

# Fusion 185

Gas Engine-Driven Welder 

## Quick Specs

### Industrial Applications

Construction  
Maintenance and repair  
Farm/ranch applications  
Service trucks

### Processes

Stick (SMAW)  
Air plasma cutting and gouging  
with optional Spectrum® models

**Output Range** 30–185 A

**Auxiliary Power Output Rated at 104°F (40°C)**

6,500 watts peak, 6,200 watts continuous

**Net Weight** 242 lb. (110 kg)

The Fusion 185 delivers a smooth, stable arc from either engine power or 120/240-volt utility power, providing a unique combination of versatility and productivity in a lightweight package.



### Easier to transport.

Fusion 185 engine-driven welder weighs 242 pounds. That's up to 50 pounds less than similar machines, so moving the Fusion 185 is easier and faster. Less time is spent waiting, and more work can get done.



### Less rework.

The Fusion 185 uses inverter technology to deliver a smooth, stable stick arc that's forgiving of variations in arc length and travel speed, so it's easier to produce clean welds that meet specifications—and avoid the time and expense of rework.



## POWER SHIFT

### Work anywhere convenience.

PowerShift technology provides weld capabilities using either the Fusion 185 gasoline engine or 120/240-volt utility power. You'll have the confidence of knowing that you can weld virtually anywhere with just one machine — outdoors with engine or utility power and indoors with utility power.



The multi-voltage plug (MVP™) makes it easy to connect the welder to either 120- or 240-volt power.



Engine-driven welder is warranted for three years, parts and labor.  
Engine is warranted separately by the engine manufacturer.



### Miller Electric Mfg. LLC

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### MillerWelds.com



# Specifications (Subject to change without notice.)



Input Power	Welding Mode	Amperage Range	Rated Weld Output at 104°F (40°C)*	Amps Input at Rated Output, 50/60 Hz, 1-Phase	Single-Phase Auxiliary Power	Dimensions	Net Weight (without fuel)
Engine Power	CC/DC	30–185 A	185 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	—	Peak: 6,500 watts Continuous: 6,200 watts 120/240 VAC, 40/26 A	H: 24.75 in. (629 mm) W: 20.13 in. (511 mm) D: 31.25 in. (794 mm)	242 lb. (110 kg)
PowerShift 120 V	CC/DC	30–100 A	90 A at 23.6 V, 40% duty cycle	22.7**	—		
PowerShift 240 V	CC/DC	30–185 A	185 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	25.0			

\*Rated at sea level. \*\*Effective input amps at rated output = 20 amps.

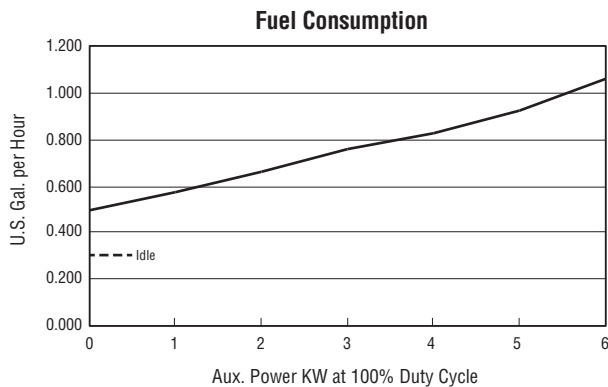


Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

## Engine Specifications (Engines warranted separately by the engine manufacturer.)

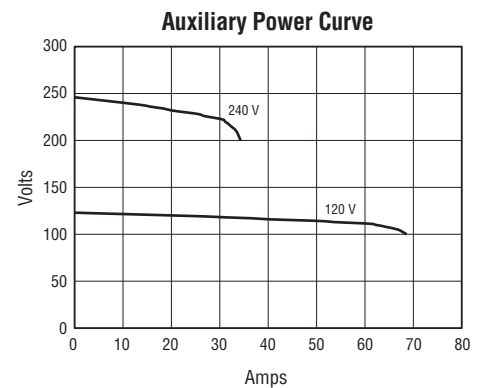
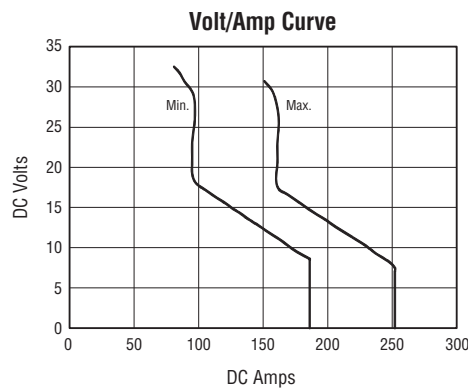
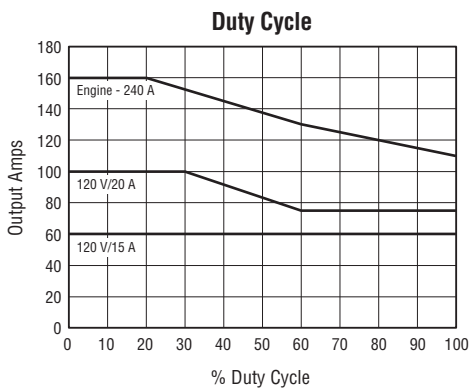
Engine Brand and Warranty	Horsepower (HP)	Type	Engine Speeds	Fuel Capacity	Oil Capacity	Standard Shutdowns
Kohler CH440, 3-year warranty	13.4 HP at 3,600 rpm	One-cylinder, four-cycle overhead valve, industrial air-cooled, gasoline	3,750 rpm (2,500 rpm at idle)	6.25 gal. (23.7 L)	1.4 qt. (1.3 L)	Low oil level

## Performance Data

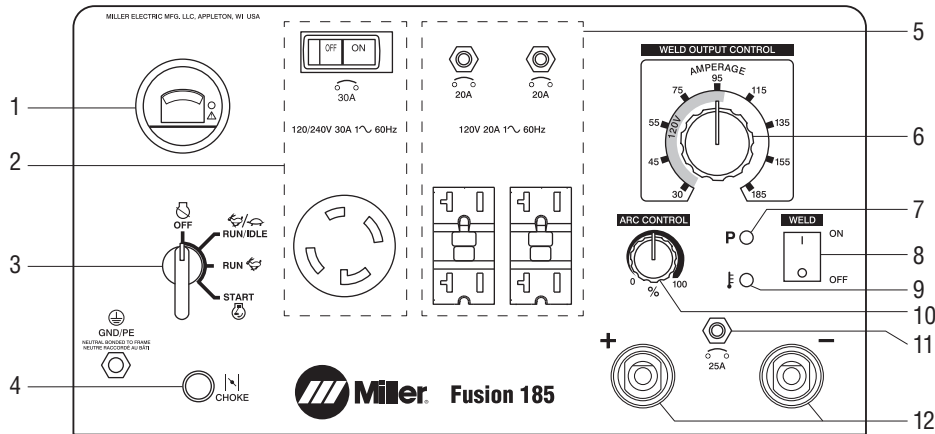


### Fuel Consumption Data

- 6.25-gallon fuel capacity.
- Under a continuous load of 3,000 watts of auxiliary power, the Fusion 185 will run for about 7.5 hours.
- Welding at 185 amps (at 20 percent duty cycle), the Fusion 185 will run for about 8.2 hours of operation.



# Control Panel



1. Engine Hour Meter/Idle Control
2. 120/240 V Receptacle with Circuit Breaker
3. Engine Control Switch
4. Choke Control
5. 120 V GFCI Receptacles with Circuit Breakers
6. Weld Output Control
7. Power Indicator LED
8. Weld On/Off Switch
9. Overtemperature/Fault Code LED
10. Arc Control
11. Circuit Breaker CB4
12. Weld Receptacles (Tweco)

# Power Usage Guide

The auxiliary power is designed to provide **strong power** while keeping the voltage within 10 percent of 120/240 V. 120/240 V  $\pm$ 10 percent is the range where tools and motors are designed to operate. **This increases tool/motor performance and tool/motor life.**

## Typical Contractor Tools

Tool	Starting Watts	Running Watts
<b>Hand Drill</b>		
1/4 inch	350	350
1/2 inch	600	600
<b>Circular Saw</b>		
6-1/2 inch	500	500
8-1/4 inch	1,400	1,400
<b>Table Saw (10 inch)</b>	6,300	1,800
<b>Band Saw (14 inch)</b>	2,500	1,100
<b>Air Compressor</b>		
1/2 hp	3,000	1,000
1-1/2 hp	8,200	2,200
<b>Electric Chain Saw</b>		
1/2 hp, 12 inch	1,100	1,100
2 hp, 14 inch	1,100	1,100
<b>Flood Lights</b>		
HID	125	100
Metal halide	313	250
Mercury	1,000	—
Vapor	1,250	1,000
<b>Submersible Pump (400 gph)</b>	600	200
<b>Centrifugal Pump (900 gph)</b>	900	500
<b>High Pressure Washer</b>		
1/2 hp	3,150	950
1 hp	6,100	1,600
<b>Wet and Dry Vac (1.7 hp)</b>	900	900

## Typical Farm Equipment

Machine	Starting Watts	Running Watts
<b>Portable Conveyor (1/2 hp)</b>	3,400	1,000
<b>Farm Duty Motors</b> (e.g. conveyors, feed augers air compressors)		
1/3 hp	1,720	720
1-1/2 hp	8,200	2,200
<b>Washer (2 gal/min.)</b>		
550 psi	4,500	1,400
700 psi	6,100	1,600

## Typical Industrial Motors

Motor	Starting Watts	Running Watts
<b>Split Phase</b>		
1/8 hp	800	300
1/2 hp	3,175	875
<b>Capacitor Start — Induction Run</b>		
1/3 hp	2,020	720
1-1/2 hp	8,200	2,200
<b>Capacitor Start — Capacitor Run</b>		
1-1/2 hp	8,100	2,000
<b>Fan</b>		
1/8 hp	1,000	400
1/2 hp	3,500	1,100

# Genuine Miller® Accessories



### Running Gear 301246

Compact, balanced, lightweight, wheel-barrow-style running gear designed for easy on-site mobility.



### Lifting Eye 195353

Secure lift point when picking up machine.

### Protective Cover 301245

Blue with logo. Attractive, mildew-resistant, odor-free, water-resistant cover protects your machine's finish.

### Spark Arrestor Kit 301244

Mandatory when operating on California grasslands, brush, or forest-covered land, and all national forests. For other areas, check your state and local laws.



### Twist Lock Adapter Cord 301489

Field L14-30R to NEMA 6-50R. Adapts engine drive 120/240 V twist lock plug to common Millermatic® and Spectrum® 240 V plug.

### Weld Cables

**195457** 2/0, 10 ft. with electrode holder, Tweco® male connector and stud/Tweco adapter, 400 A.

**195458** 2/0, 10 ft. with work clamp, Tweco male connector and stud/Tweco adapter, 400 A.

**301387** 1/0, 10 ft. with electrode holder, Tweco male connector and stud/Tweco adapter, 200 A.

**301566** 2/0, 50 ft. with electrode holder and work clamp, Tweco male connector, 400 A.



### Tweco®-Style Connector 191981

Accepts 1/0 to 2/0 AWG cable. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Tweco-style receptacles on the power source.



### Spectrum® 375 X-TREME™ 907529

See literature PC/9.2. Comes complete with protective X-CASE™ (not shown).

### Remote Oil Drain Kit 224831

Quick connect for easy engine maintenance.

### Engine Tune-Up Kit 268469

Field For Kohler CH440. Includes spark plug and engine air filter.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Fusion 185</b>	<b>907781</b>	Electric start. Kohler engine, with 120 V GFCI receptacles		
<b>Accessories</b>				
Running Gear	<b>301246</b>	Balanced running gear for easy transport		
Lifting Eye	<b>195353</b>	Provides safe and secure lifting of machine		
Protective Cover	<b>301245</b>	Blue with logo		
Spark Arrestor Kit	<b>301244</b>			
Twist Lock Adapter Cord	<b>301489</b>			
Remote Oil Drain Kit	<b>224831</b>	Quick connect for easy engine maintenance		
Engine Tune-Up Kit	<b>268469</b>	Includes spark plug and engine air filter		
<b>Stick Accessories</b>				
Weld Cables		See above		
Tweco®-Style Connector	<b>191981</b>			
<b>Plasma Accessories</b>				
Spectrum® 375 X-TREME™	<b>907529</b>	120–240 V, 12 ft. torch. See literature PC/9.2		

Date:

Total Quoted Price:

Distributed by:

