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# Millermatic® 211

## MIG Power Source, Wire Feeder and Gun Package

## Quick Specs

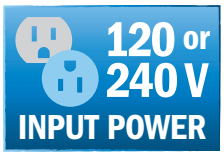
**Light Industrial Applications**
Light fabrication
Maintenance and repair
Auto body
Farm/home

**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

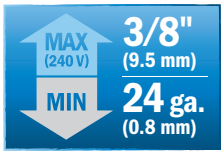
**Input Power**
**120 V:** 24.3 A, single-phase, 50/60 Hz
**240 V:** 16.6 A, single-phase, 50/60 Hz

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



Uses 120- or 240-volt power

Portable



MIG weld capacity

Quick and easy setup

## AccuLock™

Includes **MDX™-100 MIG gun with AccuLock™ MDX consumable system** featuring a dual-locked, front-loading liner that optimizes wire feedability.

**Advanced Auto-Set™** includes five different wire/gas combinations and three wire size capabilities.
- Wire/gas combinations include Flux Cored, Mild Steel with 100% $CO_2$, Mild Steel with C25, Stainless Steel, and Aluminum with spool gun
- Select the wire type and gas being used
- Set the wire diameter (.024, .030 or .035 in.). 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!

**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- and 240-volt 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.

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

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

**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 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
- 10 ft. (3 m) MDX™-100 MIG gun
- 10 ft. (3 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/$CO_2$ 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 ➤ 229895
- Hook-and-loop cord wraps

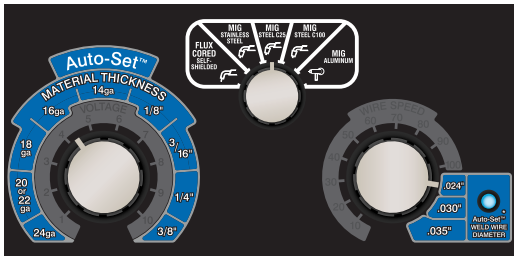
*Note: Shielding gas and safety equipment not included.*

Miller®

ISO 9001 Quality

# Operation Modes

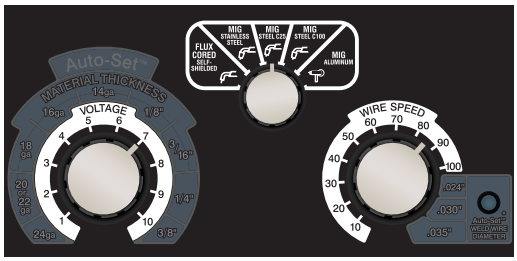
## Auto-Set™ mode




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 .024-, .030- and .035-inch steel and stainless steel wires, .030- and .035-inch flux-cored wires, and .030- and .035-inch 4043 aluminum wires with the Spoolmate 100 spool gun. 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.

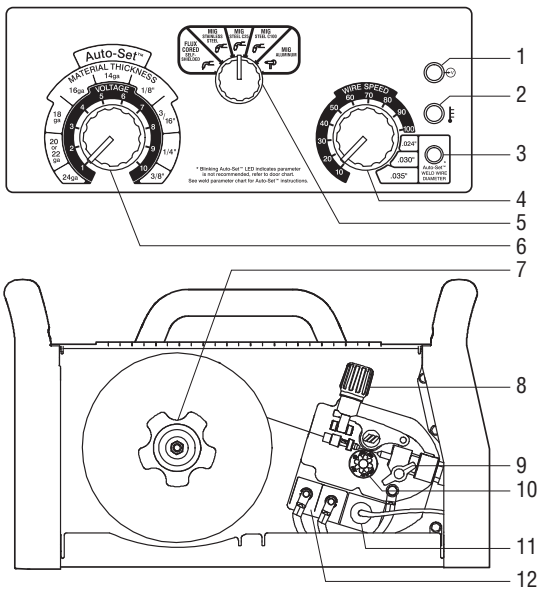
# Specifications (Subject to change without notice.)

CV DC 1 Phase

| Input Power | Amperage Range | Rated Output | Amps Input at Rated Output, 50/60 Hz 120 V | 240 V | KVA | KW | Wire Feed Speed | Wire Type and Diameter | Max. Open-Circuit Voltage | Dimensions | Net Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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–.045 in. (0.8–1.2 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

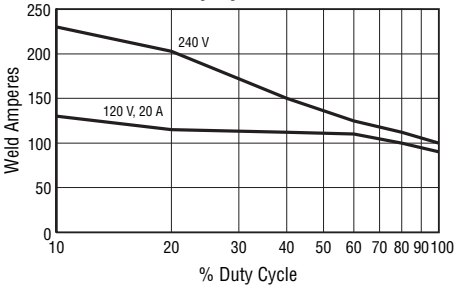



1. Power On Light
2. Over Temperature Light
3. Auto-Set Light
4. Wire Speed/Wire Diameter Control
5. Wire Selector Knob
6. Voltage/Material Thickness Control
7. Plastic Hub with Retaining Ring for 8-inch Spools (shaft also accepts 4-inch spools)
8. Calibrated Tension Knob
9. T-Knob (secures torch)
10.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

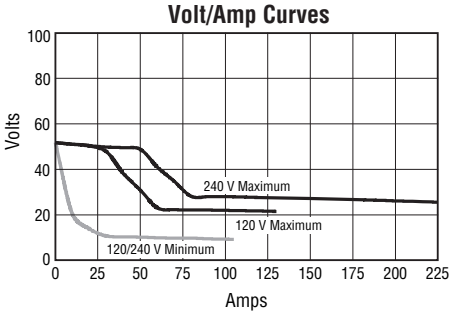
*Note: Power switch and gas solenoid are on machine back panel.*

# Performance Data

### Duty Cycle Chart




### Volt/Amp Curves






Miller

# Genuine Miller® Accessories

**MDX™-100 MIG Gun 1770028**
100-amp MIG gun with Miller® AccuLock™ MDX consumables for .030–.035 in. (0.8–0.9 mm) wire. Includes 10 ft. (3 m) cable assembly.

- Install AccuLock contact tips with a single turn.
- AccuLock 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™ 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™ 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 package (951603) and receive the Millermatic 211 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 301262**

# Consumables

## For MDX™-100 MIG Gun

**Miller® AccuLock™ MDX 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 *(10 ft.)***

| | |
|---|---|
| **LM1A-10** | .023/.025 in. (0.6 mm) |
| **LMD2A-10** | .030/.035 in. (0.8/0.9 mm) |
| **LMD3A-10** | .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.***

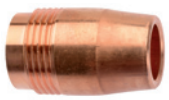
## For Spoolmate™ 100 Spool Gun

**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™ 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

**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**<br>**Millermatic® 211** with Running Gear/Cyl Rack | **907614**<br>**951603** | 120/240 V, 50/60 Hz<br>Power source packaged with 301239 running gear/cylinder rack | | |
| **Guns** | | | | |
| MDX™-100 Gun | **1770028** | 10 ft. (3 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 | **301262** | | | |
| Material Thickness Gauge | **229895** | | | |
| Flow Gauge Regulator for Argon or AR/$CO_2$ Mix | **31-50-580-6** | Replacement standard regulator | | |
| Flow Gauge Regulator for $CO_2$ | **31-50-320** | Required if using 100 percent $CO_2$ 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:**

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