

Power requirements

General

All switches, slow-blow fuses and power cables are customer-supplied and must be chosen as outlined by applicable national and local electrical codes. Installation must be performed by a licensed electrician. Use a separate, primary, line disconnect switch for the power supply. Recommendations on fuse and circuit breaker sizing are listed below, however actual sizes required will vary based on individual site electrical line conditions (including but not limited to: source impedance, line impedance, and line voltage fluctuation), product inrush characteristics, and regulatory requirements.

The main feed protection device (circuit breaker or fuse) must be sized to handle all branch-feed loads for both inrush and steady-state current. The power supply must be wired into one of the branch-feed circuits. The power supply has a steady-state current listed in the table below.

Use a motor-start circuit breaker or equivalent if time delay high inrush fuses are not permitted by local and national codes. Time delay fuses and circuit breakers must be capable of withstanding inrush current that is up to **30** times the rated input current (FLA) for 0.01 seconds and up to **12** times the rated input current (FLA) for 0.1 seconds.

Input voltage	Phase	Rated input current (FLA) @ 80 kW output	Recommended time delay, high inrush fuse size	Recommended cable size for 15 m (50 ft) maximum length
				Rated for 90°C (194°F)
200/208 VAC	3	262/252 amps	325 amps	235 mm ² (350 MCM)
220 VAC	3	238 amps	300 amps	201.1 mm ² (300 MCM)
240 VAC	3	219 amps	275 amps	167.5 mm ² (250 MCM)
380 VAC	3	138 amps	175 amps	67.5 mm ² (2/0 AWG)
400 VAC	3	131 amps	175 amps	67.5 mm ² (2/0 AWG)
440 VAC	3	120 amps	150 amps	53.5 mm ² (1 AWG)
480 VAC	3	110 amps	150 amps	53.5 mm ² (1 AWG)
600 VAC	3	88 amps	110 amps	26.7 mm ² (3 AWG)

Note: Cable AWG recommendations taken from table 310-16 of the National Electric Code handbook (USA).