

Hypertherm®

New Powermax SYNC™ series

Professional air plasma systems from 65–105 amps





A dramatically simplified consumable platform combined with advanced torch communication for automated setup makes Hypertherm's new Powermax65/85/105 SYNC™ plasma systems the smarter choice for any cutting or gouging application.

SmartSYNC torch

- Simple, twist-on consumable installation
- Convenient power and amperage adjustment controls



Cartridge

- Single-piece
- Easy to identify
- RFID communicates amperage and type





Auto-set power supply

- Automatic process and amperage setting
- Data display



Easy to use

- Easy to identify single-piece cartridge consumables are color coded by process to eliminate parts mix-up and simplify consumable inventory management.
- New SmartSYNC™ torches with the Hypertherm cartridge automatically set the correct amperage and operating mode, eliminating setup errors.
- End of life detection lets the operator know when it's time to change the cartridge.

Minimizes operating costs

- Simplified operation minimizes downtime, troubleshooting, waste and training time.
- Advanced cartridge consumable design provides up to twice the life for hand cutting and improved quality over life compared to standard consumables.
- Access cartridge data for performance tracking, analyzing usage patterns.

	Powermax65 SYNC		Powermax85 SYNC		Powermax105 SYNC	
Capacity	Thickness	Cut speed	Thickness	Cut speed	Thickness	Cut speed
Cutting						
Recommended	20 mm	500 mm/min	25 mm	500 mm/min	32 mm	500 mm/min
	25 mm	250 mm/min	32 mm	250 mm/min	38 mm	250 mm/min
Severance	32 mm	125 mm/min	38 mm	125 mm/min	50 mm	125 mm/min
Pierce*	16 mm		20 mm		22 mm	
*Pierce rating for handheld use or with automatic height control						
Capacity	Metal removal rate	Groove profile	Metal removal rate	Gouge profile	Metal removal rate	Gouge profile
Maximum removal gouging						
Typical gouge	4 kg per hour	2,9 mm D x 6,4 mm W	8,2 kg per hour	3,5 mm D x 6,6 mm W	8,6 kg per hour	6,6 mm D x 6,2 mm W



Powermax 105 SYNC

Maximize performance

- Tackle a wide range of jobs with easily interchangeable torch styles and application-specific Hypertherm cartridge consumables for various types of cutting and gouging.
- Reduce training time with simplified set up and consistent performance.
- Time-saving torch controls allow the operator to adjust the amperage on the fly and change consumables and applications without returning to the power supply.

Industry-leading reliability

- SmartSYNC™ torches are engineered for rugged, industrial environments.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Industry-leading reliability reduces production downtime.

Torches and cartridges



New color-coded, quarter-turn cartridges can be changed out in about 10 seconds!

Gouging mode LED

Amperage adjustment button

Active/Inactive/Fault LED

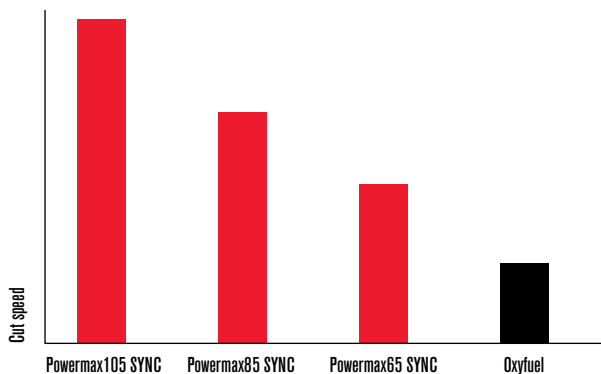
7-step amperage LED scale

Torch lock switch

Specifications

	Powermax65 SYNC™	Powermax85 SYNC™	Powermax105 SYNC™
Input voltages	380 V, 3-PH 50/60 Hz	380 V, 3-PH, 50/60 Hz	380 V, 3-PH, 50/60 Hz
Kilowatt output	9 kW	12,2 kW	16,8 kW
Input current	380 V, 3-PH 15,5 A @ 9 kW	380 V, 3-PH 20,5 A @12,2 kW	380 V, 3-PH 30 A @ 16 kW
Output current	20–65 A	25–85 A	30–105 A
Rated output voltage	139 VDC	143 VDC	160 VDC
Duty cycle @ 40° C	50% @ 65 A, 380 V, 3-PH 100% @ 46 A, 380 V, 3-PH	60% @ 85 A, 380 V, 3-PH 100% @ 66 A, 380 V, 3-PH	80% @ 105 A, 380 V, 3-PH 100% @ 94 A, 380 V, 3-PH
Open circuit voltage (OCV)	270 VDC	270 VDC	300 VDC
Dimensions with handles	483 mm D; 233 mm W; 430 mm H	483 mm D; 233 mm W; 430 mm H	592 mm D; 274 mm W; 508 mm H
Weight w/7,6 m torch	20,6 kg	23,5 kg	42,7 kg
Gas supply	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen
Optimum inlet gas pressure	7,6–8,3 bar	7,6–8,3 bar	7,6–8,3 bar
Minimum inlet gas pressure	5,2 bar	5,2 bar	5,5 bar
Recommended inlet gas flow rate	Cutting: 210 l/min @ 5,9 bar Gouging: 210 l/min @ 4,8 bar	Cutting: 210 l/min @ 5,9 bar Gouging: 210 l/min @ 4,8 bar	Cutting: 260 l/min @ 5,9 bar Gouging: 260 l/min @ 4,8 bar
Input power cable length	3 m	3 m	3 m
Power supply type	Inverter – IGBT	Inverter – IGBT	Inverter – IGBT
Engine drive requirement	15 kW for full 65 A output	20 kW for full 85 A output	30 kW for full 105 A output
Certifications	CCC – for use in China.	CCC – for use in China.	CCC – for use in China.
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty

Relative cut performance on 12 mm mild steel



Ordering information

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

CCC	75° hand torch		75° and 15° hand torch
Torch lead length	7,6 m	15,2 m	7,6 m
Powermax65 SYNC™ power supplies			Without remote pendant
Standard power supply	083356	083357	083360
Power supply with CPC port and voltage divider	083358	083359	
Powermax85 SYNC™ power supplies			Without remote pendant
Standard power supply	087196	087197	087200
Power supply with CPC port and voltage divider	087198	087199	
Powermax105 SYNC™ power supplies			Without remote pendant
Standard power supply	059690	059691	059692

Custom configurations (select power supply, torch, work cable, cartridge, and other components)

Power supply options

	Standard power supply	Power supply with CPC port and voltage divider	Power supply with CPC port, voltage divider and serial port
Powermax65 SYNC 380 V	083368	083369	083370
Powermax85 SYNC 380 V	087210	087211	087212
Powermax105 SYNC 380 V	059705	059709	059710

Torch options

	Hand torches	
	75°	15°
7,6 m	059726	059723
15,2 m	059727	059724
22,8 m	059728	059725

Cable options

Work cables			
Cable length	Hand clamp	C-style clamp	Ring terminal
7,6 m	223254	223287	223284
15,2 m	223255	223288	223285
22,8 m	223256	223289	223286

Hypertherm cartridge options

	Drag cutting	Standoff cutting	Max removal gouging	Max control gouging
45 A	428927	428925	428932	428933
65 A	428931	428930		
85 A	428935	428934		
105 A	428937	428936	428938	428939

Specialty application cartridge options

	FlushCut™	FineCut® handheld
30-45 A		428928
65 A	428952	
85 A	428953	
105 A	428954	

For more information, visit:
www.hypertherm.com

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