



Powermax Sync 85 Specifications

Cut capacity

Capacity	Thickness	Cut speed
Recommended	25 mm (1")	500 mm/min (20 ipm)
	32 mm (1-1/4")	250 mm/min (10 ipm)
Severance (hand cutting)	38 mm (1-1/2")	125 mm/min (5 ipm)
Pierce*	20 mm (3/4")	

*Pierce rating for handheld cutting, or mechanized cutting with programmable torch height control.

Maximum removal gouging

Capacity	Metal removal rate	Gouge profile
Typical gouge	8.2 kg (18.2 lbs.) per hour	3.5 mm D x 6.6 mm W (0.14" D x 0.26" W)

General specifications

Input voltages	200–480 V, 1-PH, 50/60 Hz 200–600 V, 3-PH, 50/60 Hz
Kilowatt output	12.2 kW
Input current	200/208/240/480, 1-PH 70/68/58/29 A @ 12.2 kW 200/208/240/480/600 V, 3-PH 42/40/35/18/17 A @ 12.2 KW
Output current	25–85 A
Rated output voltage	143 VDC
Duty cycle @ 104° F	60% @ 85 A, 230–600 V, 3-PH 60% @ 85 A, 480 V, 1-PH 50% @ 85 A 240 V, 1-PH 50% @ 85 A, 200–208 V, 3-PH 40% @ 85 A, 200–208 V, 1-PH 100% @ 66 A, 230–600 V, 1/3-PH
Open circuit voltage (OCV)	305 VDC
Dimensions with handles	483 mm D; 233 mm W; 430 mm H (19" D; 9.2" W; 17" H)
Weight w/7.6 m (25') torch	32 kg (67 lbs.)
Gas supply	Clean, dry, oil-free air or nitrogen
Optimum inlet gas pressure	7.6–8.3 bar (110–120 psi)
Minimum inlet gas pressure	5.2 bar (75 psi)
Recommended inlet gas flow rate	Cutting: 210 l/min @ 5.9 bar (450 scfh, 7.5 scfm @ 85 psi) Gouging: 210 l/min @ 4.8 bar (450 scfh, 7.5 scfm @ 70 psi)
Input power cable length	3 m (10')
Power supply type	Inverter–IGBT
Engine drive requirement	20 kW for full 85 A output
Certifications	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty