

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					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	14	18	25	65	14	18	25	50	100	14	18	25	50	100
	600 Vac	—	—	—	—	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	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	14	18	25	25	14	18	25	50	75	14	20	20	20	75
	690 Vac	—	—	—	—	—	—	—	—	20	—	—	—	—	20
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	X
Fed. Specs W-C-375B/GEN	X	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	X
Connections/Terminations															
Unit Mount	X	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	X
Rear Connection	—	—	—	—	X [39]	X [39]	X	X	X	X	X	X	X	X	X
Drawout	—	—	—	—	X [39]	X [39]	X	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	X
Accessories and Modifications															
Shunt Trip	X	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	X
Auxiliary Switches	X	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	X
Motor Operator	—	—	—	—	X [39]	X [39]	X	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	X
Mechanical Interlocks (3P)	X	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	X
Cylinder Lock (3P)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Optional GF Protection	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X
Trip System Type															
Thermal-magnetic	X	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	X
Molded Case Switch (Automatic)	X	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]	X [40]
Enclosures (page 7-86–page 7-88)															
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	—	X	X	X	X	X	—
Watertight (NEMA 4, 4X, 5)	—	—	—	—	X	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 7-32 / Section 9					page 7-33 / 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 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

B-Frame 125 A	H-Frame 150 A	J-Frame 250 A	Q-Frame 250 A	L-Frame 600 A	M-Frame 800 A	P-Frame 1200 A	R-Frame 3000 A
							
	Electronic Trip Version	Electronic Trip Version					

Table 7.46: 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 7.47: Common Catalog Numbering System

Frame	Rating	Termination	Poles	Voltage	Amperage[4]			Suffix Code		Suffix Code	
H	G	L	3	6	1	5	0	A	B	S	A
			1=1 Pole 2=2 Pole 3=3 Pole 4=4 Pole	4=480 V 6=600 V				2A/2B Auxiliary Switch		110 Vac Shunt Trip	

Frame Designation

B	125 A Frame
H	150 A Frame
J	250 A Frame
Q	250 A Frame
L	600 A Frame
M	800 A Frame
P	1200 A Frame
R	3000 A Frame

Interrupting Rating

	240 Vac	480 Vac	600Vac
B	10 kA	—	—
D	25 kA	18 kA	14 kA
G	65 kA	35 kA	18 kA
J	100 kA	65 kA	25 kA
K	100 kA	65 kA	65 kA
L	125 kA	100 kA	50 kA
R	200 kA	200 kA	100 kA

Terminations

A	I-Line
L	Lugs on Both Ends
F	Bus Bar (No Lugs)
M	Lugs Line Side Only
P	Lugs Load End Only
N	Plug-in
D	Drawout
S	Rear Connected Studs

For more information:

B-Frame Circuit Breakers, page 7-32
 H- and J-Frame Circuit Breakers, page 7-33
 Q-Frame Circuit Breakers, page 7-36
 L-Frame Circuit Breakers, page 7-38
 P-Frame Circuit Breakers, page 7-41
 R-Frame Circuit Breakers, page 7-42
 H, J, and L-Frame Motor Protectors, page 7-50
 Motor Circuit Protectors and Motor Protector Circuit Breakers, page 7-50
 Automatic Switches, page 7-46
 500 Vdc Circuit Breakers, page 7-45
 Mission Critical Circuit Breakers, page 7-44
 Electrical Accessories for Circuit Breakers, page 7-51
 Motor Operators, page 7-52 and Rotary Handles, page 7-53
 Locks, Installation Accessories, and Rear Connectors, page 7-54
 Mechanical Lugs, page 7-56
 Compression Lugs, page 7-57 and Power Distribution Connectors, page 7-58
 Terminal Nuts, Terminal Pads, Terminal Shields, and Accessories, page 7-59
 Plug-In and Drawout Mountings, page 7-60
 MicroLogic Electronic Trip Units, page 7-61
 Trip Unit Accessories, page 7-64

[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.



J-Frame
MicroLogicTM Trip Unit



J-Frame 3-Pole
Thermal-Magnetic Trip Unit

Table 7.53: Lug Kit Wire Ranges

Sensor Rating	Standard Lug Kit	Terminal Wire Range
60–150 A	AL150HD	14–3/0 AWG Al or Cu
250 A	AL250JD	3/0 AWG–350 kcmil Al or Cu

PowerPact H- and J-Frame Molded-Case Circuit Breakers (150 A and 250 A)

A flexible, high performance offer certified to global standards.

- Thermal magnetic or MicroLogicTM trip protection from 15–250 A up to 600 Vac and 250 Vdc
- 2 and 3-pole unit mount and I-Line constructions^[5]
- High performance UL listed interrupting ratings from 18 to 200 kA at 480 Vac
- H- and J-Frame have common mounting holes, handle locations and trim dimensions with many shared accessories and auxiliaries.
- UL, CSA, NOM, IEC, CCC certified and CE marked for global acceptance.

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
250 Vdc ^[6]	20 kA	20 kA	20 kA	20 kA	—

Table 7.55: H- and J-Frame Termination Options

Termination Letter	
A = I-Line (See Section 9—Panelboards)	H D L 3 6 0 1 5 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 7-51](#)

Optional Lugs see [page 7-56](#)

Dimensions see [page 7-87](#)

Enclosures see [page 7-88](#)

[5] H- and J- frame circuit breakers can be used as a main or sub-feed circuit breaker in an NQ or NF panelboard.

[6] Not available with electronic trip units.

PowerPact H-Frame Thermal-Magnetic Circuit Breakers

Table 7.56: Powerpact H-Frame 150 A Thermal-Magnetic UL Current-Limiting [7] Circuit Breakers (600 Vac, 250 Vdc) [8] With Factory Sealed Trip Unit Suitable for Reverse Connection [9]

Current Rating @ 40°C	Fixed AC Magnetic Trip		Interrupting Rating							
			D		G		J [8]		L [8]	
	Hold	Trip	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated	Standard (80% Rated)	100% Rated
H-Frame, 150A 2P, 600 Vac 50/60 Hz, 250 Vdc [10]										
15 A	350 A	750 A	HDL26015	HDL26015C	HGL26015	HGL26015C	HJL26015	HJL26015C	HLL26015	HLL26015C
20 A	350 A	750 A	HDL26020	HDL26020C	HGL26020	HGL26020C	HJL26020	HJL26020C	HLL26020	HLL26020C
25 A	350 A	750 A	HDL26025	HDL26025C	HGL26025	HGL26025C	HJL26025	HJL26025C	HLL26025	HLL26025C
30 A	350 A	750 A	HDL26030	HDL26030C	HGL26030	HGL26030C	HJL26030	HJL26030C	HLL26030	HLL26030C
35 A	400 A	850 A	HDL26035	HDL26035C	HGL26035	HGL26035C	HJL26035	HJL26035C	HLL26035	HLL26035C
40 A	400 A	850 A	HDL26040	HDL26040C	HGL26040	HGL26040C	HJL26040	HJL26040C	HLL26040	HLL26040C
45 A	400 A	850 A	HDL26045	HDL26045C	HGL26045	HGL26045C	HJL26045	HJL26045C	HLL26045	HLL26045C
50 A	400 A	850 A	HDL26050	HDL26050C	HGL26050	HGL26050C	HJL26050	HJL26050C	HLL26050	HLL26050C
60 A	800 A	1450 A	HDL26060	HDL26060C	HGL26060	HGL26060C	HJL26060	HJL26060C	HLL26060	HLL26060C
70 A	800 A	1450 A	HDL26070	HDL26070C	HGL26070	HGL26070C	HJL26070	HJL26070C	HLL26070	HLL26070C
80 A	800 A	1450 A	HDL26080	HDL26080C	HGL26080	HGL26080C	HJL26080	HJL26080C	HLL26080	HLL26080C
90 A	800 A	1450 A	HDL26090	HDL26090C	HGL26090	HGL26090C	HJL26090	HJL26090C	HLL26090	HLL26090C
100 A	800 A	1700 A	HDL26100	HDL26100C	HGL26100	HGL26100C	HJL26100	HJL26100C	HLL26100	HLL26100C
110 A	900 A	1700 A	HDL26110	HDL26110C	HGL26110	HGL26110C	HJL26110	HJL26110C	HLL26110	HLL26110C
125 A	900 A	1700 A	HDL26125	HDL26125C	HGL26125	HGL26125C	HJL26125	HJL26125C	HLL26125	HLL26125C
150 A	900 A	1700 A	HDL26150	HDL26150C	HGL26150	HGL26150C	HJL26150	HJL26150C	HLL26150	HLL26150C
H-Frame 150A 3P, 600 Vac 50/60 Hz, 250 Vdc										
15 A	350 A	750 A	HDL36015	HDL36015C	HGL36015	HGL36015C	HJL36015	HJL36015C	HLL36015	HLL36015C
20 A	350 A	750 A	HDL36020	HDL36020C	HGL36020	HGL36020C	HJL36020	HJL36020C	HLL36020	HLL36020C
25 A	350 A	750 A	HDL36025	HDL36025C	HGL36025	HGL36025C	HJL36025	HJL36025C	HLL36025	HLL36025C
30 A	350 A	750 A	HDL36030	HDL36030C	HGL36030	HGL36030C	HJL36030	HJL36030C	HLL36030	HLL36030C
35 A	400 A	850 A	HDL36035	HDL36035C	HGL36035	HGL36035C	HJL36035	HJL36035C	HLL36035	HLL36035C
40 A	400 A	850 A	HDL36040	HDL36040C	HGL36040	HGL36040C	HJL36040	HJL36040C	HLL36040	HLL36040C
45 A	400 A	850 A	HDL36045	HDL36045C	HGL36045	HGL36045C	HJL36045	HJL36045C	HLL36045	HLL36045C
50 A	400 A	850 A	HDL36050	HDL36050C	HGL36050	HGL36050C	HJL36050	HJL36050C	HLL36050	HLL36050C
60 A	800 A	1450 A	HDL36060	HDL36060C	HGL36060	HGL36060C	HJL36060	HJL36060C	HLL36060	HLL36060C
70 A	800 A	1450 A	HDL36070	HDL36070C	HGL36070	HGL36070C	HJL36070	HJL36070C	HLL36070	HLL36070C
80 A	800 A	1450 A	HDL36080	HDL36080C	HGL36080	HGL36080C	HJL36080	HJL36080C	HLL36080	HLL36080C
90 A	800 A	1450 A	HDL36090	HDL36090C	HGL36090	HGL36090C	HJL36090	HJL36090C	HLL36090	HLL36090C
100 A	800 A	1700 A	HDL36100	HDL36100C	HGL36100	HGL36100C	HJL36100	HJL36100C	HLL36100	HLL36100C
110 A	900 A	1700 A	HDL36110	HDL36110C	HGL36110	HGL36110C	HJL36110	HJL36110C	HLL36110	HLL36110C
125 A	900 A	1700 A	HDL36125	HDL36125C	HGL36125	HGL36125C	HJL36125	HJL36125C	HLL36125	HLL36125C
150 A	900 A	1700 A	HDL36150	HDL36150C	HGL36150	HGL36150C	HJL36150	HJL36150C	HLL36150	HLL36150C

HJ and HL are UL certified as current limiting circuit breakers.

PowerPact J-Frame Thermal-Magnetic Circuit Breakers

Table 7.57: J-Frame 250 A Thermal-Magnetic UL Current-Limiting [11] Circuit Breakers (600 Vac, 250 Vdc) With Factory Sealed Trip Unit Suitable for Reverse Connection [9]

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

JJ, JL and JR are UL certified as current limiting circuit breakers.

[7] Circuit breakers with J and L interrupting ratings are UL certified as current limiting.

[8] Standard lug kit: AL150HD. Terminal wire range: 14–3/0 AWG Al or Cu.

[9] See Supplemental Digest Section 3 for circuit breakers with field interchangeable trip units.

[10] HD and HG circuit breakers are true two-pole construction.

[11] Circuit breakers with J, L, and R interrupting ratings are UL certified as current limiting.

[12] 2P in a 3P module