

# QO™ and QOU Miniature Circuit Breakers

## QO™ Miniature Circuit Breakers

Class 730, 731, 733 / Refer to Catalog 0730CT9801

QO™ miniature circuit breakers are plug-on products for use in QO load centers, NQOD panelboards, NQOD OEM interiors or Speed-D™ switchboard distribution panels. Bolt-on QOB circuit breakers are for use in NQOD panelboards or interiors.▲  
The QO 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.

### 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
<b>10 k AIR</b>								
10 A	QO110		QO210		—		QO310	
15 A	QO115★▼		QO215★		QO215H		QO315★	
20 A	QO120★▼		QO220★		QO220H		QO320★	
25 A	QO125★		QO225★		QO225H		QO325★	
30 A	QO130★		QO230★		QO230H		QO330★	
35 A	QO135★		QO235★		—		QO335★	
40 A	QO140★		QO240★		QO240H		QO340★	
45 A	QO145★		QO245★		—		QO345★	
50 A	QO150★		QO250★		QO250H		QO350★	
60 A	QO160★		QO260★		QO260H		QO360★	
70 A	QO170★		QO270★		QO270H		QO370★	
80 A	—		QO280★		QO280H		QO380★	
90 A	—		QO290★		QO290H		QO390★	
100 A	—		QO2100★		QO2100H		QO3100★	
110 A	—		QO2110★		—		—	
125 A	—		QO2125★		—		—	
150 A	—		QO2150★△◇		—		—	
175 A	—		QO2175★△◇		—		—	
200 A	—		QO2200★△◇		—		—	
Molded Case Switch 60 A max.—240 Vac			—		QO200		QO300	
Molded Case Switch 100 A max.—240 Vac			—		QO2000★		QO3000★	
<b>22 k AIR★</b>								
15 A	QO115VH▼		QO215VH□		—		QO315VH□	
20 A	QO120VH▼		QO220VH□		—		QO320VH□	
25 A	QO125VH		QO225VH□		—		QO325VH□	
30 A	QO130VH		QO230VH□		—		QO330VH□	
40 A	—		QO240VH□		—		QO340VH□	
50 A	—		QO250VH□		—		QO350VH□	
60 A	—		QO260VH□		—		QO360VH□	
70 A	—		QO270VH□		—		QO370VH□	
80 A	—		QO280VH□		—		QO380VH□	
90 A	—		QO290VH□		—		QO390VH□	
100 A	—		QO2100VH◇		—		QO3100VH□	
110 A	—		QO2110VH◇		—		—	
125 A	—		QO2125VH◇		—		—	
150 A	—		QO2150VH△◇		—		—	
175 A	—		QO2175VH△◇		—		—	
200 A	—		QO2200VH△◇		—		—	
<b>42 k AIR★</b>								
40 A	—		QOH240★		—		—	
45 A	—		QOH245★		—		—	
50 A	—		QOH250★		—		—	
60 A	—		QOH260★		—		—	
70 A	—		QOH270		—		—	
80 A	—		QOH280		—		—	
90 A	—		QOH290		—		—	
100 A	—		QOH2100		—		—	
110 A	—		QOH2110★		—		—	
125 A	—		QOH2125		—		—	
<b>65 k AIR★</b>								
15 A	QH115▼		QH215		—		QH315★	
20 A	QH120▼		QH220		—		QH320	
25 A	QH125★		QH225★		—		QH325★	
30 A	QH130		QH230		—		QH330	

### 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	
35–50 A	3	5238
70–110 A	2	
60–100 A	3	5273

### 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	110–150 A	4–300 Al/Cu
	15–20 A	12–8 Al 14–8 Cu
QOT	15–20 A	12–8 Al 14–8 Cu
QO-AFI, QO-GFI & 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

### Replacement Tandem Circuit Breakers

For Use in Old Style Non-Class CTL QO Load Centers—10 k AIR

Ampere Rating	Cat. No.★	\$ Price
<b>1P—120/240 Vac—1 Space Required</b>		
15 & 15 A	QO1515	
15 A & 20 A	QO1520	
20 A & 20 A	QO2020	
20 A & 30 A	QO2030	
30 A & 20 A	QO3020	
<b>Two 1P Individual Trip—120/240 Vac—2 Spaces Required</b>		
15 A & 15 A	Order Two QO1515 or QO2020 circuit breakers and handle tie QOHTT for common switching of center two poles.	
15 A & 20 A	—	
20 A & 20 A	—	
20 A & 30 A	QO20303020▼	
30 A & 20 A	—	



QO 1P  
1 Space Required



QOT 1P Tandem  
1 Space Required



QO 2P  
2 Spaces Required



QO2200 2P 200 A  
4 Spaces Required

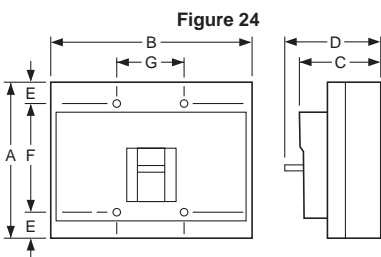
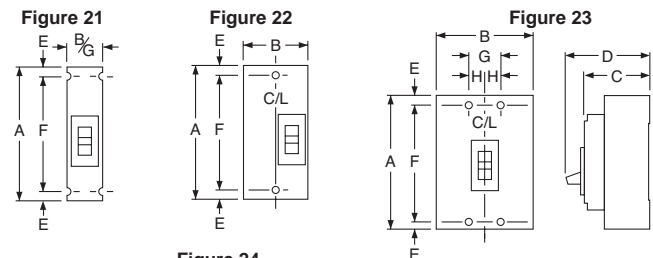
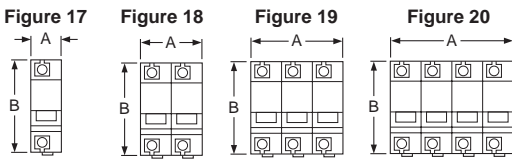
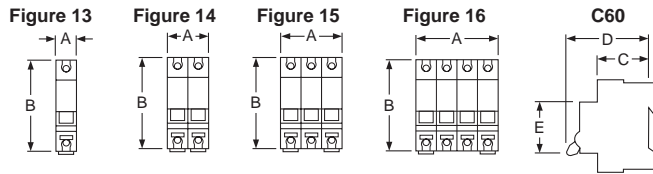
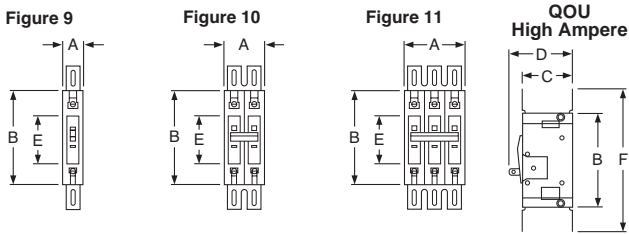
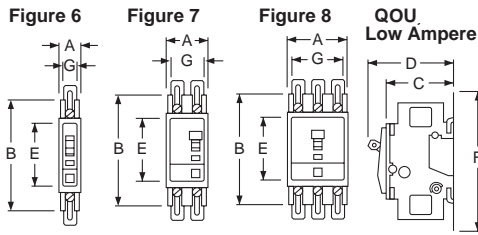
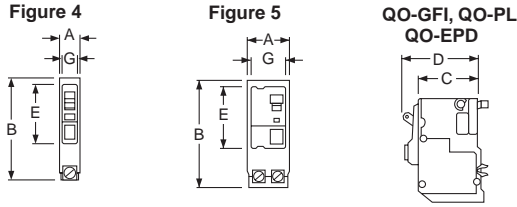
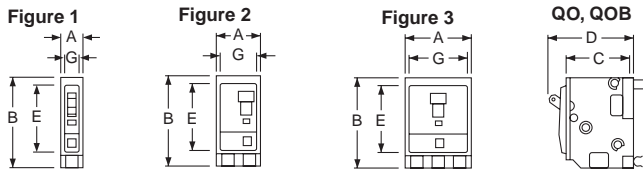


QO 3P  
3 Spaces Required

- ▲ See Section 1 for load centers, and Section 5 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.
  - ◆ CSA/UL Listed 5 k AIR on corner grounded Delta systems.
  - ★ CSA/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.
  - ▼ CSA/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.
  - CSA/UL Listed for use ahead of QO, QO-GFI, QO-EPD, QO-AFI, QOT, QOCAFI, and QO-PL 10 k AIR circuit breakers to permit their application at 22 kA fault level.
  - ◇ 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 QOHTT.
  - Not suitable for use in 3Ø panels. Use only in 1Ø panel rated 150 A or greater.
- Interrupting Ratings ..... Page DE3-2  
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# Dimensions and Shipping Weights

## Miniature and Molded Case Circuit Breakers



### QO™, QOU, Multi 9™ Circuit Breakers

Circuit Breaker Catalogue No. Prefix	No. Poles	Fig. No.	Dimensions—Inches						
			A	B	C	D	E	F	G
QO, QOB	1	1	0.75	3.00▲	2.31	2.91	2.25	...	0.59
	2	2	1.50	3.00▲	2.31	2.91	2.25	...	1.34
	3	3	2.25	3.00▲	2.31	2.91	2.25	...	2.09
QOB-VH 150 A QOB-VH 110–150 A	2	2	3.0	5.72	2.53	4.90	3.78	...	2.85
	3	3	4.50	5.72	2.53	4.90	3.78	...	4.35
QO-PL QO-GFI QO-EPD	1	4	0.75	4.12■	2.31	2.91	2.25	...	0.59
	2	5	1.50	4.12■	2.31	2.91	2.25	...	1.34
	3	5	2.25	4.12■	2.31	2.91	2.25	...	2.09
QOU Low Ampere	1	6	0.75	4.05♦	2.38	2.98	2.25	5.00▼	0.62
	2	7	1.50	4.05♦	2.38	2.98	2.25	5.00▼	1.37
	3	8	2.25	4.05★	2.38	2.98	2.25	5.00△	2.12
QOU High Ampere	1	9	0.75	4.45	2.37	2.96	2.25	6.78	...
	2	10	1.50	4.45	2.37	2.96	2.25	6.78	...
	3	11	2.25	4.45	2.37	2.96	2.25	6.78	...
Multi 9™ C60	1	13	0.71	3.19	1.73	2.76	1.77	—	—
	2	14	1.42	3.19	1.73	2.76	1.77	—	—
	3	15	2.13	3.19	1.73	2.76	1.77	—	—
	4	16	2.84	3.19	1.73	2.76	1.77	—	—

- ▲ 35–70 A is 3.12 in; 80–100 A 2-pole and 70–100 A 3-pole are 3.50 in.
- QO-PL is 4.55 in.
- ♦ 80–100 A 1-pole and 80–125 A 2-pole are 4.45 in.
- ★ 70–100 A 4.45 in.
- ▼ 80–100 A 1-pole and 80–125 A 2-pole are 6.78 in.
- △ 70–100 A is 6.78 in.

### QB, QD, QG, QJ, Q4, FA, FI, KI, LA, LH Circuit Breakers

Circuit Breaker Catalogue No. Prefix	No. Poles	Fig. No.	Dimensions—Inches							
			A	B	C	D	E	F	G	H
QB, QD, QG, QJ	2	22	6.47	3.00	3.02	3.93	□	4.25	...	...
	3	23	6.47	4.50	3.02	3.93	□	4.25	1.50	0.75
FAL, FHL	1	21	6.00	1.50	3.16	4.13	0.44	5.13	1.50	...
	2	22	6.00	3.00	3.16	4.13	0.44	5.13	...	...
	3	23	6.00	4.50	3.16	4.13	0.44	5.13	1.50	0.75
FIL, KIL	2 & 3	23	8.00	4.50	3.66	4.75	0.44	7.13	1.50	0.75
Q4L, LAL, LHL	2 & 3	23	11.00	6.00	4.06	5.84	0.88	9.25	2.00	1.00

□ Dimensions E are 1.59 in at ON end and 0.63 in at OFF end.

### Shipping Weights ◊

Frame Size	Approx. Shipping Weight (Lbs.)	Frame Size	Approx. Shipping Weight (Lbs.)
FAL, FHL 1P	2	KIL	9
FAL, FHL 2P	3	LAL, LHL	15
FAL, FHL 3P	5	LIL LXIL	25
FIL	8	Q4L	15
QB, QD, QG, QJ	4		

◊ All weights are for 3P circuit breakers unless otherwise noted.

# QO™ and QOU Miniature Circuit Breakers

## QO™ Miniature Circuit Breakers

Class 730, 731, 733 / Refer to Catalog 0730CT9801

QO™ miniature circuit breakers are plug-on products for use in QO load centers, NQOD panelboards, NQOD OEM interiors or Speed-D™ switchboard distribution panels. Bolt-on QOB circuit breakers are for use in NQOD panelboards or interiors.▲  
The QO 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.

### 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
<b>10 k AIR</b>								
10 A	QO110		QO210		—		QO310	
15 A	QO115★▼		QO215★		QO215H		QO315★	
20 A	QO120★▼		QO220★		QO220H		QO320★	
25 A	QO125★		QO225★		QO225H		QO325★	
30 A	QO130★		QO230★		QO230H		QO330★	
35 A	QO135★		QO235★		—		QO335★	
40 A	QO140★		QO240★		QO240H		QO340★	
45 A	QO145★		QO245★		—		QO345★	
50 A	QO150★		QO250★		QO250H		QO350★	
60 A	QO160★		QO260★		QO260H		QO360★	
70 A	QO170★		QO270★		QO270H		QO370★	
80 A	—		QO280★		QO280H		QO380★	
90 A	—		QO290★		QO290H		QO390★	
100 A	—		QO2100★		QO2100H		QO3100★	
110 A	—		QO2110★		—		—	
125 A	—		QO2125★		—		—	
150 A	—		QO2150★△◇		—		—	
175 A	—		QO2175★△◇		—		—	
200 A	—		QO2200★△◇		—		—	
Molded Case Switch 60 A max.—240 Vac			—		QO200		QO300	
Molded Case Switch 100 A max.—240 Vac			—		QO2000★		QO3000★	
<b>22 k AIR★</b>								
15 A	QO115VH▼		QO215VH□		—		QO315VH□	
20 A	QO120VH▼		QO220VH□		—		QO320VH□	
25 A	QO125VH		QO225VH□		—		QO325VH□	
30 A	QO130VH		QO230VH□		—		QO330VH□	
40 A	—		QO240VH□		—		QO340VH□	
50 A	—		QO250VH□		—		QO350VH□	
60 A	—		QO260VH□		—		QO360VH□	
70 A	—		QO270VH□		—		QO370VH□	
80 A	—		QO280VH□		—		QO380VH□	
90 A	—		QO290VH□		—		QO390VH□	
100 A	—		QO2100VH◇		—		QO3100VH□	
110 A	—		QO2110VH◇		—		—	
125 A	—		QO2125VH◇		—		—	
150 A	—		QO2150VH△◇		—		—	
175 A	—		QO2175VH△◇		—		—	
200 A	—		QO2200VH△◇		—		—	
<b>42 k AIR★</b>								
40 A	—		QOH240★		—		—	
45 A	—		QOH245★		—		—	
50 A	—		QOH250★		—		—	
60 A	—		QOH260★		—		—	
70 A	—		QOH270		—		—	
80 A	—		QOH280		—		—	
90 A	—		QOH290		—		—	
100 A	—		QOH2100		—		—	
110 A	—		QOH2110★		—		—	
125 A	—		QOH2125		—		—	
<b>65 k AIR★</b>								
15 A	QH115▼		QH215		—		QH315★	
20 A	QH120▼		QH220		—		QH320	
25 A	QH125★		QH225★		—		QH325★	
30 A	QH130		QH230		—		QH330	

### 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	
35–50 A	3	5238
70–110 A	2	
60–100 A	3	5273

### 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
	150–200 A	4–300 Al/Cu
QO-PL	10–60 A	12–2 Al 14–2 Cu
QO-AFI, QO-GFI & QO-EPD	15–30 A	12–8 Al 14–8 Cu
QO-PL	40, 50, 60 A	12–4 Al 14–6 Cu
QO-PL	10–60 A	12–2 Al 14–2 Cu

### Replacement Tandem Circuit Breakers

For Use in Old Style Non-Class CTL QO Load Centers—10 k AIR

Ampere Rating	Cat. No.★	\$ Price
<b>1P—120/240 Vac—1 Space Required</b>		
15 & 15 A	QO1515	
15 A & 20 A	QO1520	
20 A & 20 A	QO2020	
20 A & 30 A	QO2030	
30 A & 20 A	QO3020	
<b>Two 1P Individual Trip—120/240 Vac—2 Spaces Required</b>		
15 A & 15 A	—	Order Two QO1515 or QO2020 circuit breakers and handle tie QOHTT for common switching of center two poles.
15 A & 20 A	—	
20 A & 20 A	—	
20 A & 30 A	QO20303020▼	
30 A & 20 A	—	



QO 1P  
1 Space Required



QOT 1P Tandem  
1 Space Required



QO 2P  
2 Spaces Required



QO2200 2P 200 A  
4 Spaces Required

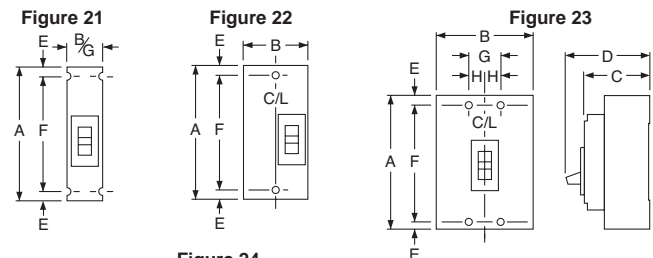
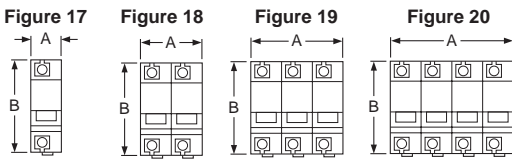
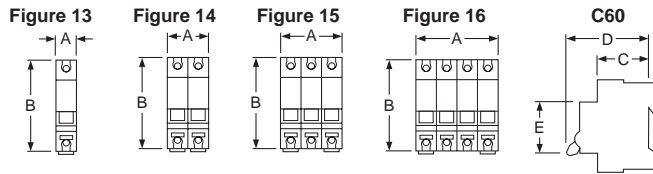
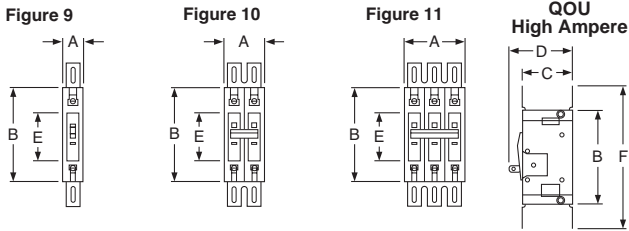
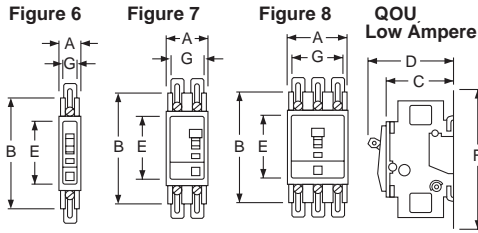
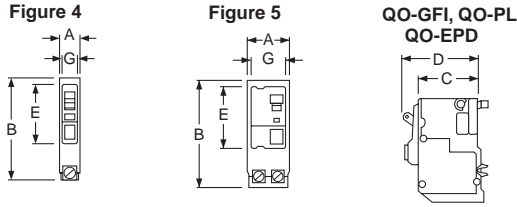
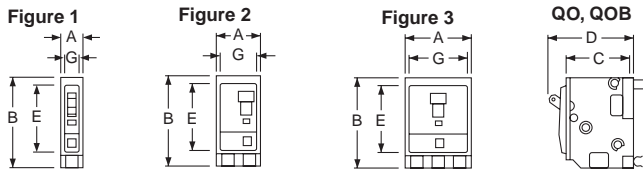


QO 3P  
3 Spaces Required

- ▲ See Section 1 for load centers, and Section 5 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.
  - ◆ CSA/UL Listed 5 k AIR on corner grounded Delta systems.
  - ★ CSA/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.
  - ▼ CSA/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.
  - CSA/UL Listed for use ahead of QO, QO-GFI, QO-EPD, QO-AFI, QOT, QOCAFI, and QO-PL 10 k AIR circuit breakers to permit their application at 22 kA fault level.
  - ◇ 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 QOHTT.
  - Not suitable for use in 3Ø panels. Use only in 1Ø panel rated 150 A or greater.
- Interrupting Ratings ..... Page DE3-2  
Accessories ..... Page DE3-12  
Dimensions ..... Page DE3-54

# Dimensions and Shipping Weights

## Miniature and Molded Case Circuit Breakers



### QO™, QOU, Multi 9™ Circuit Breakers

Circuit Breaker Catalogue No. Prefix	No. Poles	Fig. No.	Dimensions—Inches						
			A	B	C	D	E	F	G
QO, QOB	1	1	0.75	3.00▲	2.31	2.91	2.25	...	0.59
	2	2	1.50	3.00▲	2.31	2.91	2.25	...	1.34
	3	3	2.25	3.00▲	2.31	2.91	2.25	...	2.09
QOB-VH 150 A QOB-VH 110–150 A	2	2	3.0	5.72	2.53	4.90	3.78	...	2.85
	3	3	4.50	5.72	2.53	4.90	3.78	...	4.35
QO-PL QO-GFI QO-EPD	1	4	0.75	4.12■	2.31	2.91	2.25	...	0.59
	2	5	1.50	4.12■	2.31	2.91	2.25	...	1.34
	3	5	2.25	4.12■	2.31	2.91	2.25	...	2.09
QOU Low Ampere	1	6	0.75	4.05♦	2.38	2.98	2.25	5.00▼	0.62
	2	7	1.50	4.05♦	2.38	2.98	2.25	5.00▼	1.37
	3	8	2.25	4.05★	2.38	2.98	2.25	5.00△	2.12
QOU High Ampere	1	9	0.75	4.45	2.37	2.96	2.25	6.78	...
	2	10	1.50	4.45	2.37	2.96	2.25	6.78	...
	3	11	2.25	4.45	2.37	2.96	2.25	6.78	...
Multi 9™ C60	1	13	0.71	3.19	1.73	2.76	1.77	—	—
	2	14	1.42	3.19	1.73	2.76	1.77	—	—
	3	15	2.13	3.19	1.73	2.76	1.77	—	—
	4	16	2.84	3.19	1.73	2.76	1.77	—	—

- ▲ 35–70 A is 3.12 in; 80–100 A 2-pole and 70–100 A 3-pole are 3.50 in.
- QO-PL is 4.55 in.
- ♦ 80–100 A 1-pole and 80–125 A 2-pole are 4.45 in.
- ★ 70–100 A 4.45 in.
- ▼ 80–100 A 1-pole and 80–125 A 2-pole are 6.78 in.
- △ 70–100 A is 6.78 in.

### QB, QD, QG, QJ, Q4, FA, FI, KI, LA, LH Circuit Breakers

Circuit Breaker Catalogue No. Prefix	No. Poles	Fig. No.	Dimensions—Inches							
			A	B	C	D	E	F	G	H
QB, QD, QG, QJ	2	22	6.47	3.00	3.02	3.93	□	4.25	...	...
	3	23	6.47	4.50	3.02	3.93	□	4.25	1.50	0.75
FAL, FHL	1	21	6.00	1.50	3.16	4.13	0.44	5.13	1.50	...
	2	22	6.00	3.00	3.16	4.13	0.44	5.13	...	...
	3	23	6.00	4.50	3.16	4.13	0.44	5.13	1.50	0.75
FIL, KIL	2 & 3	23	8.00	4.50	3.66	4.75	0.44	7.13	1.50	0.75
Q4L, LAL, LHL	2 & 3	23	11.00	6.00	4.06	5.84	0.88	9.25	2.00	1.00

□ Dimensions E are 1.59 in at ON end and 0.63 in at OFF end.

### Shipping Weights ◊

Frame Size	Approx. Shipping Weight (Lbs.)	Frame Size	Approx. Shipping Weight (Lbs.)
FAL, FHL 1P	2	KIL	9
FAL, FHL 2P	3	LAL, LHL	15
FAL, FHL 3P	5	LIL LXIL	25
FIL	8	Q4L	15
QB, QD, QG, QJ	4		

◊ All weights are for 3P circuit breakers unless otherwise noted.