

Powermax45 SYNC

Recommended cut capacity of 16 mm (5/8") Severance capacity of 29 mm (1 1/8") Professional grade



Part of the Powermax® family, the Powermax45 SYNC features advanced torch communication for automated setup and patented single-piece cartridges for hand cutting, mechanized or robotic cutting, marking, or gouging.

Key business benefits

Simplify operations and boost productivity

Single-piece cartridge simplifies operations and dramatically reduces training time

Minimize operating costs

Up to 5x longer consumable life compared to competitors decreases operating costs

Reduce secondary operations

Improved cut quality over consumable life delivers better part consistency to reduce secondary operations

Cut and gouge capacities

Cut capacity	Thickness	Cut speed		
Recommended	16 mm (5/8")	500 mm/min (20 ipm)		
Severance (hand cutting)	29 mm (1-1/8")	125 mm/min (5 ipm)		
Pierce*	12 mm (1/2")			
*Pierce rating for handheld us	e or with automatic torch height cont	trol		
Gouge capacity	Metal removal rate	Groove profile		
Typical gouge	3.4 kg (7.5 lbs) per hour	3.2 mm (.12") D x 6,8 mm (.26") W		

Torch output**	6.9 kW
	45 A x 155 V ÷ 1000 W = 6.9 kW

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

Easy to use. Versatile. Reliable.

For metal workers who want the most versatile system available to gouge, cut, and mark, Powermax45 SYNC delivers the best return on investment with a patented single-piece cartridge, up to 5x longer consumable life, and greater cutting power than higher-amperage competitors.

Our proprietary single-piece, color-coded cartridges help operators eliminate mix-ups, simplify inventory management, and decrease operating costs.





Highlighted product features:

Easy to use

- A patented single-piece cartridge eliminates operator error and simplifies operations
- Advanced torch communication for automated setup improves cut quality
- Easy to set up for mechanized usage with optional CNC interface and FastConnect™ torch connection

Versatile

- Gain greater cutting power than higher-amperage competitors
- Expand application capabilities with a wide variety of specialty cartridges and torches
- Cut and mark using the same FineCut® cartridge

Industry-leading reliability

- Powermax plasma cutters are known to last decades in the field, minimizing maintenance and downtime
- SmartSYNC® torches are engineered for rugged industrial environments
- Each Powermax component is tested to perform reliably in demanding conditions

Our customers' preferred cutting tool for industries including:

- Job shops/fabricators
- Property/plant maintenance
- HVAC/mechanical contracting
- Educational/trade schools
- Agricultural/equipment maintenance

Specifications – CSA					
	200-240 V, 1-PH, 50/60 Hz				
Input voltages (± 10%)	480 V, 3-PH, 50/60 Hz				
Input current @ 6.9 kW	200-240 V, 1-PH, 39/32 A				
	480 V, 3-PH, 10 A				
Output current	9-45 A				
Rated output voltage	155 VDC				
	50% @ 45 A, 200-240 V, 1-PH				
	60% @ 41 A, 200-240 V, 1-PH				
Duty cycle @ 40° C	100% @ 32 A, 200-240 V, 1-PH				
(104° F)	50% @ 45 A, 480 V, 3-PH				
	60% @ 41 A, 480 V, 3-PH				
	100% @ 32 A, 480 V, 3-PH				
Ones sines: 1 (OOV)	275 VDC 200-240 V				
Open circuit voltage (OCV)	275 VDC 480 V				
Weight with 6.1 m (20') torch	14 kg (31 lbs.)				

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

Specifications - CE/CCC				
	230 V, 1-PH, 50/60 Hz			
Input voltages (± 10%)	400 V, 3-PH, 50/60 Hz			
Input current @ 6.9 kW	230 V, 1-PH, 33 A			
	400 V, 3-PH, 10 A			
Output current	9-45 A			
Rated output voltage	155 VDC			
	50% @ 45 A, 230 V, 1-PH			
	60% @ 41 A, 230 V, 1-PH			
Duty cycle @ 40° C	100% @ 32 A, 230 V, 1-PH			
(104° F)	50% @ 45 A, 400 V, 3-PH			
	60% @ 41 A, 400 V, 3-PH			
	100% @ 32 A, 400 V, 3-PH			
0	275 VDC 200-240 V			
Open circuit voltage (OCV)	265 VDC 400 V			
Weight with 6.1 m (20') torch	15 kg (33 lbs.)			

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

Dimensions with handles	442 mm (17.4") D; 173 mm (6.8") W; 357 mm (14.1") H				
	Cutting: air (clean, dry and oil-free), nitrogen, F5				
Gas supply	Gouging: air (clean, dry and oil-free), nitrogen, F5				
	Marking: air (clean dry and oil-free)				
Recommended gas inlet flow rate/ pressure	188 I/min @ 5.9 bar (400 scfh 6.7 scfm @ 90 psi)				
Input power cable length	3 m (10')				
Power supply type	Inverter - IGBT				
Engine drive requirement	12.5 kVA (10 kW) for full 45 A output				
Electrical efficiency	90%				
Recyclability	100%				
Warranty	Power supply: 6-year, Torch: 1-year				

Ordering information - CSA

Below are the standard system configurations, which include a power supply, torch or torches, work cable, product information, and 1-2 cartridges.

CSA – for use in the Americas and Asia, except China	75° hand torch 75° and 15° hand torch		180° full-length machine torch			180° full-length machine torch and 75° hand torch	
Torch lead length	6.1 m (20')	15.2 m (50')	6.1 m (20') and 7.6m (25')	7.6 m (25')		15.2 m (50')	7.6m (25') and 6.1 m (20')
✓ = With remote pendant					✓		✓
Powermax45 SYNC® power supplies	Handheld Mechanized					ed	
200-240 V CSA standard power supply	088560	088561	088564				
OOO OAO V OOA nower aventy with ODO next and voltage divides		000500		000500	000500	000504	000500
200-240 V GSA power supply with CPC port and voltage divider	088562	088563		088580	088582	088581	088583

Custom configurations - CSA

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

Power supply options		Standard	With CPC port and voltage divider	With CPC port, voltage divider and serial port	
	Powermax45 SYNC 230V CSA	088570	088571	088572	
	Powermax45 SYNC 480V CSA	088573			

Ordering information - CE/CCC

Below are the standard system configurations, which include a power supply, torch or torches, work cable, product information, and 1-2 cartridges.

CE - for use in Europe, Australia & New Zealand - RCM, Serbia, UK - UKCA, Ukraine, and other countries where accepted. CCC - for use in China.	75° har	id torch	75° and 15° hand torch	180° full-length machine torch		180° full-length machine torch and 75° hand torch	
Torch lead length	6.1 m (20')	15.2 m (50')	6.1 m (20') and 7.6m (25')	7.6 m (25')		15.2 m (50')	7.6m (25') and 6.1 m (20')
✓ = With remote pendant					✓		~
Powermax45 SYNC® power supplies	Powermax45 SYNC® power supplies Handheld			Mechanized			
400 V CE/CCC standard power supply	088565	088566					
400 V CE/CCC power supply with CPC port and voltage divider	088567			088585		088586	
230 V CE/CCC standard power supply	088568						
230 V CE/CCC power supply with CPC port and voltage divider	088569			088587			

Custom configurations - CE/CCC

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

Power supply options	Standard	With CPC port and voltage divider	With CPC port, voltage divider and serial port
Powermax45 SYNC 400 V CE/CCC	088574	088575	088576
Powermax45 SYNC 230 V CE/CCC	088577	088578	088579

Cable options

	Work cables		Control cables								
Cable length	Hand clamp	Remote pendant	CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub					
7.6 m (25')	223595	128650	228350	023206	223236	223239					
15.2 m (50')	223596	128651	228351	023279	223237	223240					
22.8 m (75')	223127	128652									

Torch options

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	Hand torches			Long torches		Machine torches		Robotic/Mini		
	75°	15°	0.6 m (2'), 45°	0.6 m (2'), 90°	1.2 m (4'), 45°	1.2 m (4'), 90°	180°	180°	90°	45°
4.5 m (15')								059733		
7.6 m (25')	059726	059723			528114		059719	059734	059731	059729
10.7 m (35')							059720			
15.2 m (50')	059727	059724	528116	528117	528118	528119	059721	059735	059732	059730
22.8 m (75')	059728	059725					059722		059767	059766
30 m (100')	059770							059801		

Cable options

	Work cables		Control cables								
Cable length	Hand clamp	Remote pendant	CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub					
7.6 m (25')	223595	128650	228350	023206	223236	223239					
15.2 m (50')	223596	128651	228351	023279	223237	223240					
22.8 m (75')	223127	128652									

Powermax cartridge options

	Drag cutting	Mechanized/standoff cutting	Max removal gouging	Max control gouging	Ohmic ring kit
45 A	428927	428925	428932	428933	428895

	FineCut®		
	Handheld	Mechanized	
30-45 A	428928	428926	

Accessories

Part number	Description	
528083	Hypertherm Cartridge Reader	
128647	Eliminizer Air Filtration Kit, 1-micron filter and auto-drain moisture separator	
024877	Leather Torch Lead Cover with hook and loop closure, Black, 7.6 m (25') section	
027669	Plasma Circle Cutting Guide, SmartSYNC Deluxe Kit with magnetic base	
127219	System Storage Dust Cover, Powermax45/45 XP/45 SYNC	



Learn more at www.hypertherm.com/powermax45sync

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