

# Miller<sup>®</sup>matic 140

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**MIG Arc Welding 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)

**Input Power** 115 V, 20 A, 60 Hz, Single-Phase

**Rated Output** 90 A at 18 VDC, 20% Duty Cycle  
63 A at 21 VDC, 20% Duty Cycle, **CSA**

**Amperage Range** 30–140 A

**Max. Open-Circuit Voltage** 28

## The Power of Blue.<sup>®</sup>

**NEW! Smooth-Start™** patent-pending technology provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category. No pop gun starts and no spatter to clean up.

### Infinite Voltage Control with Manual On/Off Wire Feed Speed Tracking

provides a broader operating range with finer control by automatically increasing or decreasing wire feed speed when voltage is adjusted (unit shipped with wire feed speed tracking set to "off").

### Durable cast aluminum feedhead

incorporates dual-groove quick-change drive roll and spring-loaded tension arm with calibrated tension knob, all designed to make set up easier and faster.

### Thermal overload protection

shuts down unit and activates **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when fault is corrected and unit cools.

### Miller's exclusive "Tip Saver" short circuit protection

shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage. **Trigger reset** permits quick reset at torch rather than unit.

### Self-resetting motor protection circuit

eliminates the need to find and replace fuses.

**New!**



### Comes Complete With:

- Power source
- 6 ft (1.8 m) power cord and plug
- 10 ft (3 m), M-10 MIG gun and cable assembly
- 10 ft (3 m) work cable and clamp
- Smith<sup>®</sup> Argon and AR/CO<sub>2</sub> mix regulator/flow gauge with hose
- Spool of Hobart<sup>®</sup> .024 in (0.6 mm) solid wire
- Two contact tips for .024 in (0.6 mm) wire and two contact tips for .030 in (0.8 mm) wire
- Dual groove quick-change drive roll for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Factory-installed gas solenoid valve
- Set-up and operation video
- Information/settings chart
- Material thickness gauge

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



Easy access to output studs provides **convenient polarity changeover** when changing from solid or flux cored wires.

### Semiautomatic constant voltage wire welding package

is capable of welding 24 gauge up to 3/16 in (0.8–4.8 mm) mild steel.

### Standard built-in solid-state

**contactor circuit** makes wire electrically "cold" until trigger is pulled, making the unit safer. It's also easier to position torch to work before starting weld.

### Uses 4 or 8 in (102 or 203 mm)

**spools** and can be set up to weld with wire sizes .024–.030 in (0.6–0.8 mm) mild/stainless steel and .030–.035 in (0.8–0.9 mm) flux cored.

**TRUE BLUE<sup>®</sup>**  
3 YR. WARRANTY

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.

MADE IN **USA**



### Miller Electric Mfg. Co.

An Illinois Tool Works Company  
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Appleton, WI 54914 USA

### International Headquarters

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USA FAX: 920-735-4134  
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International FAX: 920-735-4125

### Web Site

www.MillerWelds.com



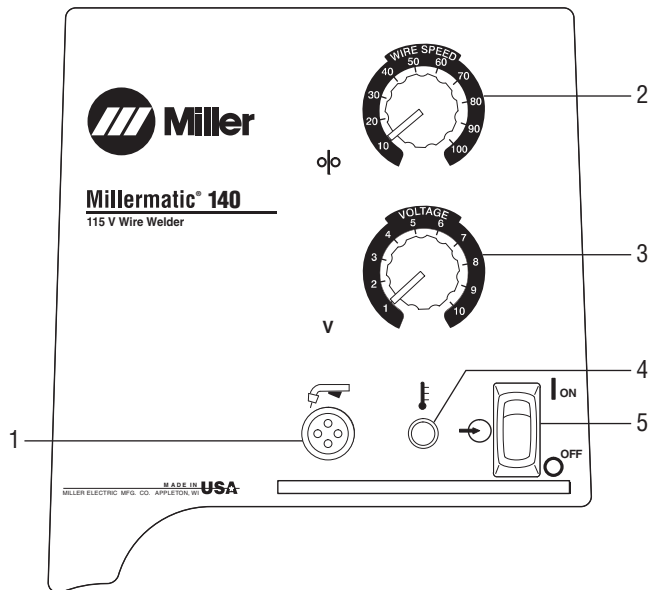
# Specifications (Subject to change without notice.)



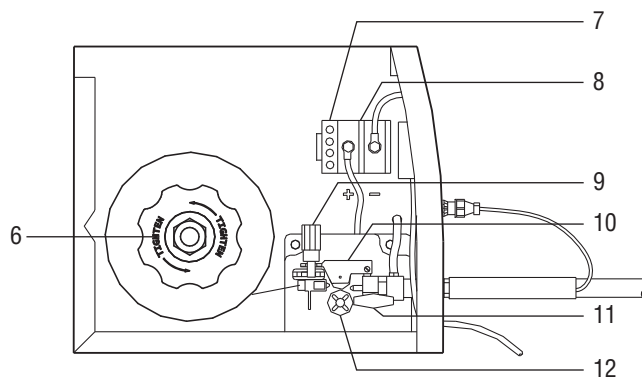
Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz			Wire Feed Speed	Dimensions	Net Weight	Ship Weight
			115 V	KVA	KW				
90 A, 18 VDC at 20% Duty Cycle	30–140 A	28	20	2.8	2.4	40–500 IPM (1.0–12.7 m/min); 45–500 IPM at no load (1.1–12.7 m/min)	H: 17-1/2 in (444 mm) W: 10-5/8 in (273 mm) D: 15-3/4 in (400 mm)	60 lb (27.3 kg)	67 lb (30.5 kg)
63 A, 21 VDC at 20% Duty Cycle, <b>CSA</b>			15	2.1	1.8				

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

## Control Panel



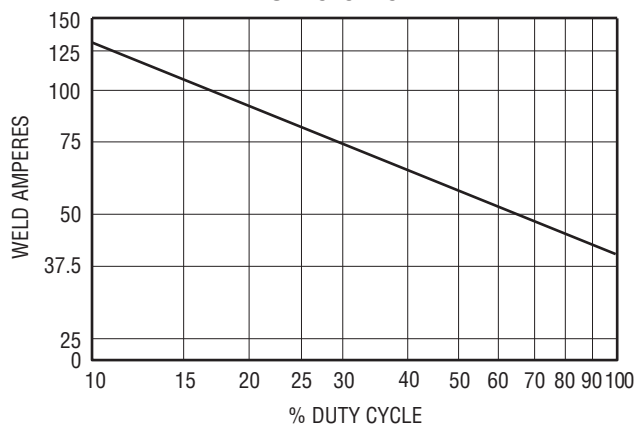
1. Trigger Lead Switch Connection
2. Wire Feed Speed Control
3. Infinite Voltage Control
4. Over Temperature Light
5. Power Switch



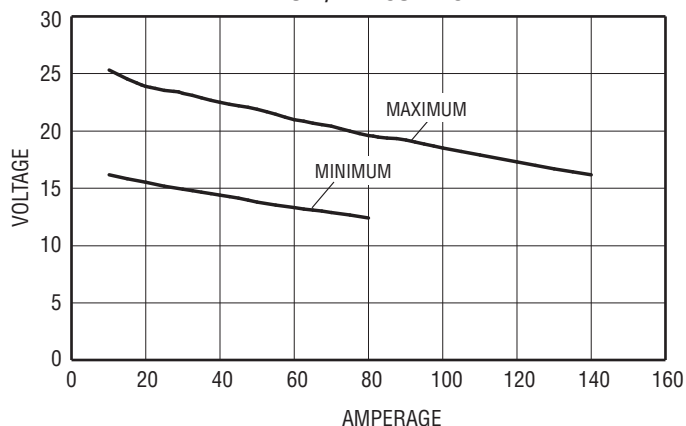
6. Plastic Hub with Retaining Ring for 8 in Spools (shaft also accepts 4 in spools)
7. Storage Holes for Spare Tips
8. Polarity Changeover Terminals
9. Calibrated Tension Knob
10. Springloaded Tension Arm
11. T-Knob (secures torch)
12. Dual Groove Quick-Change Drive Roll

## Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



## Genuine Miller Accessories

**M-10 Replacement Gun #195 605**  
10 ft (3 m). Shipped with liner #194 011.



**Millermatic Protective Cover #195 149**



**Running Gear/Cylinder Rack #300 416**  
Heavy-duty construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 100 lb (45 kg).



**Small Running Gear/Cylinder Rack #300 425**  
Durable construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 75 lb (34 kg).

**Purchase the Millermatic 140 package (#907 311-01-1) and receive Millermatic 140 and Small Running Gear/Cylinder Rack (#300 425) packaged together!**

## Consumables (Order from Miller Service Parts.)



### 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



### Nozzle #169 715

1/2 in (13 mm) diameter orifice. Nozzle flush with contact tip (standard).

### Spot Nozzles

**#176 237** Flat  
**#176 239** Inside corner  
**#176 241** Outside corner



### Gasless Flux Cored Nozzle #226 190

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 work piece. For use with M10 and M15 torches.



### Drive Rolls — Quick Change

#### Dual Groove, V-Smooth #220 179

For .024, .030 and .035 in (0.6, 0.8 and 0.9 mm) wire.

#### Dual Groove, V-Knurled #202 926

For .030/.035 in (0.8/0.9 mm) or .045 in (1.2 mm) flux cored wire.



### Gun Convenience Kit #193 973

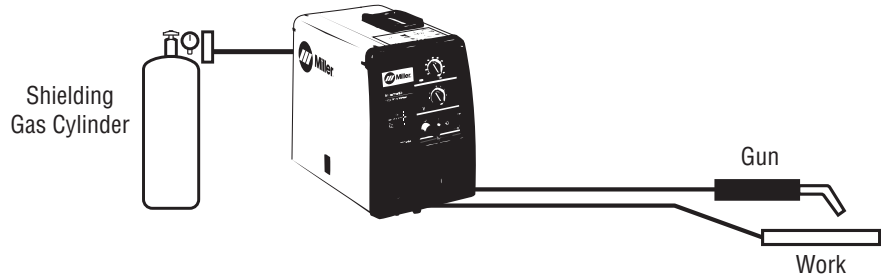
Contains:

3 – .024 in (0.6 mm) contact tips (#087 299)  
5 – .030 in (0.8 mm) contact tips (#000 067)  
5 – .035 in (0.9 mm) contact tips (#000 068)  
2 – Tip adapters (#169 716)  
3 – O-rings (#170 471)  
2 – Shock washers (#169 717)  
1 – 1/2 in (13 mm) diameter orifice nozzle (#169 715)

# Typical Installations



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



## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Millermatic® 140</b>	<b>#907 311</b>	115 V, 60 Hz		
<b>Millermatic® 140 with Small Running Gear</b>	<b>#907 311-01-1</b>	Power source packaged with #194 776 Small Running Gear/Cylinder Rack		
<b>Guns</b>				
M-10 Gun	<b>#195 605</b>	10 ft (3 m), .030–.035 in (0.8–0.9 mm)		
<b>Consumables</b> (Order from Miller Service Parts.)				
Contact Tips		See page 3		
Contact Tip Adapter		See page 3		
Replacement Liners		See page 3		
Nozzles		See page 3		
Spot Nozzles		See page 3		
Gasless Flux Cored Nozzle	<b>#226 190</b>			
Gun Convenience Kit	<b>#193 973</b>			
Drive Rolls		See page 3		
<b>Accessories</b>				
Running Gear/Cylinder Rack	<b>#300 416</b>			
Small Running Gear/Cylinder Rack	<b>#300 425</b>			
Protective Cover	<b>#195 149</b>			
CO <sub>2</sub> Regulator/Flow Gauge	<b>#212 492</b>	Required if using 100% CO <sub>2</sub> Gas. <i>Order from Miller Service Parts</i>		
Flux Cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				

Date:

Total Quoted Price:



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