

The PowerPact Advantage

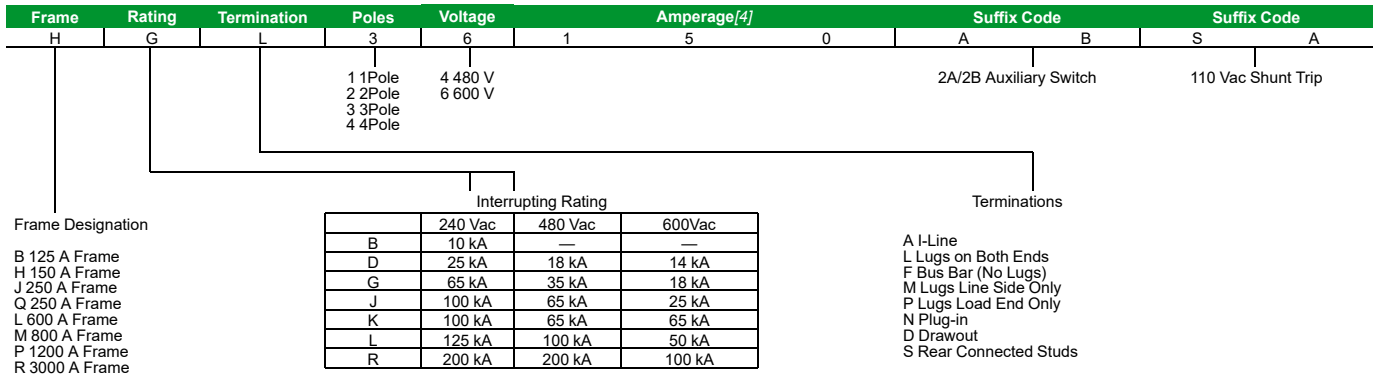
- **Proven Performance:** Industry-leading circuit breaker innovation and protection for heavy-duty commercial and industrial applications.
- **Smart:** Integrated metering options provide a cost-effective solution to reduce energy consumption, optimize energy costs, and improve energy availability for 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.

PowerPact L-Frame Molded Case Circuit Breakers

Table 7.63: L-Frame 600 A Standard (80% Rated) UL Current-Limiting [25] Circuit Breakers with Lugs and Factory-Sealed Electronic Trip Units Suitable for Reverse Connection [26][27]

Electronic Trip Unit			Sensor Rating	Interrupting Rating (80% Rated)					Terminal
Type	Function	Trip Unit		D	G	J [25]	L [25]	R [25]	
600 Vac, 50/60 Hz, 3P									
Micrologic Standard	LI	3.3 [28]	250 A	LDL36250U31X	LGL36250U31X	LJL36250U31X	LLL36250U31X	LRL36250U31X	AL400L61K3 [29]
			400 A	LDL36400U31X	LGL36400U31X	LJL36400U31X	LLL36400U31X	LRL36400U31X	AL600LS52K3 [30]
			600 A	LDL36600U31X	LGL36600U31X	LJL36600U31X	LLL36600U31X	LRL36600U31X	
Micrologic Standard	LSI	3.3S [28] [31]	250 A	LDL36250U33X	LGL36250U33X	LJL36250U33X	LLL36250U33X	LRL36250U33X	AL400L61K3 [29]
			400 A	LDL36400U33X	LGL36400U33X	LJL36400U33X	LLL36400U33X	LRL36400U33X	AL600LS52K3 [30]
			600 A	LDL36600U33X	LGL36600U33X	LJL36600U33X	LLL36600U33X	LRL36600U33X	
Micrologic Ammeter	LSI	5.3A	400 A	LDL36400U43X	LGL36400U43X	LJL36400U43X	LLL36400U43X	LRL36400U43X	AL600LS52K3 [30]
			600 A	LDL36600U43X	LGL36600U43X	LJL36600U43X	LLL36600U43X	LRL36600U43X	
Micrologic Energy	LSI	5.3E	400 A	LDL36400U53X	LGL36400U53X	LJL36400U53X	LLL36400U53X	LRL36400U53X	
			600 A	LDL36600U53X	LGL36600U53X	LJL36600U53X	LLL36600U53X	LRL36600U53X	
Micrologic Ammeter	LSIG	6.3A	400 A	LDL36400U44X	LGL36400U44X	LJL36400U44X	LLL36400U44X	LRL36400U44X	
			600 A	LDL36600U44X	LGL36600U44X	LJL36600U44X	LLL36600U44X	LRL36600U44X	
Micrologic Energy	LSIG	6.3E [32]	400 A	LDL36400U54X	LGL36400U54X	LJL36400U54X	LLL36400U54X	LRL36400U54X	
			600 A	LDL36600U54X	LGL36600U54X	LJL36600U54X	LLL36600U54X	LRL36600U54X	
600 Vac, 50/60 Hz, 4P									
Micrologic Standard	LI	3.3	250 A	LDL46250U31X	LGL46250U31X	LJL46250U31X	LLL46250U31X	LRL46250U31X	
			400 A	LDL46400U31X	LGL46400U31X	LJL46400U31X	LLL46400U31X	LRL46400U31X	AL600LS52K4 [30]
			600 A	LDL46600U31X	LGL46600U31X	LJL46600U31X	LLL46600U31X	LRL46600U31X	AL400L61K4 [29]
Micrologic Standard	LSI	3.3S [31]	250 A	LDL46250U33X	LGL46250U33X	LJL46250U33X	LLL46250U33X	LRL46250U33X	AL400L61K4 [29]
			400 A	LDL46400U33X	LGL46400U33X	LJL46400U33X	LLL46400U33X	LRL46400U33X	AL600LS52K4 [30]
			600 A	LDL46600U33X	LGL46600U33X	LJL46600U33X	LLL46600U33X	LRL46600U33X	
Micrologic Ammeter	LSI	5.3A	400 A	LDL46400U43X	LGL46400U43X	LJL46400U43X	LLL46400U43X	LRL46400U43X	AL600LS52K4 [30]
			600 A	LDL46600U43X	LGL46600U43X	LJL46600U43X	LLL46600U43X	LRL46600U43X	
Micrologic Energy	LSI	5.3E	400 A	LDL46400U53X	LGL46400U53X	LJL46400U53X	LLL46400U53X	LRL46400U53X	
			600 A	LDL46600U53X	LGL46600U53X	LJL46600U53X	LLL46600U53X	LRL46600U53X	
Micrologic Ammeter	LSIG	6.3A	400 A	LDL46400U44X	LGL46400U44X	LJL46400U44X	LLL46400U44X	LRL46400U44X	
			600 A	LDL46600U44X	LGL46600U44X	LJL46600U44X	LLL46600U44X	LRL46600U44X	
Micrologic Energy	LSIG	6.3E	400 A	LDL46400U54X	LGL46400U54X	LJL46400U54X	LLL46400U54X	LRL46400U54X	
			600 A	LDL46600U54X	LGL46600U54X	LJL46600U54X	LLL46600U54X	LRL46600U54X	

Table 7.64: L-Frame 600 A 100% Rated UL Current-Limiting [25] Circuit Breakers with Lugs and Factory-Sealed Electronic Trip Units Suitable for Reverse Connection [26][27]

Electronic Trip Unit			Sensor Rating	Interrupting Rating (100% Rated)					Terminal	
Type	Function	Trip Unit		D	G	J [25]	L [25]	R [25]		
600 Vac, 50/60 Hz, 3P										
Micrologic Standard	LI	3.3 [28]	250 A	LDL36250CU31X	LGL36250CU31X	LJL36250CU31X	LLL36250CU31X	LRL36250CU31X	AL400L61K3 [29]	
			400 A	LDL36400CU31X	LGL36400CU31X	LJL36400CU31X	LLL36400CU31X	LRL36400CU31X	AL600LS52K3 [30]	
Micrologic Standard	LSI	3.3S [28] [31]	250 A	LDL36250CU33X	LGL36250CU33X	LJL36250CU33X	LLL36250CU33X	LRL36250CU33X	AL400L61K3 [29]	
			400 A	LDL36400CU33X	LGL36400CU33X	LJL36400CU33X	LLL36400CU33X	LRL36400CU33X	AL600LS52K3 [30]	
Micrologic Ammeter	LSI	5.3A	400 A	LDL36400CU43X	LGL36400CU43X	LJL36400CU43X	LLL36400CU43X	LRL36400CU43X	AL600LS52K3 [30]	
Micrologic Energy	LSI	5.3E	400 A	LDL36400CU53X	LGL36400CU53X	LJL36400CU53X	LLL36400CU53X	LRL36400CU53X		
Micrologic Ammeter	LSIG	6.3A	400 A	LDL36400CU44X	LGL36400CU44X	LJL36400CU44X	LLL36400CU44X	LRL36400CU44X		
Micrologic Energy	LSIG	6.3E [32]	400 A	LDL36400CU54X	LGL36400CU54X	LJL36400CU54X	LLL36400CU54X	LRL36400CU54X		
600 Vac, 50/60 Hz, 4P										
Micrologic Standard	LI	3.3	250 A	LDL46250CU31X	LGL46250CU31X	LJL46250CU31X	LLL46250CU31X	LRL46250CU31X		AL400L61K4 [29]
			400 A	LDL46400CU31X	LGL46400CU31X	LJL46400CU31X	LLL46400CU31X	LRL46400CU31X		AL600LS52K4 [30]
Micrologic Standard	LSI	3.3S	250 A	LDL46250CU33X	LGL46250CU33X	LJL46250CU33X	LLL46250CU33X	LRL46250CU33X		AL400L61K4 [29]
			400 A	LDL46400CU33X	LGL46400CU33X	LJL46400CU33X	LLL46400CU33X	LRL46400CU33X		AL600LS52K4 [30]
Micrologic Ammeter	LSI	5.3A	400 A	LDL46400CU43X	LGL46400CU43X	LJL46400CU43X	LLL46400CU43X	LRL46400CU43X		AL600LS52K4 [30]
Micrologic Energy	LSI	5.3E	400 A	LDL46400CU53X	LGL46400CU53X	LJL46400CU53X	LLL46400CU53X	LRL46400CU53X		
Micrologic Ammeter	LSIG	6.3A	400 A	LDL46400CU44X	LGL46400CU44X	LJL46400CU44X	LLL46400CU44X	LRL46400CU44X		
Micrologic Energy	LSIG	6.3E	400 A	LDL46400CU54X	LGL46400CU54X	LJL46400CU54X	LLL46400CU54X	LRL46400CU54X		



L-Frame Circuit Breaker

Table 7.65: Termination Options

Termination Letter	Termination Option	
A	I-Line (See Section 9)	For factory-installed termination, place termination letter in the third block of the circuit breaker catalog number. Termination Letter L G L 3 6 6 0 0 U 4 4 X
F	No lugs	
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	

[25] Circuit breakers with J, L, and R interrupting ratings are UL certified as current limiting.
 [26] See Supplemental Digest Section 3 for circuit breakers with field interchangeable trip units.
 [27] For applications requiring communications see page 7-68.
 [28] 3P circuit breakers with this trip unit can be used for 2P applications.
 [29] AL400L61K3 terminal wire ranges are (1) 2 AWG–600 kcmil Cu or (1) 2 AWG–500 kcmil Al.
 [30] AL600LS52K3 terminal wire range is (2) 2/0 AWG–500 kcmil Al/Cu.
 [31] Fixed ST and LT delays.
 [32] 3P circuit breakers with this trip unit can be used for 2P applications in order to have ground fault protection. Additional metering capabilities will not work properly on the unconnected phase.