

B-, H-, J-Frame Molded Case Circuit Breakers

	PowerPact™ 125 A B-Frame				PowerPact 150 A H-Frame					PowerPact 250 A J-Frame					
					Electronic Trip Version					Electronic Trip Version					
															
Circuit Breaker Type	BD	BG	BJ	BK	HD	HG	HJ	HL	HR	JD	JG	JJ	JL	JR	
Number of Poles	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2	2, 3	2, 3	2, 3 [34]	2, 3 [34]	3	2, 3 [34]	2, 3 [34]	2, 3 [34]	2, 3 [34]	3	
Current Range (A)	15–125	15–125	15–125	15–30	15–150	15–150	15–150	15–150	15–150	70–250 [35]	70–250 [35]	70–250 [35]	70–250 [35]	70–250 [35]	
Interrupting Ratings															
UL/CSA/ NOM AC Rating (kA RMS) (50/60 Hz)	240 Vac	25	65	100	100	25	65	100	125	200	25	65	100	125	200
	480Y/277 Vac	18	35	65	65	18	35	65	100	200	18	35	65	100	200
	480 Vac	18	35	65	65	18	35	65	100	200	18	35	65	100	200
	600Y/347 Vac 600 Vac	14	18	25	65	14	18	25	50	100	14	18	25	50	100
UL/CSA/ NOM DC Ratings	250 Vdc [36] [37]	10	20	50	—	20	20	20	20	—	20	20	20	—	
	500 Vdc [36]	—	—	—	—	—	20	—	50	—	20	—	50	—	
IEC AC Rating (kA RMS) (50/60 Hz) Icu/Ics [38]	220/240 Vac	25	65	100	100	25	65	100	125	150	25	65	100	125	150
	380/415 Vac	18	35	65	65	18	35	65	100	125	18	35	65	100	125
	440/480 Vac	18	35	65	65	18	35	65	100	125	18	35	65	100	125
	500/525 Vac 690 Vac	14	18	25	25	14	18	25	50	75	14	20	20	20	75
IEC DC Ratings	250 Vdc	—	—	—	—	—	—	—	—	—	20	20	20	20	
	500 Vdc	—	—	—	—	—	—	—	—	—	20	20	20	20	
Special Ratings															
CCC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Fed. Specs W-C-375B/GEN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
HACR	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Connections/Terminations															
Unit Mount	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
I-Line™	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Rear Connection	—	—	—	—	X [39]	X [39]	X	X	X	X	X	X	X	X	
Drawout	—	—	—	—	X [39]	X [39]	X	X	X	X	X	X	X	X	
Optional Lugs	X	X	X	X	X [39]	X [39]	X	X	X	X	X	X	X	X	
Accessories and Modifications															
Shunt Trip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Undervoltage Trip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Auxiliary Switches	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alarm Switch	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Motor Operator	—	—	—	—	X [39]	X [39]	X	X	X	X	X	X	X	X	
Handle Operators	X	X	X	X	X [39]	X [39]	X	X	X	X	X	X	X	X	
Mechanical Interlocks (3P)	X	X	X	—	X	X	X	X	X	X	X	X	X	X	
Handle Padlock Attachment	X	X	X	X	X [39]	X [39]	X	X	X	X	X	X	X	X	
Cylinder Lock (3P)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Optional GF Protection	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Trip System Type															
Thermal-magnetic	X	X	X	X	X	X	X	X	—	X	X	X	X	X	
Instantaneous-only (MCP)	—	—	—	—	—	X	X [40]	X [40]	X [40]	—	X [40]	X [40]	X	X	
Molded Case Switch (Automatic)	X	X	X	X	—	X	—	X	—	—	X	—	X	X	
Electronic	—	—	—	—	X [40]	X [40]	X [40]	X [40]	X [40]	X [40]	X [40]	X [40]	X [40]	X [40]	
Enclosures (page 7-75–page 7-77)															
General Purpose (NEMA 1)	—	—	—	—	X	X	X	X	—	X	X	X	X	—	
Raintight (NEMA 3R)	—	—	—	—	X	X	X	X	—	X	X	X	X	—	
Dust-tight (NEMA 12)	—	—	—	—	X	X	X	X	—	X	X	X	X	—	
Watertight (NEMA 4, 4X, 5)	—	—	—	—	X	X	X	X	—	X	X	X	X	—	
Explosion Proof (NEMA 7, 9)	—	—	—	—	—	—	—	—	—	X [41]	X [41]	—	—	—	
Dimensions (3P Unit Mount) in. (mm)	Height	5.4 (137)				6.4 (163)					7.5 (191)				
	Width	3.2 (81)				4.1 (104)					4.1 (104)				
	Depth	3.5 (89)				3.4 (86)					3.4 (86)				
Pages (Unit Mount)/(I-Line)	page 7-31/Section 9				page 7-32/Section 9					page 7-32/Section 9					

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

[34] 2P in a 3P module.
 [35] 70–250 A with electronic trip system
 [36] Not available with electronic trip units
 [37] 1P Available at 125 Vdc
 [38] Dual UL and IEC ratings and CE markings on circuit breakers. For additional IEC ratings, see the Supplemental Digest, Section 10.
 [39] Not available in HD and HG 2P rating (2P module).
 [40] 3P only.
 [41] Not UL Listed due to wire bending space.

The PowerPact Advantage

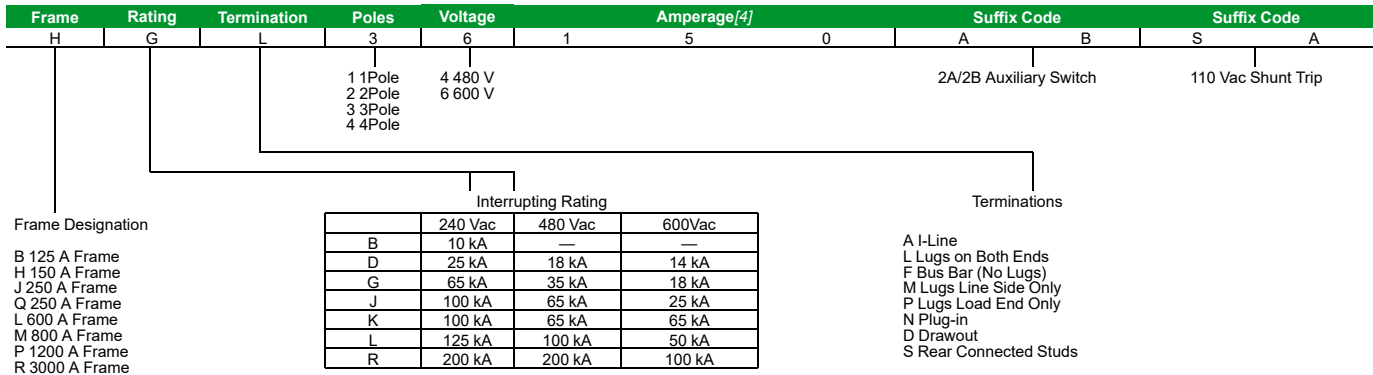
- **Proven Performance:** Industry-leading circuit breaker innovation and protection for heavy-duty commercial and industrial applications.
- **Smart:** Integrated metering options provide a cost-effective solution to reduce energy consumption, optimize energy costs, and improve energy availability for your facilities.
- **Flexible:** Full range of thermal-magnetic and electronic trip 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 7.45: PowerPact Interrupting Ratings

Voltage	Interrupting Rating						
	B	D	G	J	K	L	R
240 Vac	10 kA	25 kA	65 kA	100 kA	65 kA [1]	125 kA	200 kA
480 Vac		18 kA	35 kA	65 kA	65 kA [2]	100 kA	200 kA
600 Vac		14 kA	18 kA	25 kA	65 kA [2]	50 kA [3]	100 kA

Table 7.46: Common Catalog Numbering System



Description

- B-Frame Circuit Breakers, page 7-31
- H- and J-Frame Circuit Breakers, page 7-32
- Q-Frame Circuit Breakers, page 7-36
- L-Frame Circuit Breakers, page 7-37
- P-Frame Circuit Breakers, page 7-39
- R-Frame Circuit Breakers, page 7-40
- PowerPact™ H- and J-Frame Electronic Motor Circuit Protectors, page 7-42
- Motor Circuit Protectors and Motor Protector Circuit Breakers, page 7-45
- Automatic Switches, page 7-49
- 500 Vdc Circuit Breakers, page 7-50
- Mission Critical Circuit Breakers, page 7-52
- PowerPact™ Circuit Breaker Accessories, page 7-54
- Motor Operators and Rotary Handles, page 7-55
- Locks, Installation Accessories, and Rear Connections, page 7-57
- Mechanical Lugs, page 7-57
- Compression Lugs and Power Distribution Connectors (PDC), page 7-60
- Terminal Nuts, Terminal Pads, Terminal Shields and Accessories, page 7-62
- Plug-In and Drawout Mountings, page 7-63
- Micrologic™ Electronic Trip Units, page 7-64
- Micrologic™ Trip Unit Accessories, page 7-68

[1] B-Frame K interrupting rating is 100 kA at 240 Vac
 [2] P-frame K interrupting is 50 kA at 480 and 600 Vac.
 [3] P-frame L interrupting is 25 kA at 600 Vac.

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

Table 7.53: J-Frame 250 A Thermal-Magnetic UL Current-Limiting [9] Circuit Breakers (600 Vac, 250 Vdc) With Factory Sealed Trip Unit Suitable for Reverse Connection [10]

Current Rating @ 40°C	Adjustable AC Magnetic Trip		Interrupting Rating									
			D		G		J [9]		L [9]		R [9]	
	Low	High	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated
J-Frame 250A 2P, 600 Vac 50/60 Hz, 250 Vdc												
150 A [11]	750 A	1500 A	JDL26150	JDL26150C	JGL26150	JGL26150C	JJL26150	JJL26150C	JLL26150	JLL26150C	—	—
175 A [11]	875 A	1750 A	JDL26175	JDL26175C	JGL26175	JGL26175C	JJL26175	JJL26175C	JLL26175	JLL26175C	—	—
200 A [12]	1000 A	2000 A	JDL26200	JDL26200C	JGL26200	JGL26200C	JJL26200	JJL26200C	JLL26200	JLL26200C	—	—
225 A [12]	1125 A	2250 A	JDL26225	JDL26225C	JGL26225	JGL26225C	JJL26225	JJL26225C	JLL26225	JLL26225C	—	—
250 A [12]	1250 A	2500 A	JDL26250	JDL26250C	JGL26250	JGL26250C	JJL26250	JJL26250C	JLL26250	JLL26250C	—	—
J-Frame 250A 3P, 600 Vac 50/60 Hz, 250 Vdc												
150 A [11]	750 A	1500 A	JDL36150	JDL36150C	JGL36150	JGL36150C	JJL36150	JJL36150C	JLL36150	JLL36150C	JRL36150	JRL36150C
175 A [11]	875 A	1750 A	JDL36175	JDL36175C	JGL36175	JGL36175C	JJL36175	JJL36175C	JLL36175	JLL36175C	JRL36175	JRL36175C
200 A [12]	1000 A	2000 A	JDL36200	JDL36200C	JGL36200	JGL36200C	JJL36200	JJL36200C	JLL36200	JLL36200C	JRL36200	JRL36200C
225 A [12]	1125 A	2250 A	JDL36225	JDL36225C	JGL36225	JGL36225C	JJL36225	JJL36225C	JLL36225	JLL36225C	JRL36225	JRL36225C
250 A [12]	1250 A	2500 A	JDL36250	JDL36250C	JGL36250	JGL36250C	JJL36250	JJL36250C	JLL36250	JLL36250C	JRL36250	JRL36250C



Plug-in



Drawout



Rear Connected

Table 7.54: H- and J-Frame Interrupting Ratings

Voltage	Interrupting Rating				
	D	G	J	L	R
240 Vac	25 kA	65 kA	100 kA	125 kA	200 kA
480 Vac	18 kA	35 kA	65 kA	100 kA	200 kA
600 Vac	14 kA	18 kA	25 kA	50 kA	100 kA

Table 7.55: H- and J-Frame Termination Options

Termination Letter	H G L 3 6 1 0 0
A = I-Line (See Section 9)	For factory-installed termination, place termination letter in the third block of the circuit breaker catalog number.
F = No Lugs (includes terminal nut kit on both ends)	
L = Lugs both ends	
M = Lugs ON end Terminal Nut Kit OFF end	
P = Lugs OFF end Terminal Nut Kit ON end	
N = Plug-in	
D = Drawout	
S = Rear Connected	

Accessories see [page 7-54](#)
Optional Lugs see [page 7-59](#)
Dimensions see [page 7-75](#)
Enclosures see [page 7-76](#)

[9] Circuit breakers with J, L, and R interrupting ratings are UL certified as current limiting.
[10] See Supplemental Digest Section 3 for circuit breakers with field interchangeable trip units.
[11] Standard lug kit: AL175JD. Terminal wire range: 4–4/0 AWG Al or Cu.
[12] Standard lug kit: AL250JD. Terminal wire range: 3/0 AWG–350 kcmil Al or Cu.

Molded Case Circuit Breaker Dimensions

Table 7.149: PowerPact B-, H-, J-, and L-Frame Circuit Breakers

Circuit Breaker Frame	No. of Poles	Fig. No.	Dimensions — Inches							
			A	B	C	D	E	F	G	H
B-Frame	1	35	6.79	1.06	3.15	4.01	0.20	6.33	—	5.39
	2	36	6.22	2.12	3.15	4.01	0.86	4.48	—	5.39
	3	37	6.22	3.19	3.15	4.01	0.86	4.48	1.06	5.39
	4	38	6.22	4.25	3.15	4.01	0.86	4.48	2.12	5.39
H-Frame	2 [8]	25	6.40	2.74	2.87	4.36	0.74	4.92	—	—
	3	26	6.40	4.12	2.87	4.36	0.74	4.92	1.38	—
J-Frame	3	27	7.52	4.12	2.87	5.00	1.30	4.92	1.38	—
L-Frame	3	28	13.38	5.51	3.75	6.61	2.22	7.87	1.77	—

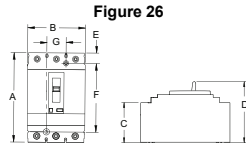
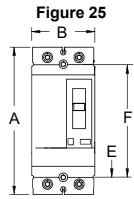


Figure 27

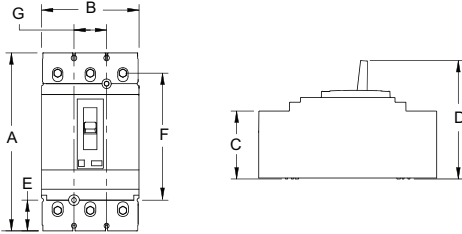


Figure 28

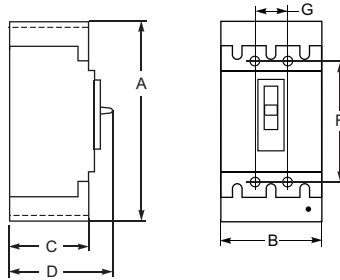


Figure 29

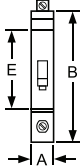


Figure 30

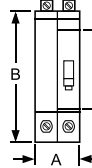


Figure 31

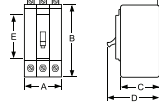


Figure 32

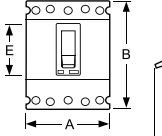


Figure 33

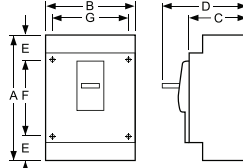


Figure 34

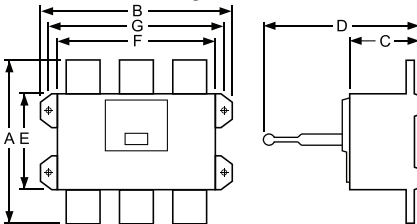


Table 7.150: ED, EG, EJ, and GJ Circuit Breakers

Circuit Breaker Cat. No. Prefix	No. of Poles	Fig. No.	Dimensions — Inches				
			A	B	C	D	E
ED, EG, EJ	1	29	0.98	5.66	3.09	4.05	3.32
ED, EG, EJ	2	30	1.96	5.66	3.09	4.05	3.32
ED, EG, EJ	3	31	2.94	5.66	3.09	4.05	3.32
GJ	3	32	3.54	4.72	2.76	3.94	2.20

Table 7.151: PowerPact M-, P-, and R-Frame Circuit Breakers

Circuit Breaker Frame	No. of Poles	Fig. No.	Dimensions — Inches						
			A	B	C	D	E	F	G
M-Frame (800 A and below)	2, 3	33	12.86	8.27	5.77	8.05	2.49	7.87	7.83
P-Frame (1000–1200 A)	2, 3	33	16.16	8.27	5.77	8.05	4.19	7.87	7.83
R-Frame	2, 3	34	16.24	16.54	6.63	14.49	8.73	14.25	15.35

Table 7.152: Shipping Weights [9]

Frame Size	Approx. Shipping Weight (Lbs.)	Frame Size	Approx. Shipping Weight (Lbs.)
B-Frame 1P	1	H-Frame 2P	4
B-Frame 2P	2	H-Frame 3P	5
B-Frame 3P	3	J-Frame	5
B-Frame 4P	4	L-Frame	14
EDB 1P	2	M-Frame	29
EDB 2P	3	P-Frame	32
EDB 3P	4	R-Frame (Without RLTB)	52

Figure 35

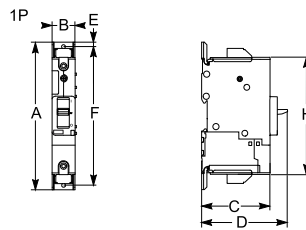


Figure 36

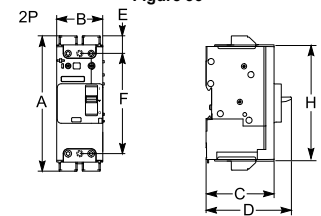


Figure 37

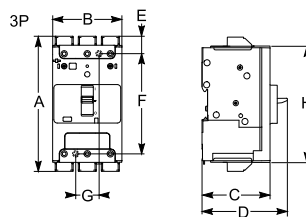
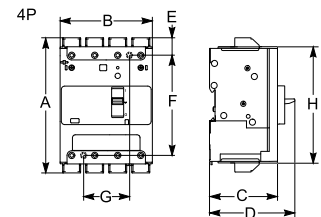


Figure 38



[8] Only HD and HG are in 2P module, HJ, HL and HR 2P are in 3P module.
[9] All weights are for 3P circuit breakers unless otherwise noted.