Fusion 160



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 30-160 A

Generator Power Output Rated at 104°F (40°C)

6,500 watts peak, 6,200 watts continuous

Net Weight 242 lb. (110 kg)

Accu-Rated™- Not Inflated **Generator Power**

The Fusion 160 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 160 welder/generator weighs 242 pounds. That's up to 50 pounds less than similar machines, so moving the Fusion 160 is easier and faster. Less time is spent waiting, and more work can get done.



Less rework.

The Fusion 160 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.





Work anywhere convenience.

PowerShift technology provides weld capabilities using either the Fusion 160 gasoline engine or 120/240-volt utility power. You'll have the confidence of knowing that you can weld virtually anywhere outdoors and indoors — with just one machine.



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



Welder/generator is warranted for three years, parts and labor. Engine is warranted separately by the engine manufacturer.



Miller Electric Mfg. LLC

An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA

Equipment Sales US and Canada

Phone: 866-931-9730 FAX: 800-637-2315

International Phone: 920-735-4554 International FAX: 920-735-4125











Specifications (Subject to change without notice.)





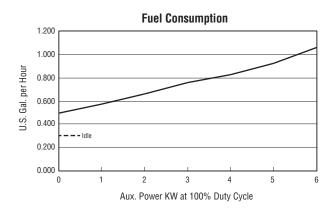
Input Power	Welding Mode	Amperage Range	Rated Weld Output at 104°F (40°C)*	Amps Input at Rated Output, 50/60 Hz, 1-Phase	Single-Phase Generator Power	Dimensions	Net Weight (without fuel)
Engine Power	CC/DC	30-160 A	160 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	_	Peak: 6,500 watts Continuous: 6,200 watts 120/240 VAC, 40/26 A	H: 24.75 in. (629 mm) W: 20.1 in.	242 lb. (110 kg)
PowerShift 120 V	CC/DC	30-100 A	90 A at 23.6 V, 40% duty cycle	22.7**	_	(511 mm) D: 31.25 in.	
PowerShift 240 V	CC/DC	30-160 A	160 A at 26.4 V, 20% duty cycle 110 A at 24.4 V, 100% duty cycle	25.0		(794 mm)	

^{*}Rated at sea level. **Effective input amps at rated output = 20 amps.

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

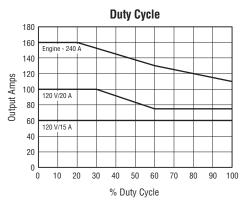
Engine Brand and Warranty	Horsepower (HP)	Туре	Engine Speeds	Fuel Capacity	Oil Capacity	Standard Shutdowns
Kohler CH440, 3-year warranty	13.4 HP at 3,600 rpm	One-cylinder, four-cycle overhead valve, industrial air-cooled, gasoline	3,750 rpm (2,500 rpm at idle)	6.25 gal. (23.7 L)	1.4 qt. (1.3 L)	Low oil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

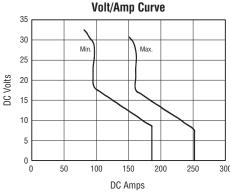
Performance Data

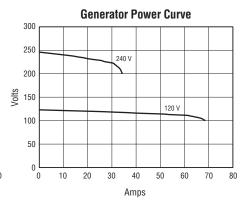


Fuel Consumption Data

- 6.25-gallon fuel capacity.
- Under a continuous load of 3,000 watts of generator power, the Fusion 160 will run for about 7.5 hours.
- Welding at 160 amps (at 20 percent duty cycle), the Fusion 160 will run for about 8.2 hours of operation.



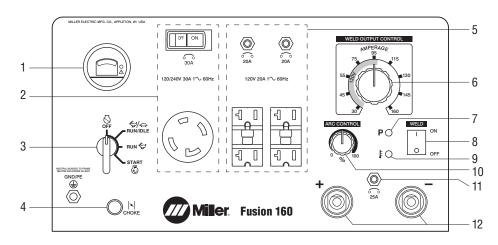






Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

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 power generator is designed to provide **strong power** while keeping the voltage within 10 percent of 120/240 V. $120/240 \text{ V} \pm 10$ 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
Hand Drill		
1/4 inch	350	350
1/2 inch	600	600
Circular Saw		
6-1/2 inch	500	500
8-1/4 inch	1,400	1,400
Table Saw (10 inch)	6,300	1,800
Band Saw (14 inch)	2,500	1,100
Air Compressor		
1/2 hp	3,000	1,000
1-1/2 hp	8,200	2,200
Electric Chain Saw		
1/2 hp, 12 inch	1,100	1,100
2 hp, 14 inch	1,100	1,100
Flood Lights		
HID	125	100
Metal halide	313	250
Mercury	1,000	
Vapor	1,250	1,000
Submersible Pump (400 gph)	600	200
Centrifugal Pump (900 gph)	900	500
High Pressure Washer		
1/2 hp	3,150	950
1 hp	6,100	1,600
Wet and Dry Vac (1.7 hp)	900	900
	1	

Typical Farm Equipment

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

Typical Industrial Motors

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

Typical Household

Dishwasher 700 Cool dry 1,400 700 Hot dry 1,400 1,450 Electric Range 6-inch element 0 1,500 8-inch element 0 2,100 Microwave Oven 800 625 (625 watts) 700 625 Refrigerator or Freezer 2,200 700 Automatic Washer 2,300 1,150 Clothes Dryer 6as 1,800 5,750 Garage Door Opener 1,400 5,750 I/4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 1,400 725 I/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000	Appliance	Starting Watts	Running Watts
Hot dry	Dishwasher		
Electric Range 6-inch element 0 1,500 8-inch element 0 2,100 Microwave Oven (625 watts) Refrigerator or Freezer 2,200 700 Automatic Washer 2,300 1,150 Clothes Dryer Gas 1,800 700 Electric 1,800 5,750 Garage Door Opener 1,4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 1/8 hp 1,000 600 1/3 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50–200 Well Pump 1,300 800	Cool dry	1,400	700
6-inch element 0 1,500 2,100 Microwave Oven (625 watts) Refrigerator or Freezer 2,200 700 Automatic Washer 2,300 1,150 Clothes Dryer Gas 1,800 5,750 Electric 1,800 5,750 Garage Door Opener 1,100 550 725 Furnace Fan (gas/fuel oil) 1/8 hp 1,400 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,300 800	Hot dry	1,400	1,450
8-inch element 0 2,100 Microwave Oven (625 watts) 800 625 Refrigerator or Freezer 2,200 700 Automatic Washer 2,300 1,150 Clothes Dryer Gas 1,800 700 Electric 1,800 5,750 Garage Door Opener 1,100 550 1/4 hp 1,400 725 Furnace Fan (gas/fuel oil) 1,800 300 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Electric Range		
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Clothes Dryer Gas 1,800 700 Electric 1,800 5,750 Garage Door Opener 1/4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 1/8 hp 500 300 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50–200 Well Pump 1/3 hp 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1/3 hp 1,300 800	Refrigerator or Freezer	2,200	700
Gas 1,800 700 Electric 1,800 5,750 Garage Door Opener 1/4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 500 300 1/8 hp 500 500 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Automatic Washer	2,300	1,150
Electric 1,800 5,750 Garage Door Opener 1,4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 500 300 1/8 hp 500 300 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Clothes Dryer		
Garage Door Opener 1,4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 1/8 hp 500 300 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Gas	,	
1/4 hp 1,100 550 1/2 hp 1,400 725 Furnace Fan (gas/fuel oil) 1/8 hp 500 300 1/6 hp 750 500 1/4 hp 1,000 600 1/3 hp 1,400 700 1/2 hp 2,350 875 Lights 0 As indicated Radio 0 50-200 Well Pump 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Electric	1,800	5,750
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1/3 hp 1,400 750 1/2 hp 2,100 1,000 Sump Pump 1,300 800	Radio	0	50-200
1/2 hp 2,100 1,000 Sump Pump 1,300 800	Well Pump		
Sump Pump 1/3 hp 1,300 800			
1/3 hp 1,300 800	1/2 hp	2,100	1,000
7.1.1			
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	1/2 hp	2,150	1,050
Central Air Conditioner		0.000	4.500
10,000 Btu 2,200 1,500	-,	,	l '
20,000 Btu 3,300 2,500 24,000 Btu 4,950 3,800	-,		l '
32,000 Btu 4,950 5,000 32,000 Btu 6,500 5,000	*		l '
40,000 Btu 7,800 6,000		,	



Genuine Miller® Options and Accessories



Running Gear 301246

Compact, balanced, lightweight, wheel-barrowstyle 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™ 907529See 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
Fusion 160	907773	Electric start. Kohler engine, with 120 V GFCI receptacles		
Accessories				
Running Gear	301246	Balanced running gear for easy transport		
Lifting Eye	195353	Provides safe and secure lifting of machine		
Protective Cover	301245	Blue with logo		
Spark Arrestor Kit	301244			
Twist Lock Adapter Cord	301489			
Remote Oil Drain Kit	224831	Quick connect for easy engine maintenance. Order from Miller Service Parts		
Engine Tune-Up Kit	268469	Includes spark plug and engine air filter. Order from Miller Service Parts		
Stick Accessories				
Weld Cables		See above		
Tweco®-Style Connector	191981			
Plasma Accessories				
Spectrum® 375 X-TREME™	907529	120-240 V, 12 ft. torch. See literature PC/9.2		

Date: Total Quoted Price:

Distributed by:

