

# Hypertherm®

## powermax190c®

**Portable Plasma Cutting System With Air Compressor**



**1/8"** (3 mm)  
**RECOMMENDED  
CAPACITY**

**3/16"** (4.5 mm)  
**MAXIMUM  
CAPACITY**

**1/4"** (6 mm)  
**SEVERANCE  
CAPACITY**

# powermax190c<sup>®</sup>

## Portable Air Plasma Cutting System With Built-in Compressor

*The benefits of Hypertherm technology –*

- **Integrated compressor – no air supply needed**
- **Convenience of 120 V (or 230 V international) input**
- **1.32 kW cutting power exceeds most competitors**
- **Portable, professional package**
- **Built-in storage compartment for consumables**



### Powermax190c Makes These Industries More Productive:

- HVAC fabrication and installation
- Building contractors – metal studs
- Trade contractors – mechanical
- Auto and truck service and repair
- Factory and farm maintenance
- Art and decorative metal
- Other sheet metal applications



### Superior Performance and Versatility

The Powermax190c plasma cutting system takes professional metal-cutting power where it has never been before. Just plug it into most household power† and you're in business. And don't worry about providing separate air, because a built-in compressor gives you all that you'll need. You'll be able to cut most sheet metals virtually anywhere.

- **Recommended Capacity:** mild steel\* to 1/8 inch (3 mm) at cutting speeds over 20 inches (500 mm) per minute.
- **Maximum Capacity:** mild steel\* to 3/16 inch (4.5 mm) at cutting speeds over 10 inches (250 mm) per minute.
- **Severance Capacity:** mild steel\* to 1/4 inch (6 mm) at slow speed.

\* Non-ferrous metals typically require a 10 – 20% capacity reduction.

† A 20-amp circuit for 120-volt operation is recommended (10-amp for 230 V).

### Advanced Power Supply

Superior power supply design delivers proven Hypertherm performance in a compact, truly portable package.

- 1.32 kW output delivers superior cutting power from a 120 V (or 230 V, 1 PH international) outlet for the sheet metal professional.
- Built-in air compressor provides required gas.
- Boosted open-circuit voltage rating can accommodate low-line conditions of -20% typical on work sites or when utilizing extension cords.
- Advanced electronic architecture provides constant current control for consistent quality on varying power levels.
- A chopper power supply provides superior energy efficiency over competitive droopers.

- Hypertherm's patented pilot-arc control circuit facilitates uninterrupted cutting on expanded metal or grating while minimizing torch consumable wear.
- Over- and under-voltage sensing circuits protect the machine from damage and permit motor-generator operation (on 2.5 kVA auxiliary circuits).

### Intelligent Torch Design

Hypertherm's new patented PAC105 torch design delivers maximum performance in a rugged, ergonomic handle. Intelligent torch features promote cut accuracy and speed, while enhancing productivity and life.

- **Higher Speed and Capacity.** Total cutting power is a product of output current (amps) and output voltage. The PAC105 torch is designed to generate a boosted output voltage – rated at 110 volts – producing up to 45% more total cutting power than typical competitors with the same output current.
- **Longer Consumable Life.** *HyLife™* electrodes last longer than ordinary designs (300% longer, in some tests) by using the same hafnium-sizing technologies developed for Hypertherm's advanced mechanized systems.
- **Easier Operation.** An optional patented nozzle shield (shown below) provides additional nozzle protection and allows superior, no-stick drag cutting and template following.



- **No Interference.** A patented “blow-back” torch design provides a strong pilot arc for penetrating rust, paint and other coatings without the high-frequency interference that can damage sensitive electronics (PCs, phone systems, machine controllers, automobile microchips).
- **Rugged Operation.** No breakable ceramics threaten the life of the torch. The durable, high-impact clamshell handle provides years of reliable service.

- **Cooler Operation.** A standard post-flow feature provides torch cooling after the cut for longer torch life and easier consumable handling. An interrupt feature automatically stops the post-flow on re-trigger for rapid re-fire.
- **Safe Starting.** Hypertherm's patented *safety trigger* protects against accidental starts.
- **Ready Access to Consumables.** A built-in parts compartment keeps consumables close at hand.



### Superior Field Reliability for the Professional Contractor or Sheet Metal Worker

The Powermax190c is designed to travel and work hard at the toughest job sites. Over 30 years of research and development dedicated exclusively to plasma cutting results in reliability that is unsurpassed.

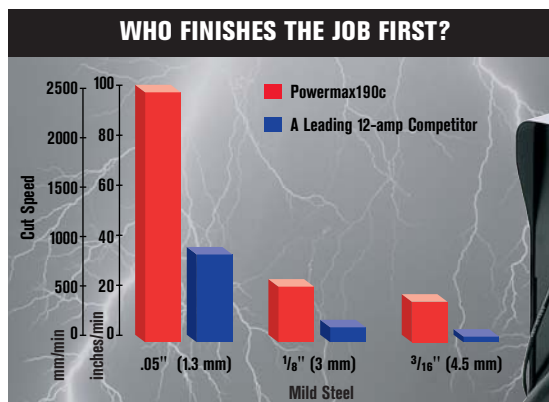
- Mechanical and electrical design are validated through aggressive, accelerated life, stress, transportation and field testing.



- Voltage sensing circuits protect against mis-wiring in the field.
- Designed to resist damage from rain (to IP23 standard).
- Backed by Hypertherm's full three-year power supply and one-year torch warranty
- CSA/NRTL and CE safety certifications document safety compliance. Beware of systems without these important certifications.

### Additional Options for Specialized Requirements

- **Circle Cutting Guide** for cutting measured circles.
- **Leather Cable Covers** for torch leads provide additional protection against damage.



In cutting speed tests, the Powermax190c substantially out-performed competitive brands on all metal thicknesses.



# powermax190c

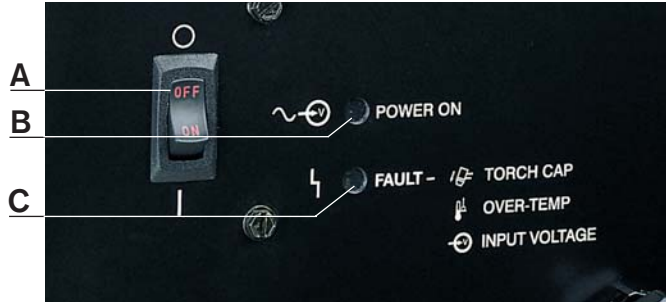
## Portable Air Plasma Cutting System With Built-in Compressor

### Powermax190c Standard System Components

- Power Supply with Integrated Air Compressor
- PAC105 Torch with Lead 20' (6.1 m)
- Spare Consumables
- Work Cable with Clamp 20' (6.1 m)
- Primary Power Cable 10' (3 m)

### Options

- Circle Cutting Guide – 027668
- Leather Torch Cable Covers – 024548



- A: On/Off Switch
- B: Power On Indicator
- C: Fault Indicator
  - Torch Cap Sensor
  - Over-Temperature Condition
  - Input Voltage Out of Range

### Ordering Information

System Description	System Number
120 V, 1 PH, 60 Hz, 20' (6.1 m) Torch Leads, CSA	070783
230 V, 1 PH, 50/60 Hz, 20' (6.1 m) Torch Leads, CE	070785

Torch Consumable Parts (Standard)	Item Number
Swirl Ring	120880
Electrode	120881
Nozzle	120882
Retaining Cap	120883

Torch Consumable Parts (Shielded)	Item Number
Retaining Cap, Shielded	120898
Shield	120884

### Specifications



Input Voltages	120 V, 1 PH, 60 Hz, CSA 230 V, 1 PH, 50/60 Hz, CE
Input Current @ 1.32 kW	120 V: 20 Amps 230 V: 10 Amps
Output Voltage	110 VDC
Output Current	12 Amps
Duty Cycle	35% @ 12 Amps, 40°C (104°F) on 20/10 A circuit
Maximum OCV	335 VDC
Dimensions	15.8" (400 mm) D; 8.5" (216 mm) W; 12" (305 mm) H
Weight with Torch	120 V: 50 lbs (25 kg) 230 V: 58 lbs (29 kg)
Gas Supply	On-board air compressor

### Operating Data

Mild Steel <sup>†</sup>	Hand Torch
<b>Recommended Capacity</b>	1/8" (3 mm)
<b>Maximum Capacity</b>	3/16" (4.5 mm)
<b>Severance Capacity</b>	1/4" (6 mm)

<sup>†</sup> Non-ferrous metals typically require a 10% – 20% de-rating.

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# Hypertherm®

The world leader in plasma cutting technology™

**Hypertherm, Inc.** USA 603-643-3441 Tel 603-643-5352 Fax manual.info@hypertherm.com

**Hypertherm Automation, LLC** USA 603-298-7970 Tel 603-298-7977 Fax info@hyperthermautomation.com

**Hypertherm Plasmatechnik, GmbH** Deutschland 49 6181 58 2100 Tel 49 6181 58 2134 Fax HTDeutschland.info@hypertherm.com

**Hypertherm (S) Pte Ltd.** Singapore 65 6 841 2489 Tel 65 6 841 2490 Fax HTSingapore.info@hypertherm.com

**Hypertherm UK, Ltd.** England 44 1928 579 074 Tel 44 1928 579 604 Fax HTUK.info@hypertherm.com

**France** 00 800 3324 9737 Tél 00 800 4973 7329 Fax HTFrance.info@hypertherm.com

**Hypertherm S.r.l.** Italia 39 02 725 46 312 Tel 39 02 725 46 400 Fax HTItalia.info@hypertherm.com

**Hypertherm Europe B.V.** Nederland 31 165 59 69 07 Tel 31 165 59 69 01 Fax HTEurope.info@hypertherm.com

**Japan** 81 05 5975 7387 Tel 81 05 5975 7376 Fax HTJapan.info@hypertherm.com

**Hypertherm Brasil Ltda.** 55 21 2278 6162 Tel 55 21 2578 0947 Fax HTBrasil.info@hypertherm.com