1HT QOTHT	DE2E DE2E
Handle Clamp	Clamp for holding QO 1P handle in ON or OFF position Clamp for holding QO or Q1 either 1P, 2P or 3P circuit breaker handles in ON or OFF position	QO1LO HLO1	DE2E DE2E
Handle Padlock Attachment for Padlocking in ON or OFF position	For padlocking 1P QO circuit breaker in ON or OFF position Loose attachment Fixed attachment	QOHPL QO1PA	DE2E DE2E
	For padlocking 1P side-by-side QOT circuit breaker in ON or OFF position	QOTHPA	DE2E
	For padlocking 2P QO-GFI circuit breakers in either ON or OFF position, fixed attachment.	GFI2PA	DE2A
	For 2P and 3P QO and Q1 standard circuit breakers which require padlocking in either ON or OFF position. Loose attachment Fixed attachment	QO1HPL QO1PL	DE2E DE2E
Handle Padlock Attachment for Padlocking in OFF position	For padlocking 1P QO circuit breaker in OFF position only, fixed attachment.	QO1PAF	DE2E
	For padlocking 2P and 3P QO circuit breakers in OFF position only, fixed attachment.	QO2PAF	DE2E
	For padlocking 1P QO-GFI, QO-CAFI, QO-DF and QO-EPD circuit breakers in OFF position only, fixed attachment.	QOGFI1PAF	DE2E
	For padlocking 2P QO-GFI, QO-CAFI and QO-EPD circuit breakers in OFF position only, fixed attachment.	QOGFI2PAF	DE2E
Ring Terminal	Ring terminals are available as a factory-installed option.	See page 7-10	DE2A
Sub-feed Lugs	60 A 2P plug-on – 2 spaces required (6-2 Al/Cu) 125 A 2P plug-on – 2 spaces required (12-2/0 Al/Cu) 225 A 2P plug-on – 4 spaces required (4-300 Al/Cu) 125 A 3P plug-on – 3 spaces required (12-2/0 Al/Cu)	QO60SL QO2125SL QO2225SL [27] QO3125SL	DE2A DE2A DE2A DE3
Mechanical Interlock Attachment	For interlocking the handles of two 2P or one 2P and one 1P QO and Q1 circuit breakers mounted side-by-side so that only one circuit breaker can be ON at a time (Not QOU)	QO2DTI	DE2E
With Retaining Kit	QO2DTI mechanical interlock attachment with retaining kits for securing two adjacent back-fed circuit breakers in dual power supply applications. Can be used with (2) 2Ps or (1) 2P and (1) 1P QO circuit breakers in QO816L100 load centers.	QO2DTIM	DE2E

LOAD CENTERS



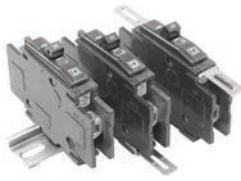
Factory-Installed Accessories for use with QO and QOB Miniature Circuit Breakers

Factory-installed electrical accessories take up an additional pole space on QO, QO-GFI, QO-EPD, QO-SWN and QOU circuit breakers. All AC electrical accessories shown below are rated for 50/60 Hz. Accessories are not available for QOB-VH (2P 150 A and 3P 110-150 A) circuit breakers or QO, QOU molded case switches. QO circuit breakers will accept only one accessory per circuit breaker. Undervoltage trip is not available on miniature circuit breakers. Factory-installed accessories are not available for QO-AFI or QO-CAFI Arc Fault Circuit Breakers or on QO2150, QO2175, or QO2200 circuit breakers.

Table 1.16: Factory-Installed Accessories

Accessory	Description	Rated Voltage	Coil Burden	Cat. No. Suffix	Access-ory	Description	Contact Comb.	Max. Voltage	Max.	Cat. No. Suffix
Shunt Trip	Trips the circuit breaker from a remote location by means of a trip coil energized from a separate circuit. A 120 Vac shunt trip will operate at 55% or more of rated voltage. All other shunt trips will operate at 75% or more of rated voltage. <b>Application</b> <ul style="list-style-type: none"> <li>For use with momentary or maintained push button.</li> <li>Not available on QO-GFI, QO-EPD.</li> <li>Shunt trip terminals accept (2) 0.14-0.12 AWG Cu.</li> </ul>	12 Vac/Vdc 24 Vac/Vdc	60 VA 168 VA	-1042	Auxiliary Switches	Monitors circuit breaker contact status and provides a remote signal indicating the circuit breaker contacts are OPEN or CLOSED. <b>Application</b> <ul style="list-style-type: none"> <li>Auxiliary switch terminals accept (2) 14-12 AWG Cu leads.</li> <li>Leads (EH): Yellow for "A", Blue for "B", Striped common 18 AWG Cu.</li> </ul>	1A 1B	120 Vac 120 Vac	5 A 5 A	-1200 -1201
		120 Vac 208 Vac 240 Vax	72 VA 228 VA 288 VA	-1021	Alarm Switches	Used with control circuits and is actuated only when the circuit breaker has tripped. Standard construction includes a normally-open contact. <b>Application</b> <ul style="list-style-type: none"> <li>Leads: Alarm switch terminals accept (2) 14-12 AWG Cu leads.</li> </ul>	1A	120 Vac	5 A	-2100

[27] Not suitable for use in 3Ø panels. Use only in 1Ø panel rated 150 A or greater.



Low Ampere QOU

**Low Ampere QOU Miniature Circuit Breakers**

QOU unit mount miniature circuit breakers (cable-in/cable-out) are ideal for OEM applications. They have the Square D™ circuit breaker’s unique Visi-Trip™ feature and can be DIN rail-mounted or surface- or flush-mounted using mounting feet. Mounting feet not provided [30].

**General Specifications Common to All Low Ampere QOU Circuit Breakers**

- For convenient flush mount, surface mount or DIN mount (symmetrical rail 35 x 7.5 DIN/EN 50 022)
- Single handle with internal common trip
- Terminal lug wire size (1) 14–2 AWG Cu or Al
- Reversible line and load lugs
- Field-installable quick connectors
- UL Listed 48 Vdc (5 k AIR)
- UL Listed as HACR Type: 10–70 A
- High magnetic trip circuit breakers (QOU-HM) are recommended for applications where high initial inrush may occur and for individual dimmer applications.
- For DIN mounting rails, see IEC Starters and Relays, Section 18.

**Table 7.22: QOU Low Ampere Miniature Circuit Breakers**

Ampere Rating	Cat. No.			
	1P 120/240 Vac	2P 120/240 Vac	2P 240 Vac [31]	3P 240 Vac
<b>10 k AIR</b>				
10 A	QOU110	QOU210	—	QOU310
15 A	QOU115	QOU215	QOU215H	QOU315
20 A	QOU120	QOU220	QOU220H	QOU320
25 A	QOU125	QOU225	QOU225H	QOU325
30 A	QOU130	QOU230	QOU230H	QOU330
35 A	QOU135	QOU235	—	QOU335
40 A	QOU140	QOU240	—	QOU340
45 A	QOU145	QOU245	—	QOU345
50 A	QOU150	QOU250	—	QOU350
60 A	QOU160	QOU260	—	QOU360
70 A	QOU170	QOU270	—	QOU370
<b>22 k AIR</b>				
15 A	QOU115VH	QOU215VH	—	QOU315VH
20 A	QOU120VH	QOU220VH	—	QOU320VH
25 A	QOU125VH	QOU225VH	—	QOU325VH
30 A	QOU130VH	QOU230VH	—	QOU330VH
35 A	QOU135VH	QOU235VH	—	—
40 A	QOU140VH	QOU240VH	—	—
45 A	QOU145VH	QOU245VH	—	—
50 A	QOU150VH	QOU250VH	—	—
60 A	QOU160VH	QOU260VH	—	—

**Table 7.23: QOU-HM Miniature Circuit Breakers (10 k AIR)**

Ampere Rating	Cat. No.			
	1P 120/240 Vac	2P 120/240 Vac	2P 240 Vac	3P 240 Vac
15 A	QOU115HM	—	—	—
20 A	QOU120HM	—	—	—

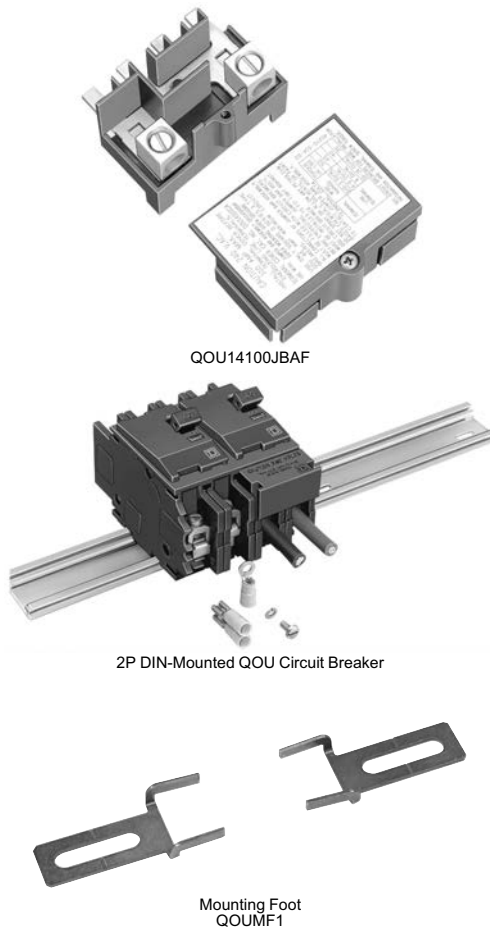
**Table 7.24: QYU UL1077 Recognized Supplementary Protectors (5 k AIR)**

Ampere Rating	Cat. No.			
	1P 277 Vac	2P 120/240 Vac	2P 240 Vac	3P 240 Vac
10 A	QYU110	—	—	—
15 A	QYU115	—	—	—
20 A	QYU120	—	—	—
25 A	QYU125	—	—	—
30 A	QYU130	—	—	—

[30] See QOU Accessories, page 7-20.  
[31] QOU-H interrupting rating is 10 kA at 240 Vac.

QOU Accessories

Table 7.27: Accessories for QOU Low Ampere Circuit Breakers (Except as Noted)



Description	Order Qty.	Cat. No.
Factory-installed ring tongue terminal, 10–32 screw, for 1P, 2P, 3P QOU, 10–60 A	—	Suffix -5283
Hex drive 5/32 in. wire binding screw for QOU	—	Suffix -5280
For padlocking 1P low ampere QOU circuit breaker in OFF or ON position	—	QOU1PA
For padlocking 2P and 3P low ampere QOU circuit breaker in OFF or ON position	—	QOU1PL
For padlocking 1P low ampere QOU circuit breaker in OFF position only	—	QOU1PAFLA
For padlocking 2P and 3P low ampere QOU circuit breaker in OFF position only	—	QOU2PAFLA
For padlocking 2P and 3P high ampere QOU circuit breaker in OFF position only	—	Suffix -7100
Handle lock-out, ON or OFF position	—	HLO1
4P 100 A Jumper bar assy. w/front wiring with base, cover and screw	1	QOU14100JBAF
4P 100 A Jumper bar assy. w/right side wiring with base, cover and screw	1	QOU14100JBAR
4P 100 A Jumper bar assy. w/left side wiring with base, cover and screw	1	QOU14100JBAL
1Ø, 4P, 100 A Jumper bar base with front wiring	40	QOU14100BAFB
1Ø, 4P, 100 A Jumper bar base with left side wiring	40	QOU14100BALB
1Ø, 4P, 100 A Jumper bar base with right side wiring	40	QOU14100BARB
4P Jumper bar cover	40	QOU14100CAB
Mounting screw for jumper bar cover	40	QOU1CMSB
6P 150 A Jumper bar assy. w/front wiring with base, cover and screw	1	QOU16150JBAF
1Ø, 6P, 150 A Jumper bar base with front wiring	40	QOU16150BAFB
1Ø, 6P, 150 A Jumper bar base with left side wiring	40	QOU16150BALB
1Ø, 6P, 150 A Jumper bar base with right side wiring	40	QOU16150BARB
6P jumper bar cover	40	QOU16150CAB
Vertical rainproof cover 2P and 3P QO, QOU, FA and KA	1 10	BCV [32] BCVB [32]
Horizontal rainproof cover 2P QO, QOU, and 3P Q2, EH	1 10	BCH [32] BCHB [32]
1P Fingersafe™ cover for high ampere QOU circuit breaker	1 40	QOUHFSC1 QOUHFSC1B
1P Fingersafe cover for low ampere QOU circuit breaker	1 40	QOULFSC1 QOULFSC1B
Cover plate for one 2P QOU circuit breaker	1 40	QOUCP2 QOUCP2B
Cover plate for one 3P QOU circuit breaker	1 40	QOUCP3 QOUCP3B
Cover plate for two 2P QOU circuit breakers	1 40	QOUCP4 QOUCP4B
Cover plate for three 2P QOU circuit breakers	1 40	QOUCP6 QOUCP6B
Field-installable ring tongue terminal adaptor	1 80	QOURT QOURTB
Quick connector end connection wiring	1 40	QOUEC QOUECB
Quick connector forward or reverse wiring	1 40	QOUFR QOUFRB
1P QOU mounting foot	1 80	QOUMF1 [32] QOUMF1B [32]
2P QOU mounting foot	1 40	QOUMF2 [32] QOUMF2B [32]
3P QOU mounting foot	1 24	QOUMF3 [32] QOUMF3B [32]
Tapped mounting foot for QOU, 1P and 2P 10–70 A, 3P 10–60 A		
Packaged with circuit breaker		Suffix -3100
Individually packaged	1	QOUMFS1
Bulk packed	80	QOUMFS1B
Mechanical interlock attachment: Used to interlock two circuit breakers mounted side-by-side so that only one circuit breaker can be ON at a time. A 1P or 2P circuit breaker can be mounted on the left and interlocked with a 2P or 3P circuit breaker on the right.	1	QOU2DTILA [33]

QOUQ Low Ampere Circuit Breakers

QOUQ low ampere circuit breakers with four-point quick-connect terminals are provided with permanent factory-installed terminals which are affixed to the Load or OFF end of the circuit breaker. This special terminal will accommodate up to four 1/4-inch insulated female quick connect wire terminations. Total ampacity of these connections must not exceed the rating of the circuit breaker.

Table 7.28: QOUQ Four-Point Quick-Connect Terminals

	Poles	Order Qty.	Cat. No.
Four-Point Quick-Connect Terminals	1	1	Change QOU to QOUQ
	2	1	
	3	1	

The QOU uses the same electrical accessories as the QO. See the QO information for available electrical accessories.

[32] For use on low and high ampere QOU.  
[33] 10–70 A 1P and 2P, 10–60 A 3P.