# Millermatic<sup>®</sup> 212 Auto-Set<sup>®</sup>

## **MIG Power Source**, Wire Feeder and Gun Package





Quick **Specs**  **Industrial Applications** Metal fabrication Maintenance and repair Farm/home Light industrial

**Processes** MIG (GMAW) Flux-cored (FCAW)

**Input Power** 200(208)/230 V, single-phase, 60 Hz Amperage Range 30–210 A Rated Output 160 A at 24.5 VDC, 60% duty cycle Wire Feed Speed 50-700 ipm (1.3-17.8 m/min.) Max. Open-Circuit Voltage 34.5 V Net Weight 178 lb. (81 kg)

Auto-Set<sup>™</sup> makes setup quick and easv and works with .030- and .035-inch wire. See page 2 for more information.

Infinite voltage control. When used in manual mode provides broader operating range with finer control than a tap machine.

Line voltage compensation keeps power constant even if power input varies by ±10 percent.

No more replacing mechanical output contactors. Our built-in solid-state contactor circuit makes wire electrically "cold" until trigger is pulled, and gives you life-long welding output and performance.

Gun-On-Demand.<sup>™</sup> Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

#### Heavy-duty aluminum two-drive-roll system.

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

Compatible with Bobcat<sup>™</sup> welder/generators.



#### Comes complete with:

- 15 ft. (4.6 m), 250-amp MDX<sup>™</sup>-250 MIG gun
- 10 ft. (3 m) work cable with clamp
- 7 ft. (2.1 m) power cord with plug
- Flow gauge regulator and gas hose for argon or AR/CO<sub>2</sub> mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips
- Material thickness gauge (229895) 🕨



EZ-Access<sup>™</sup> consumable compartment and parameter chart. Set weld parameters right the first time with convenient flip-down compartment that provides fast access to parameter chart and consumables. See page 3 for more information.

Aluminum MIG welding with optional Spoolmate<sup>™</sup> 200 spool gun. Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with more

industrial Spoolmatic® spool guns.



**IMPROVED!** 

Now with NEW!

MDX Series MIG gun.

Welder is warranted for three years, parts and labor. Original main power rectifier parts are warranted for five years. Gun warranted for 90 days, parts and labor.



# **Operation Modes**

Auto-Set<sup>™</sup> eliminates guesswork and saves you time on setup.

Use Auto-Set when you want the speed, convenience and confidence of preset controls. Simply set the wire diameter, set the material thickness, and go! Auto-Set automatically sets your welder to the proper parameters. It's available when welding mild steel with .030 or .035 solid wires and C25 shielding gas (75 percent argon, 25 percent CO<sub>2</sub>).

You can also set the weld parameters manually. Simply refer to the flip-down parameter chart, and set the voltage and wire feed speed to the recommended settings for your application.

## Auto-Set<sup>™</sup> mode



• Set the material thickness within Auto-Set range for 22 gauge through 3/8-inch mild steel. The welder automatically sets itself to proper parameters, and is ready to weld!

- Turn wire speed control fully clockwise to select Auto-Set mode. Set the wire diameter to either .030 or .035 inch.
- Light indicates Auto-Set mode is activated.



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

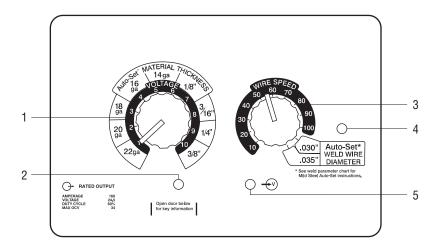
Amperage Range	Rated Output	Amps Input 200(208) V	at Rateo 230 V	l Output KVA	t, 60 Hz KW	Wire Feed Speed	Wire Type and Diameter	Max. Spool Size	Max. Open-Circuit Voltage	Dimensions	Net Weight
30-210 A	160 A at 24.5 VDC, 60% duty cycle 210 A at 22 VDC, 30% duty cycle	31.2 2.1*	27.1 1.8*	6.36 0.51*	5.45 0.26*	50–700 ipm (1.3–17.8 m/min.)	Solid/stainless steel: .023035 in. (0.6-0.9 mm) Flux-cored: .030045 in. (0.8-1.2 mm)	12 in. (305 mm)	34.5	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1,016 mm)	178 lb. (81 kg)

\*While idling.

Note: Operating temperature range: -4° to +104°F (-20° to +40°C). Storage temperature range: -22° to +122°F (-30° to +50°C).

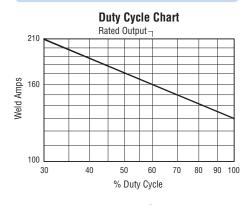
Standards. Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

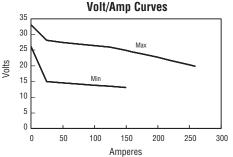
# **Control Panel**



- 1. Infinite Voltage Control/Material Thickness
- 2. Diagnostic Indicator Light
- 3. Wire Feed Speed Control/Wire Diameter
- 4. Auto-Set Light
- 5. Power On Indicator Light

# **Performance Data**







# **Standard Fully Loaded Features**

# EZ-Change<sup>™</sup> low cylinder rack

■ Operators no longer need to lift cylinders. Cylinders now easily roll on and off our EZ-Change<sup>™</sup> low cylinder rack.

# Angled wire drive

- Angled industrial aluminum dual-gear drive system significantly improves wire feeding and runs large spools of wire.
- Allows quick change of drive rolls without tools.
- Drive roll storage no more lost drive rolls, extra drive rolls are conveniently stored next to drive motor.
- Operators no longer bump into and bend MIG gun and gun liner.









# **Dual front handles**

- Split handle with rubber grips designed to move machine easily and allow work lead and MIG gun to be stored independently.
- Handles provide protection for front panel and MIG gun during transportation.

# EZ-Access<sup>™</sup> consumable compartment and parameter chart

 Convenient flip-down compartment holds parameter chart and storage for consumables.









# **Optional Fully Loaded Features**

## Elevated gun and cable rack

#### 300335

- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.
- No more running over spool gun cables or cables dragging on the floor.
- Elevated gun and cable rack can be used with either a single or dual cylinder rack. (Elevated gun and cable rack is included with the dual EZ-Change<sup>™</sup> low cylinder rack.)





## Dual EZ-Change<sup>™</sup> low cylinder rack with elevated gun and cable rack

#### 300337

- Dual cylinder rack allows for easy storage of two cylinders.
- EZ-Change<sup>™</sup> low cylinder rack eliminates the need to lift cylinders on and off cylinder rack.
- No more running over spool gun cables or cables dragging on the floor.
- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.



# **Genuine Miller® Accessories**



Dual EZ-Change<sup>™</sup> Low Cylinder Rack with Elevated Gun and Cable Rack 300337 Dual cylinder rack allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

#### Elevated Gun and Cable Rack 300335

For use with single cylinder rack. (Included with dual EZ-Change low cylinder rack.)



Protective Cover 195142 Features side pocket. (Not for use with dual cylinder rack or elevated gun and cable rack.)

Argon/Mixed Gas Regulator and Gas Hose 195050



Full KVA Adapter Cord 300517 Field NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic® and Spectrum<sup>®</sup> 240 V plug.

## **MIG Guns**



MDX<sup>™</sup>-250 MIG Gun with AccuLock<sup>™</sup> MDX Consumables 1770035 10 ft. (3 m) 1770036 12 ft. (3.7 m) 1770037 15 ft. (4.6 m), standard Industrial 250-amp MIG gun with consumables for .030/.035 in. (0.8/0.9 mm) wire.

#### MDX<sup>™</sup>-250 MIG Gun

with Industrial AccuLock<sup>™</sup> S Consumables 1770041 10 ft. (3 m) 1770042 12 ft. (3.7 m) 1770043 15 ft. (4.6 m) Industrial 250-amp MIG gun with consumables for .035/.045 in. (0.9/1.2 mm) wire.

## **Spool Guns**

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#### Spoolmate<sup>™</sup> 200 Spool Gun 300497

Reliable and economical spool gun perfect for hobbyists and light fabricators who weld aluminum. Handles .030-.035 inch (0.8–0.9 mm) aluminum wires and .023-.035 inch (0.6-0.9 mm) steel/stainless steel wires. Rated at 160 amps, 60 percent duty cycle with 20-foot cable assembly. For detailed information, see Spoolmate literature M/1.47.

Optional Spoolmate<sup>™</sup> 200 Head Tubes **300591** 45-degree head tube **300592** 9-inch extension head tube 243385 5-inch head tube



Spoolmatic® 15A Spool Gun 195156 Spoolmatic® 30A Spool Gun 130831 Ideal for aluminum welding jobs. Air-cooled, one-pound spool gun with 15-foot (4.6 m) or 30-foot (9.1 m) cable assembly. Rated at 200 amps at 100 percent duty cycle. For detailed information, see Spoolmatic literature M/1.73.



# **Consumables**

## For MDX<sup>™</sup>-250 MIG Guns

#### Standard Miller<sup>®</sup> AccuLock<sup>™</sup> 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)
Nozzles	
N M42000	Conner 1/2 in ID fluch

 N-M1200C
 Copper, 1/2 in. ID, flush, standard

 N-M1218C
 Copper, 1/2 in. ID, 1/8 in. recess

 N-M5800C
 Copper, 5/8 in. ID, flush

 N-M5818C
 Copper, 5/8 in. ID, 1/8 in. recess

 N-M58XTC
 Copper, 5/8 in. ID, 1/8 in. stickout

#### Diffuser D-M250

#### **Monocoil Replacement Liners**

**10 ft. Liner** LM1A-10 .02

 LM1A-10
 .023/.025 in. (0.6 mm)

 LM2A-10
 .030/.035 in. (0.8/0.9 mm)

 LM3A-10
 .035/.045 in. (0.9/1.2 mm)

 12 ft. Liner
 .023/.025 in. (0.6 mm)

 LM1A-12
 .023/.025 in. (0.6 mm)

 LM2A-12
 .030/.035 in. (0.8/0.9 mm)

 LM3A-12
 .033/.045 in. (0.9/1.2 mm)

#### 15 ft. Liner

LM1A-15	.023/.025 in. (0.6 mm)
LM2A-15	.030/.035 in. (0.8/0.9 mm)
LM3A-15	.035/.045 in. (0.9/1.2 mm)

#### Optional Bernard® AccuLock $^{\rm \tiny M}$ S Consumables

Consumables for increased durability and longer life when guns are used in industrial applications.

#### Contact Tips (10 per package)

T-A023CH	.023 in. (0.6 mm)
T-A030CH	.030 in. (0.8 mm)
T-A035CH	.035 in. (0.9 mm)
T-A039CH	.039 in. (1.0 mm)
T-A045CH	.045 in. (1.2 mm)
Nozzles	
N-A5800C	Copper, 5/8 in. ID, flush, standard
N-A5818C	Copper, 5/8 in. ID, 1/8 in. recess
N-A5814C	Copper, 5/8 in. ID, 1/4 in. recess
D://	844050

#### Diffuser D-MA250

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

## For Spoolmate<sup>™</sup> 200 Spool Gun

*Note: Spoolmate 200 spool gun ships with (2) .030 in. and (2) .035 in. contact tips and (1) nozzle.* 

#### For Standard Heavy-Duty Head Tube

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

#### Nozzle 050622

#### For Optional Head Tubes

Note: The same consumables are used on 45-degree, 9-inch extension and 5-inch head tubes.

#### Contact Tips (5 per package)

 
 199730
 .024 in. (0.6 mm) (requires V-knurled drive roll 136135)

 186419
 .030 in. (0.8 mm)

 186406
 .035 in. (0.9 mm)

 Nozzle
 186405

#### For Spoolmatic<sup>®</sup> Spool Guns

#### For Aluminum Wire

FasTip™	Contact Tips (25 per package)
206186	Heavy-duty, .030 in. (0.8 mm)
206187	Heavy-duty, .035 in. (0.9 mm)
206188	Heavy-duty, .040 in. (1.0 mm)
209026	Tapered, .030 in. (0.8 mm)
209027	Tapered, .035 in. (0.9 mm)

#### **Screw-On Nozzles**

II HOLLIGO
Brass, 1/2 in. orifice, tapered
Brass, 5/8 in. orifice, tapered
Brass, 5/8 in. orifice, tapered HD
Brass, 3/4 in. orifice, straight
Brass, 3/4 in. orifice, straight HD
Copper, 3/8 in. orifice, tapered
Copper, 1/2 in. orifice, tapered
Copper, 1/2 in. orifice, tapered HD
Copper, 5/8 in. orifice, tapered
Copper, 5/8 in. orifice, tapered HD
Copper, 5/8 in. orifice, tapered 15/16 OD
Copper, 3/4 in. orifice, straight
Copper, 3/4 in. orifice, straight HD

Bernard<sup>®</sup> Centerfire<sup>™</sup> "T" Series Contact Tips T-035AL .035 in. (0.9 mm)

#### Bernard<sup>®</sup> Centerfire<sup>™</sup> Small Nozzles

NST-3818B	Brass, 3/8 in. ID, 1/8 in. tip recess
NS-1218B	Brass, 1/2 in. ID, 1/8 in. tip recess
NS-1200B	Brass, 1/2 in. ID, flush tip
NS-5818B	Brass, 5/8 in. ID, 1/8 in. tip recess
NS-1218C	Copper, 1/2 in. ID, 1/8 in. tip recess

## For Millermatic<sup>®</sup> 212 Auto-Set<sup>™</sup>

Note: Machine drive roll kits include two drive rolls and an inlet guide.

#### V-Grooved Drive Roll Kits (solid wire)

 
 204579
 .030 and .035 in. (0.8 and 0.9 mm) combination (reversible)

 087131
 .024 in. (0.6 mm)

 079594
 .030 in. (0.8 mm)

 079595
 .035 in. (0.9 mm)

#### V-Knurled Drive Roll Kits

(flux-cored or difficult-to-feed wire) 079606 .035 in. (0.9 mm) 079607 .045 in. (1.2 mm)



# **Ordering Information**

Steel Configuration	Stock No.	Description		Price
Millermatic® 212 Auto-Set™	907405	200(208)/230 V, 60 Hz		
Millermatic V-Grooved Drive Roll Kits (solid wire)	087131	.024 in. (0.6 mm)		
	079594	.030 in. (0.8 mm)		
	079595	.035 in. (0.9 mm)		
	204579	.030/.035 in. (0.8/0.9 mm)		
Millermatic V-Knurled Drive Roll Kits (flux-cored)	079606	.035 in. (0.9 mm)		
	079607	.045 in. (1.2 mm)		
Miller <sup>®</sup> AccuLock <sup>™</sup> MDX <sup>™</sup> Contact Tips	T-M023	.023 in. (0.6 mm)		
(10 per package)	T-M030	.030 in. (0.8 mm)		
	T-M035	.035 in. (0.9 mm)		
	T-M045	.045 in. (1.2 mm)		
Miller <sup>®</sup> AccuLock <sup>™</sup> MDX <sup>™</sup> Nozzles	N-M1200C	Copper, 1/2 in. ID, flush, standard		
	N-M1218C	Copper, 1/2 in. ID, 1/8 in. recess		
	N-M5800C	Copper, 5/8 in. ID, flush		
	N-M5818C	Copper, 5/8 in. ID, 1/8 in. recess		
	N-M58XTC	Copper, 5/8 in. ID, 1/8 in. stickout		

# Aluminum Configuration For MDX-250 gun consumables and Millermatic 212 Auto-Set drive rolls, see steel configuration chart above.

Millermatic <sup>®</sup> 212 Spool Gun Package (includes standard MDX <sup>™</sup> -250 MIG gun)	951177	200(208)/230 V, 60 Hz with Spoolmate <sup>™</sup> 200, dual cylinder rack, elevated gun and cable rack, regulator and hose	
Spoolmate <sup>™</sup> 200 Contact Tips (5 per package)	199387 199388 050622	.030 in. (0.8 mm) wire .035 in. (0.9 mm) wire	
Optional Spoolmate™ 200 Head Tubes	300591 300592 243385	45-degree head tube 9 in. extension head tube 5 in. head tube	

#### **Accessories**

Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	300337		
Elevated Gun and Cable Rack	300335	For use with single cylinder rack (included with dual EZ-Change low cylinder rack)	
Protective Cover	195142	Features side pocket	
Argon/Mixed Gas Regulator and Gas Hose	195050		
Full KVA Adapter Cord	300517		
Guns			
MDX™-250 MIG Gun	1770035	10 ft. (3 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire	
with AccuLock™ MDX Consumables	1770036	12 ft. (3.7 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire	
	1770037	15 ft. (4.6 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire	
MDX <sup>™</sup> -250 MIG Gun	1770041	10 ft. (3 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire	
with Industrial AccuLock™ S Consumables	1770042	12 ft. (3.7 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire	
	1770043	15 ft. (4.6 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire	
Spoolmate™ 200	300497	20 ft. (6 m), 160 A, .030–.035 in. (0.8–0.9 mm) for aluminum wire,	
		.023035 in. (0.6-0.9 mm) for steel/stainless steel wires	
Spoolmatic <sup>®</sup> 15A	195156	15 ft. (4.6 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum wire	
Spoolmatic <sup>®</sup> 30A	130831	30 ft. (9 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum wire	

Date:

**Total Quoted Price:** 

