# Millermatic 212 Auto-Set

### MIG Arc Welding 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**

208/230 V, 1-Phase, 60 Hz

Rated Output 160 A at 24.5 VDC, 60% Duty Cycle

Max. Open-Circuit Voltage 34.5 V Amperage Range 30 – 210 A

Wire Feed Speed 50-700 IPM (1.3-17.8 m/min.)

**Weight** 178 lb. (81 kg)

# The Power of Blue®

Auto-Set™ is a breakthrough control that automatically sets your welder to the proper parameters. Auto-Set makes set up very simple and gives you precise settings instantly. See page 2 for details.

**Manual mode** allows you to manually set weld parameters for broader applications.

Infinite voltage control replaces "tap" settings which means that you now can "dial in" precise weld voltage and wire feed speed when using the Manual Mode.

Compatible with Spoolmate™ 200

spool gun! The
Spoolmate 200
with wire feed speed
control on the gun saves
time for the operator by
eliminating the need to go
back to the machine to change the
spool gun wire feed speed.

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.

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



- 15-ft. (4.6 m), 250-amp M-25 MIG gun for .030/.035-in. wire
- 10-ft. (3 m) work cable with clamp
- 7-ft. (2.1 m) power cord and plug
- Argon mix regulator/flow gauge and hose
- Factory-installed running gear with EZ-Change™ Low Cylinder Rack
- .030/.035-in. reversible drive rolls
- Extra contact tips
- Set-up and operation interactive CD
- Material thickness gauge (#229 895) >





EZ-Access™ 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.

Reduce maintenance and operating costs with our Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and contaminants drawn into the machine.



Welder is warranted for 3 years, parts and labor.

Original main power rectified parts are warranted for 5 years.

Gun warranted for 90 days, parts and labor.



#### Miller Electric Mfg. Co.

An Illinois Tool Works Company 1635 West Spencer Street Appleton, WI 54914 USA

### **Equipment Sales US and Canada**

Phone: 866-931-9730 FAX: 800-637-2315 International Phone: 920-735-4554 International FAX: 920-735-4125 Website

MillerWelds.com



### **Auto-Set™ Feature**

The Millermatic® 212 Auto-Set™ eliminates the guess work when setting weld parameters.

Use Auto-Set when you want the speed, convenience and confidence of pre-set controls. Simply set the wire diameter, set the material thickness, and go! The Auto-Set control automatically sets your welder to the proper parameters. It is available when welding mild steel with solid wire and only works with .030 and .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 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.)







Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input 200 (208) V		t, 60 Hz KW	Wire Type and Diameter	Wire Feed Speed	Max. Spool Size	Dimensions	Net Weight
160 A at 24.5 VDC, 60% Duty Cycle 210 A at 22 VDC, 30% Duty Cycle	30-210 A	34.5	31.2 2.1*	27.1 1.8*	5.45 0.26*	Solid/Stainless Steel .023035 in. (0.6 - 0.9 mm) Flux-Cored .030045 in. (0.8 - 1.2 mm)	50 – 700 IPM (1.3 – 17.8 m/min.)	12 in. (305 mm)	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1016 mm)	178 lb. (81 kg)

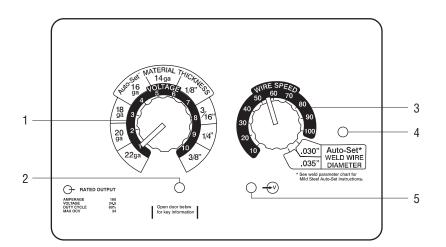
<sup>\*</sup>While idling.

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



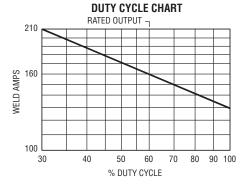
(P) Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

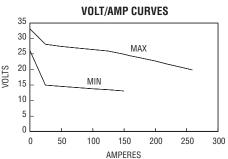
### **Control Panel**



- 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™ Low Cylinder Rack

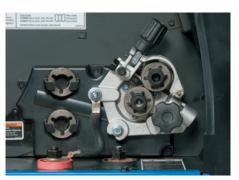
Operators no longer need to lift cylinders.
 Cylinders now easily roll on and off our
 EZ-Change™ Low Cylinder Rack.





### **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™ 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**

### #300 335

- 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™ Low Cylinder Rack with Elevated Gun and Cable Rack

### #300 337

- Dual cylinder rack allows for easy storage for two cylinders.
- EZ-Change™ 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**

M-25 Replacement Gun

**#169 594** 10 ft. (3 m) **#169 596** 12 ft. (3.7 m)

**#169 598** 15 ft. (4.6 m) standard Gun shipped to run .030 – .035 inch (0.8 – 0.9 mm) wire.



Spoolmate™ 200 Spool Gun #300 497
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, Index No. M/1.47.



Spoolmatic® 15A Spool Gun #195 156 Spoolmatic® 30A Spool Gun #130 831 Ideal for aluminum welding jobs. Air-cooled, 1-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, Index No. M/1.73.



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337

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** #300 335 For use with single cylinder rack. (*Included with Dual EZ-Change Low Cylinder Rack.*)



Protective Cover #195 142
Features side pocket.
(Not for use with Dual Cylinder Rack or Elevated Gun and Cable Rack.)

Argon/Mixed Gas Regulator and Gas Hose #195 050

(Order from Miller Service Parts.)

**CO**<sub>2</sub> **Regulator/Flow Gauge** #237 702 Required if using 100 percent CO<sub>2</sub> gas. (Order from Miller Service Parts.)



### **Consumables** (Order from Miller Service Parts.)

### For M-25 Gun



#### **Contact Tips**

**#087 299** .023/.025 in. (0.6 mm)

**#000 067** .030 in. (0.8 mm) **#000 068** .035 in. (0.9 mm) **#000 069** .045 in. (1.1 mm)

**#187 117** .035 in. (0.9 mm) heavy-duty tip **#187 118** .045 in. (1.2 mm) heavy-duty tip

### **Tapered Contact Tips**

**#176 797** .030 in. (0.8 mm) **#176 793** .035 in. (0.9 mm) **#176 794** .045 in. (1.2 mm)



Contact Tip Adapter #169 728



### **Replacement Liners**

**#194 010** .023/.025 in.

**#194 011** .030 – .035 in. (standard)

**#194 012** .035 – .045 in.



#### **Nozzles**

Note: Flush or stickout nozzles should be used for the short-circuit process.

### #200 258 Standard

1/2-inch (13 mm) diameter orifice. Nozzle flush with contact tip.

#### #169 726

5/8-inch (16 mm) diameter orifice. Nozzle flush with contact tip.

#### #169 727

5/8-inch (16 mm) diameter orifice. Contact tip sticks out of nozzle 1/8 inch (3.2 mm).

#### #169 724

1/2-inch (13 mm) diameter orifice. Contact tip recessed 1/8 inch (3.2 mm) into nozzle.

#### #169 725

5/8-inch (16 mm) diameter orifice. Contact tip recessed 1/8 inch (3.2 mm) into nozzle.

### **Tapered Nozzles**

Note: Tapered tips are recommended when using a tapered nozzle.

#### #176 243

3/8-inch (9.5 mm) diameter orifice.

#### #178 386

11/32-inch (8.7 mm) diameter orifice.



### M-Series Consumable Kits

**#234 610** .030 in. (0.8 mm) **#234 611** .035 in. (0.9 mm) **#234 612** .045 in. (1.2 mm)

Contains ten contact tips, one nozzle, one contact tip adapter and one nozzle adapter.

### **Drive Rolls**

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

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

**#204 579** .030 and .035 in. (0.8 and 0.9 mm)

combination (reversible) **#087 131** .023/.025 in. (0.6 mm)

**#079 594** .030 in. (0.8 mm) **#079 595** .035 in. (0.9 mm)

#### V-Knurled Drive Roll Kits

(flux-cored or difficult-to-feed wire) **#079 606** .035 in. (0.9 mm)



# **Notes**



# **Ordering Information**

Steel Configuration	Stock No.	Description		Price
Millermatic <sup>®</sup> 212 Auto-Set <sup>™</sup> #907 405		200(208)/230 V, 60 Hz		
V-Groove Drive Roll Kits (solid wire)	#087 131	.023/.025 (0.6 mm)		
	#079 594	.030 (0.8 mm)		
	#079 595	.035 (0.9 mm)		
	#204 579	.030/.035 (0.8/0.9 mm)		
V-Knurled Drive Roll Kits (flux-cored)	#079 606	.035 (0.9 mm)		
	#079 607	.045 (1.2 mm)		
Contact Tips (10 per package)	#087 299	.023/.025 (0.6 mm)		
	#000 067	.030 (0.8 mm)		
	#000 068	.035 (0.9 mm)		
	#000 069	.045 (1.2 mm)		
Nozzles	#169 724	1/2-in. (13 mm) diameter, 1/8-in. (3.2 mm) recessed		
	#169 725	5/8-in. (16 mm) diameter, 1/8-in. (3.2 mm) recessed		
	#200 258	1/2-in. (13 mm) diameter, flush. <i>Included with standard configuration</i>		
	#169 726	5/8-in. (16 mm) diameter, flush		
	#169 727	5/8-in. (16 mm) diameter, 1/8-in. (3.2 mm) exposed		
M-Series Gun Consumable Kits (for M-25)	#234 607	.030 in. (0.8 mm)		
	#234 608	.035 in. (0.9 mm)		
	#234 609	.045 in. (1.2 mm)		

### **Aluminum Configuration**

Millermatic® 212 Spool Gun Package (includes standard M-25 MIG gun)	#951 177	200(208)/230 V, 60 Hz with Spoolmate™ 200, dual cylinder rack, elevated gun and cable rack, regulator and hose	
Spoolmate 200 Contact Tips (5 per package)	#199 730 #186 419 #186 406	.023 (0.6 mm) wire (Requires V-Knurled drive roll #136 135.) .030 (0.8 mm) wire .035 (0.9 mm) wire	
Spoolmate 200 Nozzle	#186 405		
Optional Spoolmate 200 Barrel Assemblies	#300 591 #300 592 #300 593	45-degree barrel 9-in. extension barrel Heavy-duty barrel	

For M-25 gun consumables and Millermatic 212 Auto-Set drive rolls, see steel configuration chart above.

### **Accessories**

M-25 Gun	#169 594	10 ft. (3 m), .023 – .035 in. (0.6 – 0.9 mm)	
W 25 ddii	#169 596	12 ft. (3.7 m), .023 – .035 in. (0.6 – 0.9 mm)	
	#169 598	15 ft. (4.6 m), .023 – .035 in. (0.6 – 0.9 mm)	
Spoolmate™ 200	#300 497	20 ft. (6 m), 160 A, .030 –.035 in. (0.8 – 0.9 mm) for aluminum, .023 –.035 in. (0.6 – 0.9 mm) for steel/stainless steel wires	
Spoolmatic® 15A	#195 156	15 ft. (4.6 m), 200 A, .023-1/16 in. (0.6-1.6 mm) for aluminum	
Spoolmatic® 30A	#130 831	30 ft. (9 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum	
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	#300 337		
Elevated Gun and Cable Rack	#300 335	For use with single cylinder rack. (Included with Dual EZ-Change Low Cylinder Rack.)	
Protective Cover	#195 142	Features side pocket	
Argon/Mixed Gas Regulator and Gas Hose	#195 050		
CO <sub>2</sub> Regulator/Flow Gauge	#237 702	Required if using 100% CO <sub>2</sub> gas. (Order from Miller Service Parts.)	

Date: Total Quoted Price:



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