# Millermatic<sup>®</sup> 211 PRO

# Quick **Specs**

#### **Light Industrial Applications**

Light fabrication Maintenance and repair Automotive HVAC

#### **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:** 27.0 A, single-phase, 50/60 Hz **240 V:** 28.9 A, single-phase, 50/60 Hz

#### **Rated Output**

**120 V:** 110 A at 19.5 VDC, 60% duty cycle **240 V:** 160 A at 22.0 VDC, 60% duty cycle





Uses 120- or 240-volt power



MIG weld capacity



**Portable** 



Quick and easy setup

Includes a 15-foot (4.6 m) MDX™-100 MIG gun with front load liner that optimizes wire feedability.

 $\textbf{Auto-Set}^{\scriptscriptstyle{\mathsf{M}}}$  fast and easy predefined settings for multiple materials and processes to help you get welding quickly.

- 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 weld process and gas being used
- Select the wire diameter (.024, .030 or .035 in.)
- Select the material thickness you're welding
- Start welding with the exact parameters

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

Multi-voltage plug (MVP™) allows connection to common 120- and 240volt power receptacles without the use of any tools



— simply choose the plug that fits the receptacle and connect to the power cord.

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup.

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

Continually upgradeable. USB-enabled software allows expandable machine capabilities without requiring mechanical modifications. This ensures the investment continues to produce over time, even as needs evolve.

**Auto Spool Gun Detect**<sup>™</sup> automatically detects when a MIG gun or spool gun is connected, eliminating the need for a switch.

**Fan-On-Demand**<sup>™</sup> cooling system only operates when needed, reducing noise, energy use and contaminants pulled though the machine.



Welder is warrantied for three years, parts and labor. Gun warrantied for 90 days, parts only.

### 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
- 15 ft. (4.6 m) MDX<sup>™</sup>-100 MIG gun
- 15 ft. (4.6 m) work cable with clamp
- 6.5 ft. (2 m) power cord with MVP™ plugs for 120 V and 240 V
- Flow gauge regulator and gas hose for argon or AR/CO<sub>2</sub> mix
- Two contact tips for .030 in. (0.8 mm) wire
- Quick Select<sup>™</sup> 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 ➤ 229895
- Hook-and-loop cord wraps

Note: Shielding gas and safety equipment not included.



#### 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 International Phone: 920-735-4554











# **Operation Modes**

#### Auto-Set<sup>™</sup>mode



Auto-Set eliminates guesswork and saves you time on setup. Begin by pressing the Auto-Set button. The Auto-Set back-lit light indicates the mode is activated.

- 1. Press process soft-key.
- 2. Rotate left or right knob to scroll and press knob to select operating condition.
- 3. Repeat for wire diameter and material thickness conditions.

Auto-Set predefined weld setting ranges are infinitely adjustable — predefined welding range is identified on screen between the green brackets and ideal welding parameters are identified on screen by the green dot and blue text. Auto-Set predefined weld settings are configured for: steel material with C25 gas mixture (75% argon, 25% CO<sub>2</sub>) and C100 (100% CO<sub>2</sub>); stainless steel material with C2 gas mixture (98% argon, 2% CO₂); aluminum material with argon gas when using a Spoolmate™ 100 or 150.

#### 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 access manual mode, ensure that Auto-Set is off. Simply rotate the left knob to adjust voltage and the right knob to adjust wire feed speed.



# **Specifications** (Subject to change without notice.)







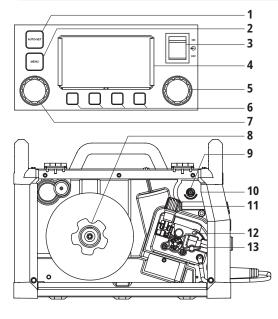
Input Power	Amperage Range	Rated Output	Rated	Input a Output 240 V	t, 50/60		Wire Feed Speed	Wire Type and Diameter	Max. Open- Circuit Voltage	Dimensions	Net Weight
120 V (NEMA 15)	30-140 A	80 A at 18 VDC, 100% duty cycle	14.7	-	1.762	1.756	60-600 ipm	Solid/stainless:	57	H: 14.625 in.	35 lb.
120 V (NEMA 20)		130 A at 20.5 VDC, 40% duty cycle	27	-	3.244	3.236	(1.5–15.2	.024–.035 in.		(372 mm)	(15.9 kg)
		110 A at 19.5 VDC, 60% duty cycle	21.7	-	2.611	2.605	m/min.)	(0.6 – 0.9 mm) Flux-cored:		W: 9.75 in. (248 mm)	
		90 A at 18.5 VDC, 100% duty cycle	17.02	-	2.049	2.042		.030 – .035 in.		D: 20 in.	
240 V (NEMA 50)	30-230 A	215 A at 24.8 VDC, 30% duty cycle	-	14.05	6.156	6.134		(0.8-0.9 mm)		(508 mm)	
		160 A at 22 VDC, 60% duty cycle	-	13.17	4.075	4.024					
		120 A at 20 VDC, 100% duty cycle	-	11.54	2.788	2.754					

<sup>\*</sup>Dimensions and net weight are for power source only.



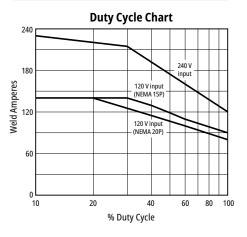
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

# **Control Panel**



- 1. Auto-Set Button
- 2. Menu Button
- 3. Power On/Off Switch
- 4. Color LCD Display
- 5. Right Adjustment Knob (adjusts wire feed speed or parameter values depending on mode)
- **6.** Soft Keys (multiple functions depending on screen displayed)
- 7. Left Adjustment Knob (adjusts voltage, arc length or parameter values depending on mode)
- 8. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
- 9. MIG Gun Connection
- **10.** USB Software Port (inside to the right)
- 11. Calibrated Tension Knob
- 12. Drive Roll
- **13.** T-Knob (secures torch)

### **Performance Data**





## **Genuine Miller® Accessories**



#### MDX™-100 MIG Gun 1770029

15 ft. (4.6 m), 100-amp MIG gun with Miller® MDX MIG consumables for .030 – .035 in. (0.8 – 0.9 mm) wire.

- Install contact tips with a single turn.
- Front load liner locks at front and back of gun to align with contact tip and power pin for a flawless wire feed path.
- Durable, ergonomic handle with overmolding improves grip and comfort.
- Ball-and-socket handle with rear swivel for increased gun maneuverability while reducing welder fatigue.



#### Spoolmate<sup>™</sup> 100 Spool Gun 300371

Direct-connect spool gun 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<sup>™</sup> 150 Spool Gun 301272

Direct-connect spool gun 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.



#### Running Gear/ Cylinder Rack 301239

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 PRO Welding Cart package (951000073) and receive the Millermatic 211 PRO and running gear/cylinder rack (301239) packaged together!



# Dual Cylinder Rack Conversion Kit and Tool Holder 301454

Converts running gear/cylinder rack (301239) from a single cylinder cart to a dual cylinder cart. Top bracket holds a variety of tools including a welper, adjustable wrench, screwdrivers, chipping hammer, wire brush and filler rod.



Protective Cover 301737

# **Consumables**

#### For MDX\*-100 MIG Gun (15 ft.)

#### Miller® MDX MIG Gun Consumables

Smaller consumables and components to access hard-to-reach weldments.

#### Contact Tips (10 per package)

T-M023 .023 in. (0.6 mm) T-M030 .030 in. (0.8 mm) T-M035 .035 in. (0.9 mm) T-M045 .045 in. (1.2 mm) T-M047 3/64 in. (1.2 mm)

#### **Nozzles**

NS-M1200B Brass, 1/2 in. ID, flush
NS-M1200C Copper, 1/2 in. ID, flush
NS-MFLX Gasless nozzle

Diffuser D-M100

#### Monocoil Replacement Liners (15 ft.)

**LM1A-15** .023/.025 in. (0.6 mm) **LMD2A-15** .030/.035 in. (0.8/0.9 mm) **LMD3A-15** .035/.045 in. (0.9/1.2 mm)

Note: Miller® FasTip™, M-Series and Bernard Centerfire™ diffusers and consumables are NOT compatible with MDX Series guns.

### For Spoolmate<sup>™</sup> 100 Spool Gun



#### Contact Tips (5 per package)

**199730** .024 in. (0.6 mm) **186419** .030 in. (0.8 mm) **186406** 035 in. (0.9 mm)



Nozzle 186405

### For Spoolmate<sup>™</sup> 150 Spool Gun



**Contact Tips (5 per package) 199387** .030 in. (0.8 mm) **199388** .035 in. (0.9 mm)



Nozzle 050622

### **For Both Spool Guns**



**Drive Roll (1) 186413** For .030/.035-inch (0.8/0.9 mm) wire.



**Push Roll (1) 186414** For .030/.035-inch (0.8/0.9 mm) wire.

#### For Millermatic® 211 PRO



**Quick Select™ Drive Roll 261157**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.

V-Knurled Dual-Groove Drive Roll 202926 For .030/.035-inch (0.8/0.9 mm) or .045-inch (1.2 mm) flux-cored wire.



# **Ordering Information**

Power Source and Options	Stock No.	Description	Qty.	Price
Millermatic® 211 PRO	907839	120/240 V, 50/60 Hz		
Millermatic® 211 PRO with Welding Cart	951000073	Power source packaged with 301239 running gear/cylinder rack		
Guns				
MDX <sup>™</sup> -100 MIG Gun	1770029	15 ft. (4.6 m), .030 – .035 in (0.8 – 0.9 mm) wire		
Spoolmate™ 100 Spool Gun	300371	12 ft. (3.7 m). Includes custom carrying case		
Spoolmate™ 150 Spool Gun	301272	20 ft. (6.1 m)		
Accessories				
Running Gear/Cylinder Rack	301239			
Dual Cylinder Rack Conversion Kit and Tool Holder	301454			
Dual Cylinder Rack Cart	951770	Includes running gear/cylinder rack 301239 and dual cylinder rack conversion kit 301454. Must be assembled together		
Protective Cover	301737			
Material Thickness Gauge	229895			
Flow Gauge Regulator for Argon or AR/CO <sub>2</sub> Mix	31-50-580-6	Replacement standard regulator		
Flow Gauge Regulator for CO <sub>2</sub>	31-50-320	Required if using 100 percent CO <sub>2</sub> gas		
Flux-cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
Consumables				
Contact Tips		See page 3		
Nozzles		See page 3		
Diffuser		See page 3		
Monocoil Replacement Liners		See page 3		
Drive Rolls		See page 3		

Date: Total Quoted Price:

Distributed by:

