

# Millermatic® 211

MIG Power Source,  
Wire Feeder and Gun Package 

## Quick Specs

### Light Industrial Applications

Light Fabrication  
Maintenance and Repair  
Auto Body  
Farm/Home

### Processes

MIG (GMAW)  
Flux-Cored (FCAW)

### Weld Thickness

**120 V:** 24 ga.–3/16 in. steel  
18 ga.–1/8 in. aluminum  
**240 V:** 24 ga.–3/8 in. steel  
18 ga.–3/8 in. aluminum

### Input Power

**120 V:** 24.3 A, 60 Hz, single-phase  
**240 V:** 16.6 A, 60 Hz, single-phase

### Rated Output

**120 V:** 115 A at 19.8 VDC, 20% duty cycle  
**240 V:** 150 A at 21.5 VDC, 40% duty cycle



**New!**

**120 or 240 V INPUT POWER**

Uses 120- or 240-volt power

**WEIGHS ONLY 38 lb.**

Portable

**3/8" (9.5 mm) MAX (240 V) 24 ga. (0.8 mm) MIN**

Weld capacity

**AUTO-SET™ MATERIAL THICKNESS**

Quick and easy setup

**NEW! Advanced Auto-Set™** now includes five different wire/gas combinations and .024-inch (0.6 mm) wire capability. The easiest welder to use just became more versatile.

- Wire/gas combinations include Flux Cored, Mild Steel with 100% CO<sub>2</sub>, Mild Steel with C25, Stainless Steel, and Aluminum with spool gun
- Select the wire type and gas being used
- Set the wire diameter, and select from .024, .030 and .035 diameters. A blue LED indicates that Auto-Set is activated
- Dial in the thickness of what you're welding
- Start welding with the exact parameters you need!

**NEW! Inverter technology** combines best-in-class arc characteristics with the portability of a 38-pound machine. The arc is extremely forgiving to variations in arc length and travel speeds.

### Multi-voltage plug (MVP)

allows connection to common 120 or 240 V power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.



**NEW! Angled cast-aluminum drive system** with calibrated tension knob creates consistent feeding and easy setup for up to 15-foot MIG guns.

**NEW! Quick Select™ drive roll** makes setup quicker by offering three grooves — two for different size solid wire and a third for flux-cored wire.

**NEW! Auto Spool Gun Detect™** automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

**NEW! Fan-On-Demand™** power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.

**NEW! Smooth-Start™** provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

**Thermal overload protection** shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

**TRUE BLUE™**  
3YR. WARRANTY

Welder is warranted for 3 years, parts and labor.  
Gun warranted for 90 days, parts and labor.

Uses 4- or 8-inch (102 or 203 mm) spools and can be set up to weld with .024–.035 inch (0.6–0.9 mm) solid wire and .030–.045 inch (0.8–1.2 mm) flux-cored wire.

### Comes complete with:

- Power source
- 6.5-ft. (2 m) power cord with MVP plugs for 120 V and 240 V
- 10-ft. (3 m) M-100 MIG gun and cable assembly
- 10-ft. (3 m) work cable with clamp
- Flow gauge regulator and gas hose for Argon and AR/CO<sub>2</sub> mix
- Hobart® spool of .030-in. (0.8 mm) solid wire
- Two contact tips for .030-in. (0.8 mm) wire
- Quick Select™ drive rolls for .024-in. (0.6 mm) or .030/.035-in. (0.8/0.9 mm) solid wire, and .030/.035-in. (0.8/0.9 mm) flux-cored wire
- Material thickness gauge ▶ #229 895
- Hook-and-loop cord wraps

Note: Shielding gas and safety equipment not included.



**Miller Electric Mfg. Co.**  
An ITW Welding Company  
1635 West Spencer Street  
P.O. Box 1079  
Appleton, WI 54912-1079 USA

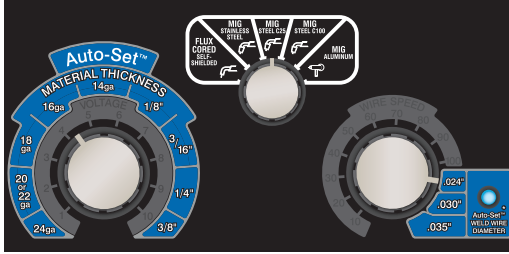
**Equipment Sales US and Canada**  
Phone: 866-931-9730  
FAX: 800-637-2315  
International Phone: 920-735-4554  
International FAX: 920-735-4125

**MillerWelds.com**  




# Operation Modes

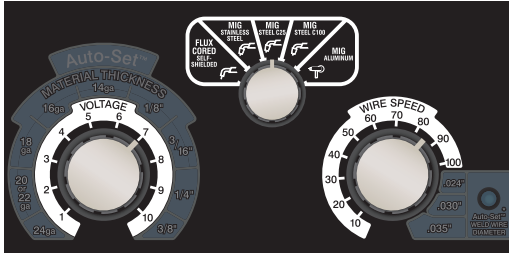
## Auto-Set™ Mode



Auto-Set eliminates guesswork and saves you time on setup. Turn wire selector knob to select the wire and gas combination being used. Turn wire speed control fully clockwise to select Auto-Set mode and set the wire diameter to either .024, .030 or .035 inch. The Auto-Set light indicates mode is activated. Then select material thickness using the Auto-Set control.

Use Auto-Set when you want the speed, convenience and confidence of pre-set controls. Auto-Set automatically sets your welder to the proper parameters. It's available for welding with flux-cored, steel, stainless steel and aluminum wires in .024-, .030- and .035-inch diameters. Shielding gas is dependent on the wire being used.

## Manual Mode



When welding outside of Auto-Set capabilities, or if you prefer custom parameters, use manual mode. The parameter chart on the inside of the access door is an easy-to-use guide for determining your voltage and wire feed speed settings. To optimize arc starts, turn wire selector knob to select the wire and gas combination being used. Reference the white areas on the controls when welding in manual mode.



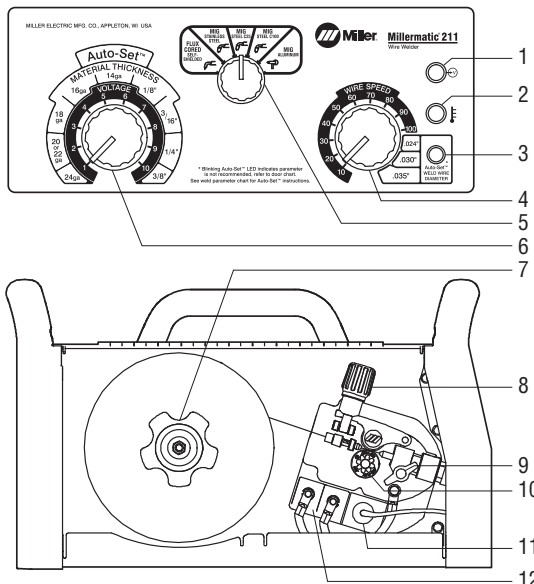
## Specifications (Subject to change without notice.)



Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz		Wire Feed Speed	Wire Type and Diameter	Max. Open-Circuit Voltage	Dimensions	Net Weight		
			120 V	240 V						KVA	KW
120 V	30–130 A	115 A at 19.8 VDC, 20% duty cycle	24.3	—	2.9	2.9	60–600 IPM (1.5–15.2 m/min.)	Solid/stainless: .024–.035 in. (0.6–0.9 mm) Flux-cored: .030–.035 in. (0.8–0.9 mm)	54	H: 12.5 in. (318 mm) W: 11.25 in. (286 mm) D: 20.5 in. (521 mm)	38 lb. (17.2 kg) 42 lb. (19.1 kg) with gun
240 V	30–230 A	150 A at 21.5 VDC, 40% duty cycle	—	16.6	4.0	4.0					

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

## Control Panel

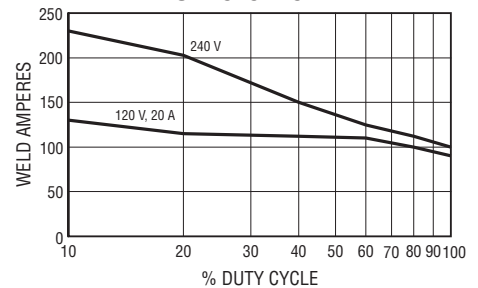


1. Power On Light
2. Over Temperature Light
3. Auto-Set Light
4. Wire Speed/Wire Diameter Control
5. Wire Selector Knob
6. Voltage/Material Thickness Control
7. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
8. Calibrated Tension Knob
9. T-Knob (secures torch)
10. Drive Roll
11. Trigger Control Connector
12. Polarity Changeover Terminals

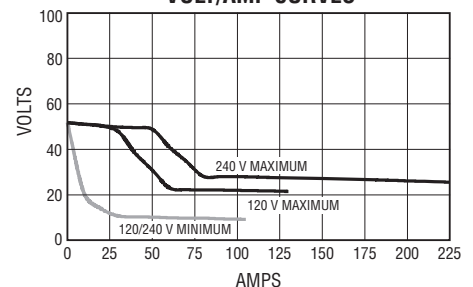
Note: Power switch and gas solenoid are on machine back panel.

## Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



## Genuine Miller® Accessories

### Replacement/Optional MIG Gun

**M-100 (Standard)**  
#248 282 10 ft. (3 m)

**M-150 (Optional)**  
#249 040 12 ft. (3.7 m)  
#249 041 15 ft. (4.5 m)

All ship with liner #194 011.



**Spoolmate™ 100 Spool Gun #300 371**  
Direct-connect spool gun for all Millermatic 140, 141, 180, 190, 211 and Multimatic 200 models. Handles

.030–.035 inch (0.8–0.9 mm) aluminum (4043 only) and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 135 amps, 30-percent duty cycle. Includes 12-foot (3.7 m) cable assembly and custom carrying case.



**Spoolmate™ 150 Spool Gun #301 272**  
Direct-connect spool gun for all Millermatic 211 and Multimatic 200 models. Handles

.030–.035 inch (0.8–0.9 mm) 4000/5000 series aluminum and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 150 amps, 60-percent duty cycle. Includes 20-foot (6.1 m) cable assembly.



**Millermatic Protective Cover #301 262**



**Running Gear/Cylinder Rack #301 239**  
Heavy-duty construction with 8-inch rubber rear wheels. Convenient front handles, cable holders and plastic consumable box.

For gas cylinders no greater than 7 inches (178 mm) in diameter or 65 pounds (29.5 kg) in weight.

**Purchase the Millermatic 211 package (#951 603) and receive the Millermatic 211 and Running Gear/Cylinder Rack (#301 239) packaged together!**

## Consumables (Order from Miller Service Parts.)

### For M-100/M-150 Gun



**Contact Tips**  
#087 299 .024 in. (0.6 mm)  
#000 067 .030 in. (0.8 mm)  
#000 068 .035 in. (0.9 mm)  
#000 069 .045 in. (1.2 mm)



**Contact Tip Adapter #169 716**



**Replacement Liners**  
#194 010 .024 in.  
#194 011 .030–.035 in. (standard)  
#194 012 .035–.045 in.  
15-foot length—trim to size needed.



**Nozzle #169 715**  
1/2-inch (13 mm) diameter orifice.  
Nozzle flush with contact tip (standard).



**Gasless Flux-Cored Nozzle #226 190**

*For M-100 gun only.*

For use with self-shielding flux-cored wires. Improves

visibility, eases access in tight corners, protects tip adapter/gas diffuser from spatter and from shorting to the workpiece.



**Drive Rolls**

**Quick Select™ #261 157**  
For .024-inch (0.6 mm) or .030/.035-inch (0.8/0.9 mm) solid wire, and .030/.035-inch (0.8/0.9 mm) flux-cored wire.

**Dual Groove, V-Knurled #202 926**  
For .030/.035-inch (0.8/0.9 mm) or .045-inch (1.2 mm) flux-cored wire.

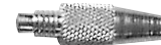


**M-Series Gun Consumable Kits**

#234 607 .024 in. (0.6 mm)  
#234 608 .030 in. (0.8 mm)  
#234 609 .035 in. (0.9 mm)

Each kit contains ten contact tips, one nozzle, and one contact tip adapter.

### For Spoolmate™ 100 Spool Gun



**Contact Tips (5 per package)**  
#199 730 For .024-inch (0.6 mm) wire.  
#186 419 For .030-inch (0.8 mm) wire.  
#186 406 For .035-inch (0.9 mm) wire.



**Nozzle #186 405**

### For Spoolmate™ 150 Spool Gun



**Contact Tips (5 per package)**  
#199 387 For .030-inch (0.8 mm) wire.  
#199 388 For .035-inch (0.9 mm) wire.



**Nozzle #199 386**

### For Both Spool Guns



**Drive Roll (1) #186 413**  
For .030/.035-inch (0.8/0.9 mm) wire.

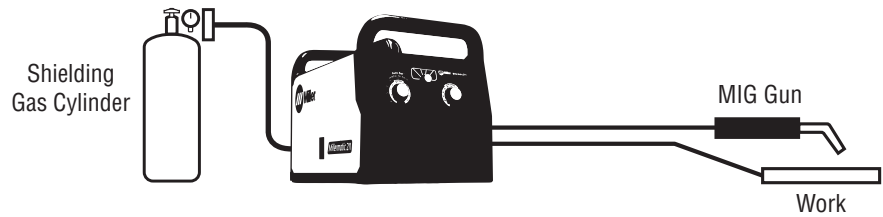


**Push Roll (1) #186 414**  
For .030/.035-inch (0.8/0.9 mm) wire.

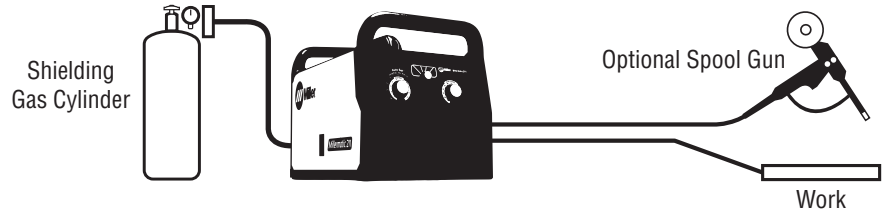
## Typical Installations



**MIG (GMAW) or Flux-Cored (FCAW)  
Basic Equipment**



**Aluminum MIG (GMAW)  
Basic Equipment**



## Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
<b>Millermatic® 211</b>	<b>#907 614</b>	120/240 V, 60 Hz		
<b>Millermatic® 211</b> with Running Gear/Cyl Rack	<b>#951 603</b>	Power source packaged with #301 239 Running Gear/Cylinder Rack		
<b>Guns</b>				
M-100 Gun (Standard)	<b>#248 282</b>	10 ft. (3 m), .030–.035 in. (0.8–0.9 mm)		
M-150 Gun (Optional)	<b>#249 040</b>	12 ft. (3.7 m), .030–.035 in. (0.8–0.9 mm)		
	<b>#249 041</b>	15 ft. (4.5 m), .030–.035 in. (0.8–0.9 mm)		
Spoolmate™ 100 Spool Gun	<b>#300 371</b>	12 ft. (3.7 m). Includes custom carrying case		
Spoolmate™ 150 Spool Gun	<b>#301 272</b>	20 ft. (6.1 m)		
<b>Accessories</b>				
Protective Cover	<b>#301 262</b>			
Running Gear/Cylinder Rack	<b>#301 239</b>			
Material Thickness Gauge	<b>#229 895</b>			
Flux-Cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
<b>Available Through Miller Service Parts</b>				
Flow Gauge Regulator for Argon or AR/CO <sub>2</sub> Mix	<b>#268 546</b>	Replacement standard regulator		
Flow Gauge Regulator for CO <sub>2</sub>	<b>#212 492</b>	Required if using 100-percent CO <sub>2</sub> gas		
Contact Tips		See page 3		
Contact Tip Adapter	<b>#169 716</b>	For M-100 and M-150 guns		
Replacement Liners		See page 3		
Nozzles		See page 3		
Gasless Flux-Cored Nozzle	<b>#226 190</b>	For M-100 gun		
Drive Rolls		See page 3		
M-Series Gun Consumable Kits	<b>#234 607</b>	.024 in. (0.6 mm)		
	<b>#234 608</b>	.030 in. (0.8 mm)		
	<b>#234 609</b>	.035 in. (0.9 mm)		

Date:

Total Quoted Price:

Distributed by:

