



GJL 3P
Circuit Breaker

Table 7.46: PowerPact G-Frame 3P 100 A Thermal-Magnetic Circuit Breaker (600Y/347 Vac)

Ampere Rating	Adjustable AC Magnetic Trip		J Interrupting		Terminal Wire Range
	Low	High	Cat. No.	\$ Price	
15 A	600 A	1200 A	GJL36015	1991.00	14-1/0 AWG Cu or 8-1/0 AWG Al
20 A	600 A	1200 A	GJL36020	1991.00	
30 A	600 A	1200 A	GJL36030	1991.00	
40 A	600 A	1200 A	GJL36040	1991.00	
50 A	800 A	1400 A	GJL36050	1991.00	
60 A	800 A	1400 A	GJL36060	1991.00	
70 A	800 A	1400 A	GJL36070	2448.00	
80 A	800 A	1400 A	GJL36080	2448.00	
90 A	800 A	1400 A	GJL36090	2448.00	
100 A	800 A	1400 A	GJL36100	2448.00	

Table 7.47: G-Frame Interrupting Ratings

Voltage	J interrupting
240 Vac	100 kA
480 Vac	65 kA
600Y/347 Vac	18 kA

Table 7.48: PowerPact Q-Frame 250 A Thermal-Magnetic Circuit Breaker (240 Vac)

Ampere Rating	Fixed AC Magnetic Trip		B Interrupting		D Interrupting		G Interrupting		J Interrupting		Terminal Wire Range	
	Hold	Trip	Cat. No. ♦	\$ Price	Cat. No. ♦	\$ Price	Cat. No. ♦	\$ Price	Cat. No. ♦	\$ Price		
2P, 240 Vac												
70 A	1000 A	1800 A	QBL22070	474.00	QDL22070	1143.00	QGL22070	1521.00	QJL22070	1890.00	#4 AWG - 300 kcmil Al/Cu	
80 A	1000 A	1800 A	QBL22080	474.00	QDL22080	1143.00	QGL22080	1521.00	QJL22080	1890.00		
90 A	1000 A	1800 A	QBL22090	474.00	QDL22090	1143.00	QGL22090	1521.00	QJL22090	1890.00		
100 A	1200 A	2400 A	QBL22100	474.00	QDL22100	1143.00	QGL22100	1521.00	QJL22100	1890.00		
110 A	1200 A	2400 A	QBL22110	474.00	QDL22110	1143.00	QGL22110	1521.00	QJL22110	1890.00		
125 A	1200 A	2400 A	QBL22125	474.00	QDL22125	1143.00	QGL22125	1521.00	QJL22125	1890.00		
150 A	1200 A	2400 A	QBL22150	474.00	QDL22150	1143.00	QGL22150	1521.00	QJL22150	1890.00		
175 A	1200 A	2400 A	QBL22175	474.00	QDL22175	1143.00	QGL22175	1521.00	QJL22175	1890.00		
200 A	1200 A	2400 A	QBL22200	474.00	QDL22200	1143.00	QGL22200	1521.00	QJL22200	1890.00		
225 A	1200 A	2400 A	QBL22225	474.00	QDL22225	1143.00	QGL22225	1521.00	QJL22225	1890.00		
250 A	1200 A	2400 A	QBL22250	693.00	QDL22250	1544.00	QGL22250	1970.00	QJL22250	2348.00		
3P, 240 Vac												
70 A	1000 A	1800 A	QBL32070	1248.00	QDL32070	1784.00	QGL32070	2442.00	QJL32070	2796.00		#4 AWG - 300 kcmil Al/Cu
80 A	1000 A	1800 A	QBL32080	1248.00	QDL32080	1784.00	QGL32080	2442.00	QJL32080	2796.00		
90 A	1000 A	1800 A	QBL32090	1248.00	QDL32090	1784.00	QGL32090	2442.00	QJL32090	2796.00		
100 A	1200 A	2400 A	QBL32100	1248.00	QDL32100	1784.00	QGL32100	2442.00	QJL32100	2796.00		
110 A	1200 A	2400 A	QBL32110	1248.00	QDL32110	1784.00	QGL32110	2442.00	QJL32110	2796.00		
125 A	1200 A	2400 A	QBL32125	1248.00	QDL32125	1784.00	QGL32125	2442.00	QJL32125	2796.00		
150 A	1200 A	2400 A	QBL32150	1248.00	QDL32150	1784.00	QGL32150	2442.00	QJL32150	2796.00		
175 A	1200 A	2400 A	QBL32175	1248.00	QDL32175	1784.00	QGL32175	2442.00	QJL32175	2796.00		
200 A	1200 A	2400 A	QBL32200	1248.00	QDL32200	1784.00	QGL32200	2442.00	QJL32200	2796.00		
225 A	1200 A	2400 A	QBL32225	1248.00	QDL32225	1784.00	QGL32225	2442.00	QJL32225	2796.00		
250 A	1200 A	2400 A	QBL32250	1812.00	QDL32250	2442.00	QGL32250	3150.00	QJL32250	3465.00		

- ▲ Replacement lugs and electrical accessories are not available for PowerPact Q-frame circuit breakers.
- 250 A lugs are suitable for copper conductors only
- ♦ DE2A Discount Schedule

Table 7.49: Q-Frame Termination Options

Termination Letter
A = I-Line (See Section 9)
E = Bolt-on I-Line (See Section 9)
F = No Lugs (includes terminal nut kit on both ends)★
L = Lugs both ends
M = Lugs ON end, Studs on OFF end
P = Lugs OFF end, Studs on ON end

★ Add TS suffix for circuit breakers without terminal nut kit. See Catalog 0734CT0201 for additional information.

For factory-installed termination, place termination letter in the third block of the circuit breaker catalog number.

QGL32250
Termination Letter

Table 7.50: Q-Frame Interrupting Ratings

Voltage	Interrupting Rating			
	B	D	G	J
240 Vac▼	10 kA	25 kA	65 kA	100 kA△

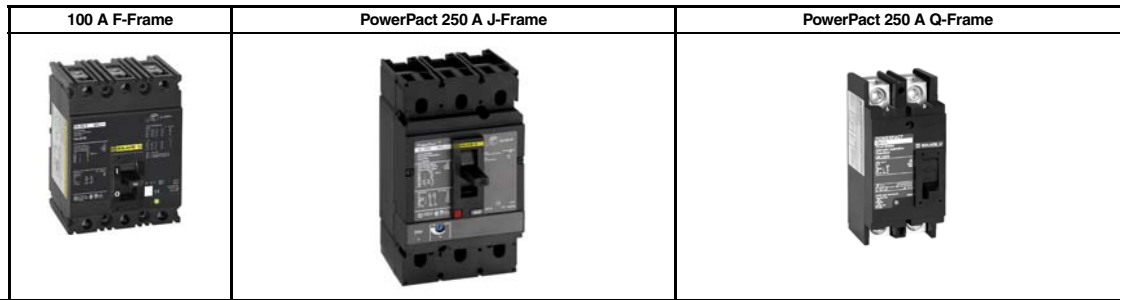
- ▼ Q-frame circuit breakers are 240 Vac only.
- △ 3P QJ circuit breakers are rated at 208Y/120 Vac only.

Accessories	Page 7-36
Optional Lugs	Page 7-39
Dimensions	Page 7-55
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MINIATURE AND MOLDED CASE
CIRCUIT BREAKERS



QBL 3P
70-250 A



Circuit Breaker Type	FI	FY	JD	JG	JJ	JL	QB	QD	QG	QJ	
Number of Poles	2, 3	1	2,3▲	2,3▲	2,3▲	2,3▲	2, 3	2, 3	2, 3	2, 3	
Current Range	20–100	15–30	150–250 A	150–250 A	150–250 A	150–250 A	70–250■	70–250■	70–250■	70–250■	
Interrupting Ratings											
UL/CSA/NOM Rating (kA RMS) (50/60 Hz)	240 Vac	200	14	25	65	100	125	10	25	65	100
	480Y/277 Vac	200	14	18	35	65	100	—	—	—	—
	480 Vac	200	—	18	35	65	100	—	—	—	—
	600Y/347 Vac	100	—	14	18	25	50	—	—	—	—
DC Ratings	600 Vac	100	—	14	18	25	50	—	—	—	—
	250 Vdc	—	—	20	20	20	20	—	—	—	—
IEC Rating (kA RMS) Icu/Ics★	500 Vdc◆	—	—	—	20	—	—	—	—	—	—
	240 Vac	—	—	25/25	65/65	100/100	125/125	10/5	10/5	10/5	10/5
IEC 50/60 Hz	415 Vac	6/1.5	—	18/18	35/35	65/65	100/100	10/5	10/5	10/5	10/5
	For additional IEC ratings, see the Supplemental Digest.										
Special Ratings											
Fed. Specs W-C-375B/GEN	X	—	X	X	X	X	X	X	X	X	X
HACR (2P, 3P)	—	—	X	X	X	X	X	X	X	X	—
Connections/Terminations											
Unit Mount	X	—	X	X	X	X	X	X	X	X	X
I-Line®	X	X	X	X	X	X	X	X	X	X	X
Rear Connection	—	—	X	X	X	X	—	—	—	—	—
Drawout	—	—	X	X	X	X	—	—	—	—	—
Optional Lugs	X	—	X	X	X	X	—	—	—	—	—
Accessories and Modifications											
Shunt Trip	X△	—	X	X	X	X	—	—	—	—	—
Undervoltage Trip	X△	—	X	X	X	X	—	—	—	—	—
Auxiliary Switches	X△	—	X	X	X	X	—	—	—	—	—
Alarm Switch	X△	—	X	X	X	X	—	—	—	—	—
Motor Operator	X	—	X	X	X	X	—	—	—	—	—
Handle Operators	—	—	X	X	X	X	—	—	—	—	—
Mechanical Interlocks (3P)	—	—	X	X	X	X	X	X	X	X	X
Handle Padlock Attachment	X	X	X	X	X	X	X	X	X	X	X
Cylinder Lock (3P△)	—	—	—	—	—	—	—	—	—	—	—
Optional GF Protection▼	X	—	—	—	—	—	—	—	—	—	—
Trip System Type											
Thermal-magnetic	X	X	X	X	X	X	X	X	X	X	X
Instantaneous-only (MCP)	—	—	—	X□	X□	—	—	—	—	—	—
Molded Case Switch (Automatic)	—	—	X	X	X	X	X	—	—	—	—
Electronic	—	—	—	—	—	—	—	—	—	—	—
Enclosures (Pages 7-56–7-58)											
General Purpose (NEMA 1)	X	—	X	X	X	—	X	X	X	X	X
Raintight (NEMA 3R)	X	—	X	X	X	—	X	X	X	X	X
Dust-tight (NEMA 12)	X	—	X	X	X	—	—	—	—	—	—
Watertight (NEMA 4, 4X, 5)	X	—	X	X	X	—	—	—	—	—	—
Explosion Proof (NEMA 7, 9)	—	—	—	—	—	—	—	—	—	—	—
Dimensions (3P Unit Mount) in. (mm)	Height	8 (203)			7.5 (191)			6.47 (164)			
	Width	4.5 (114)			4.1 (104)			4.5 (114)			
	Depth	4.75 (121)			3.4 (86)			3.93 (100)			
Pages (Unit Mount)/(I-Line)	Pages 7-49/9-24			Pages 7-22, 7-23, 7-28, 7-33, 7-34/9-25			Pages 7-24/9-24				

Note: All circuit breakers on this chart are UL Listed and CSA Certified unless otherwise noted.

- ▲ 2P in a 3P module
- I-Line Q-frame circuit breakers are available 70–225 A only. 250 A Q-frame unit-mount circuit breakers are limited to Cu conductors only.
- ◆ Ungrounded UPS systems only. See page 7-34. Special DC J-Frame only.
- ★ Dual UL and IEC ratings and CE markings on circuit breakers. For additional IEC ratings, see the Supplemental Digest.
- ▼ Requires factory-installed “G” shunt trip and 3P module.
- △ Factory-installed option only.
- 3P only.

The PowerPact Advantage

- **Proven Performance:** Industry-leading circuit breaker innovation and protection for heavy-duty commercial and industrial applications.
- **Flexible:** Full range of molded case circuit breakers from 15 A to 3000 A, delivering the ratings, configurations, and operators for your unique applications.
- **Simple:** Common catalog numbers, standardized ratings, and a full range of field-installable accessories make product selection, installation and maintenance easier than ever.
- **Common Design Features:** Mounting holes, door trim, and handle accessories



Table 7.35: PowerPact Interrupting Ratings

Voltage	Interrupting Rating					
	B	D	G	J	K	L
240 Vac	10 kA	25 kA	65 kA	100 kA	65 kA	125 kA
480 Vac		18 kA	35 kA	65 kA	65 kA ▲	100 kA
600 Vac		14 kA	18 kA	25 kA	65 kA ▲	50 kA

▲ P-frame K interrupting is 50 kA at 480 and 600 Vac.

Table 7.36: Common Catalog Numbering System

Frame	Rating	Termination	Poles	Voltage	Amperage ■			Suffix Code		Suffix Code	
					1	5	0	A	B	S	A
H	G	L	3	6	1	5	0	A	B	S	A

Frame Designation	Interrupting Rating	Terminations
G 100A Frame	240 Vac	A I-Line
H 150 A Frame	480 Vac	L Lugs on Both Ends
J 250 A Frame	600 Vac	F Bus Bar (No Lugs)
Q 250 A Frame	B 10 kA	M Lugs Line Side Only
D 600 A Frame	D 25 kA	P Lugs Load End Only
M 800 A Frame	G 65 kA	N Plug-in
P 1200 A Frame	J 100 kA	D Drawout
R 3000 A Frame	K 65 kA	S Rear Connected Studs
	L 125 kA	

110 Vac Shunt Trip
2A/2B Auxiliary Switch

■ For amperage of M-, P- or R-frame circuit breakers, add a zero to the three amperage digits; for example, 120 = 1200 A.

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**7 MINIATURE AND MOLDED CASE
CIRCUIT BREAKERS**

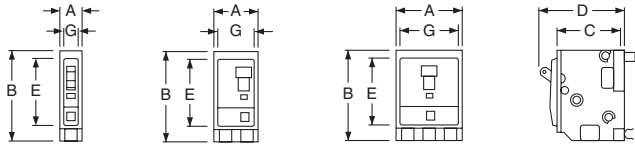


Figure 1 Figure 2 Figure 3 QO, QOB

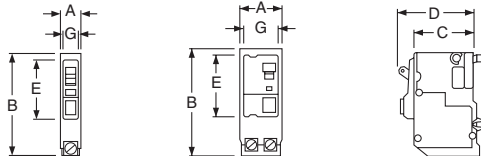


Figure 4 Figure 5 QO-GFI, QO-PL QO-EPD

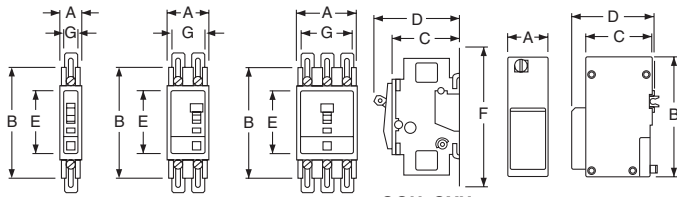


Figure 6 Figure 7 Figure 8 QOU, QYU Low Ampere Figure 9 QO-PLPS

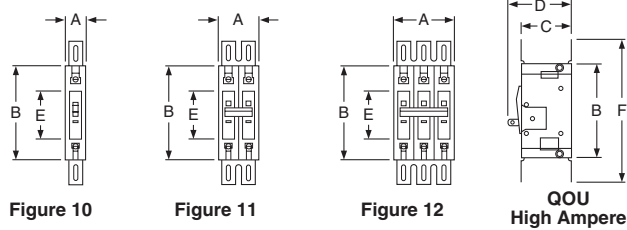


Figure 10 Figure 11 Figure 12 QOU High Ampere

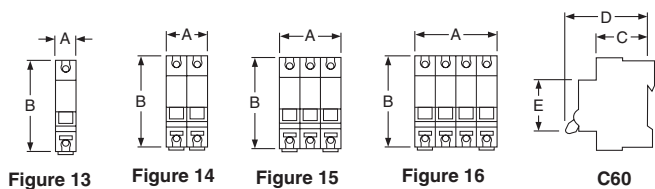


Figure 13 Figure 14 Figure 15 Figure 16 C60

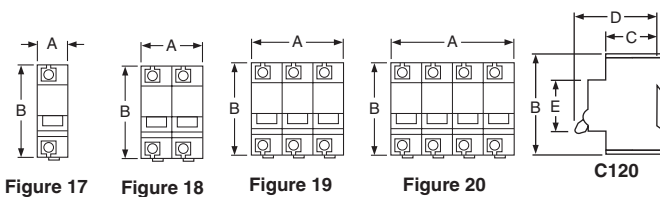


Figure 17 Figure 18 Figure 19 Figure 20 C120

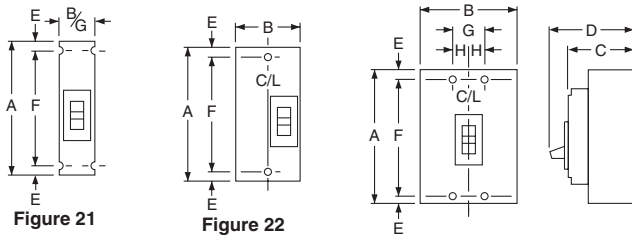


Figure 21 Figure 22 Figure 23

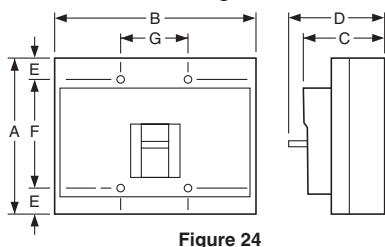


Figure 24

Table 7.140: QO®, QOU, Multi 9™ Circuit Breakers

Circuit Breaker Cat. No. Prefix	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 QYU 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	10	0.75	4.45	2.37	2.96	2.25	6.78	—
	2	11	1.50	4.45	2.37	2.96	2.25	6.78	—
	3	12	2.25	4.45	2.37	2.96	2.25	6.78	—
Multi 9™ C60N	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	—	—
QO-PLPS Power Supply	2	9	1.45	4.35	2.42	3.11	—	—	—

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

Table 7.141: QB, QD, QG, QJ, Q4, FA, FI, KA, KC, KI, LA, LC, LI, LE, LX, LXI, MA Circuit Breakers

Circuit Breaker Cat. No. Prefix	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, KAL, KCL, KHL, 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
LIL, LEL, LXL, LXIL, LCL	2 & 3	24	11.86	7.50	5.48	6.74	0.55	10.75	2.50	—
MAL, MHL	2 & 3	23	14.00	9.00	4.53	6.50	1.66	10.69	3.00	1.50

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

Table 7.142: 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	LEL, LIL, LXL, LXIL, LCL	25
FIL	8	Q4L	15
QB, QD, QG, QJ	4	MAL, MHL	34
KAL, KHL	7		

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