

Powermax125

Recommended cut capacity of 38 mm (1-1/2")

Severance capacity of 57 mm (2-1/4")

Professional grade



Part of the Powermax® family, the Powermax125 features a 100% duty cycle for the most demanding hand cutting, mechanized or robotic cutting, or gouging.

Key business benefits

Boost productivity

Finish jobs faster with cut speeds five times greater than oxyfuel on 12 mm (1/2") mild steel

Minimize operating costs

Consumable life up to four times longer than other systems in this amperage range

Reduce secondary operations

Superior cut and gouge quality lets you spend less time grinding and preparing edges

Powermax125 cut and gouge capacities

Cut capacity	Thickness	Cut speed
Recommended	38 mm (1-1/2")	457 mm/min (18 ipm)
	44 mm (1-3/4")	250 mm/min (10 ipm)
Severance (hand cutting)	57 mm (2-1/4")	125 mm/min (5 ipm)
Pierce*	25 mm (1")	

*Pierce rating for handheld use or with automatic torch height control

Gouge capacity	Metal removal rate	Groove profile
Typical gouge	12.52 kg/hr (27.6 lbs/hr)	4.3-7.9 mm D x 6.1-9.9 mm W (0.17-0.31" D x 0.24-0.39" W)

Torch output**	21.9 kW
	125 A x 175 V ÷ 1000 W = 21.9 kW

**Higher output voltage at the torch plus efficiently designed consumables result in a faster, cleaner cut.

Powermax125. Maximum power and performance.

The Powermax125® cuts thick metals fast and makes short work of your toughest cutting and gouging jobs. It offers a 100% duty cycle for maximum operation time, making it the preferred system for many mechanized or robotic cutting jobs. Smart Sense™ technology automatically adjusts the gas pressure so you can focus on the job and not the setup.

Make short work of your toughest cutting and gouging jobs with the Powermax125.

THE BEST INVESTMENT IS IN YOUR POWER

Our customers' preferred cutting tool for industries including:

- Shipbuilding/ship repair
- Truck and trailer fabrication
- Tank and vessel manufacturing
- Railyard maintenance and railcar fabrication
- Demolition and metal salvage
- Agricultural/equipment maintenance

Highlighted product features:

Easy to use

- No need to change the air pressure – Smart Sense™ technology ensures it's correctly set
- Drag cut at full output with a patented shield that reduces dross buildup for smoother cutting
- Superior cut and gouge quality lets you spend less time on grinding and edge preparation
- Electrode end-of-life detection protects the torch and workpiece from damage by automatically stopping power when the electrode is overused
- 100% duty cycle maximizes your operating time

Low operating costs

- Eleven Duramax® Hyamp™ torch styles provide versatility for hand cutting, portable automation, X-Y table cutting, extended reach cutting, and robotic cutting
- Six types of consumables for drag cutting, fine feature cutting, flush cutting, mechanized cutting, plus maximum control and removal gouging

Industry-leading reliability

- Powermax plasma cutters are known to last decades in the field, minimizing maintenance and downtime
- Power supplies and torches are engineered for rugged industrial environments
- Each Powermax component is tested to perform reliably in demanding conditions
- SpringStart™ technology ensures consistent starting and a more reliable torch

Specifications

CE – for use in Europe, Australia & New Zealand - RCM, Serbia, UK – UKCA, Ukraine, and other countries where accepted.

CCC – for use in China







CSA – for use in the Americas and Asia, except China

CE	CCC	CSA	
Input voltages (± 10%)			
		↳	480/600 V, 3-PH, 50/60 Hz
	↳		380 V, 3-PH, 50/60 Hz
↳			400 V, 3-PH, 50/60 Hz
Input current @ 12.2 kW			
		↳	480/600 V, 31/24 A
↳	↳		380 V, 3-PH, 38 A
↳	↳		400 V, 3-PH, 36 A
Output current			30–125 A
Rated output voltage			175 VDC
Duty cycle @ 40° C (104° F)			
		↳	100% @ 125 A, 480/600 V, 3-PH
↳	↳		100% @ 125 A, 380/400 V, 3-PH
Open circuit voltage (OCV)			
		↳	320 VDC
	↳		290 VDC
↳			305 VDC
Dimensions with handles			592 mm D; 274 mm W; 508 mm H (23.3" D; 10.8" W; 20.0" H)
Weight with w/7,6 m (25') torch			
		↳	480 V 47.9 kg (105.7 lbs)
		↳	600 V 47.5 kg (104.7 lbs)
↳	↳		380 V 45.2 kg
↳	↳		400 V 48.9 kg
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			5.5 bar (80 psi)
Recommended gas inlet flow rate/pressure			Cutting: 260 l/min (550 scfh) @ 5.9 bar (85 psi) Gouging: 212 l/min (450 scfh) @ 4.1 bar (60 psi)
Input power cable length			3 m (10')
Power supply type			Inverter – IGBT
Engine drive requirement			40 kW or 50 kVA for full 125 A output
Electrical efficiency			91%–92%
Recyclability			100%
Warranty			Power supply: 3-year, Torch: 1-year

Ordering information

Below are the standard system configurations, which include a power supply, torch and work cable.

CE – for use in Europe, Australia & New Zealand - RCM, Serbia, UK – UKCA, Ukraine, and other countries where accepted. CCC – for use in China GSA – for use in the Americas and Asia, except China			85° hand torch			85° and 15° hand torch		180° full-length machine torch				180° full-length machine torch and 85° hand torch
CE	CCC	GSA	Torch lead length	7.6 m (25')	15.2 m (50')	7.6 m (25')	7.6 m (25')	7.6 m (25')	7.6 m (25') with I/O cables	15.2 m (50')	15.2 m (50') with I/O cables	10.7 m/7.6 m (35'/25')
			✓ = With remote pendant									





Powermax125® power supplies		Voltage configuration	Handheld				Mechanized						
  	Power supply with CPC port and voltage divider	380 V CCC ¹	059556	059557			059558	059583			059584		
		400 V CE	059526	059527	059528	059572	059530			059531			059529
		480 V	059536	059537	059538	059569	059532			059540			059541
		600 V	059546	059547	059555	059570	059533			059553			059542
  	Power supply with CPC port, voltage divider, and serial port	380 V CCC ¹									059561		
		400 V					059560			059532	059534	059533	059535
		480 V								059542	059544	059543	059545
		600 V								059550	059548	059551	059549

¹ Does not include a power cord.

Custom configurations

Select power supply, torch, work cable, cartridge, and other components

Power supply options

CE – for use in Europe, Australia & New Zealand - RCM, Serbia, UK – UKCA, Ukraine, and other countries where accepted. CCC – for use in China GSA – for use in the Americas and Asia, except China			With CPC port and voltage divider	With CPC port, voltage divider and serial port
CE	CCC	GSA		
	Powermax125 380 V ¹		059490	059491
	Powermax125 400 V		059486	059487
	Powermax125 480 V		059488	059489
	Powermax125 600 V		059509	059510

¹ Does not include a power cord.

Work leads

	Hand clamp	C-clamp	Ring terminal
7.6 m (25')	223292	223298	223295
15.2 m (50')	223293	223299	223296
22.8 m (75')	223294	223300	223297
45.7 m (150')	223737		223744

Cable options

Cable length	Remote pendant	Control cables				
		CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	CNC, D-sub connector, divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub
7.6 m (25')	128650	228350	023206	223048	223236	223239
15.2 m (50')	128651	228351	023279	123896	223237	223240
22.8 m (75')	128652					

Torch options

Cable length	Hand torches		Machine torches		Robotic torches			Long torches					
	85°	15°	180°	Mini 180°	45°	90°	180°	0.6 m (2'), 45°	0.6 m (2'), 90°	1.2 m (4'), 45°	1.2 m (4'), 90°	1.8 m (6'), 90°	1.8 m (6'), 45°
4.5 m (15')			059519	059514									
7.6 m (25')	059492	059495	059520	059515	059564	059565	059566	059562	059563	059567	059568	059623	059758
10.7 m (35')			059521	059516									
15.2 m (50')	059493	059496	059522	059517	059670	059671	059672	059579	059580	059581	059582	059624	059759
22.8 m (75')	059494	059497	059523										
45.7 m (150')*	059665	059664		059666				059667		059667	059668		

*45.7 m (150') torch leads are compatible only with Powermax125 systems with a serial number of 125-007944 or higher.

Torch consumable parts

Nozzles and electrodes are available in various quantities. Contact your distributor for more information.

Consumable type	Torch type	Amperage	Nozzle	Shield/Deflector	Retaining cap	Swirl ring	Electrode
Drag-cutting	Hand	45	420158	420172	220977	220997	220971
		65	420169	420172			
		125	220975	420000			
Mechanized	Machine	45	420158	420168	220977 or 420156 ¹	220997	220971
		65	420169	420168			
		125/105	220975	220976			
FineCut®	Hand	45	420151	420152	220977 or 420156 ¹	420159	220971
	Machine					220997	
Max removal gouging	Hand/Machine	30-125	420001	420112	220977	220997	220971
Max control gouging	Hand/Machine	30-125	420001	420509	220977	220997	220971

¹ Ohmic retaining cap



Learn more at www.hypertherm.com/Powermax125

Unless otherwise noted in the collateral, all trademarks are property of Hypertherm, Inc. and may be registered in the United States and/or other countries.

Please visit www.hypertherm.com/patents for more details about Hypertherm Associates patent numbers and types.

© 4/2024 Hypertherm, Inc. Revision 6

860380EN-EU

As 100% Associate owners, we are all focused on delivering a superior customer experience. www.hyperthermassociates.com/ownership

Environmental stewardship is one of Hypertherm Associates' core values. www.hyperthermassociates.com/environment

100% Associate-owned

