

Miller[®]matic 350/350P

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**MIG Arc Welding
Power Source** 

Quick Specs

Industrial Applications

Fabrication
Maintenance and Repair
Farm
Manufacturing
Industrial

Processes

MIG (GMAW)
Pulsed MIG (GMAW-P)*
Flux Cored (FCAW)

*With 350P Model Only

Rated Output 300 A at 32 VDC, 60% Duty Cycle, 60 Hz, 1- or 3-Phase Input Power

Amperage Range 25–400 A

Wire Feed Speed 50–700 IPM (1.3–18 m/min) MIG Gun
50–800 IPM (1.3–20 m/min) Spool Gun/Push-Pull Gun

Weight 181 lb (82 kg)

The Power of Blue.[®]

Built-in pulsed MIG programs (Miller[®]matic 350P only)

- .035 and .045 in (0.9 and 1.2 mm) for mild or stainless steel.
- .035 and .047 in (0.9 and 1.2 mm) for 4000 and 5000 series aluminum.
- .045 in (1.2 mm) for metal core.

All programmed information is stored for MIG, push-pull and spool guns, and is restored after each power up.

1- or 3-phase input power with **Line Voltage Compensation** for constant output even with fluctuations to the input power.

Aluminum Pulse Hot Start[™] (Miller[®]matic 350P only)

automatically provides more arc power to eliminate a “cold start” that is inherent with aluminum starts.

Superior Aluminum Performance—direct connection for optional XR[™] push-pull guns or Spoolmatic[®] spool gun. With Miller's exclusive **Gun-On-Demand**, simply pull the trigger for the gun to be used and you're ready to weld.

Fan-On-Demand cooling only operates when needed, reducing power consumption and contaminants inside the unit.

Industrial, 4-roll wire drive system features two easy-to-set, scaled, tension adjustments and quick-change reversible drive rolls for .035 and .045 in (0.9 and 1.2 mm) wire.

New! XR-Aluma-Pro[™] Push-Pull Gun Aluminum Welding System now available. See page 3.



Welds materials 22 gauge up to 1/2 in (12.7 mm) thick.

TRUE BLUE[®]
3YR. WARRANTY

Power source 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.

Standard MIG System Comes Complete with:

- Bernard[®] Q300 15 ft (4.6 m) MIG gun with extra Centerfire[™] contact tips
- 10 ft (3 m) Industrial power cord (without plug) for single- or three-phase
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid
- Argon mix regulator/flow meter
- Factory-installed, low-mounted running gear/cylinder rack
- .035/.045 in (0.9/1.2 mm) reversible V-groove drive rolls (order U-groove drive roll kits for aluminum welding)
- Set-up and operation CD

Special Features

- Run-in adjustment for MIG, push-pull and spool guns.
- Built-in 2-minute spot timer.
- Pre-flow and post-flow adjustment.
- View actual welding amperage/voltage during welding, and 5 seconds after arc has shutoff.
- SharpArc[™] controls welding arc cone width in pulsed MIG welding mode.
- Inductance control customizes weld output characteristics in MIG welding mode.

Exclusive Internal Timers

- **Adjustable crater** feature optimizes crater size for steel, stainless, aluminum and metal-core applications.
- **Crater Time Delay** allows deactivation of crater feature for tack or small welds.
- **Wire Jog Mode**
 - If trigger is pressed and no arc is detected after 3 seconds, the welding output will be shut off and the unit will go into JOG MODE for feeding wire to the gun.
 - Gas Saver—Gas will automatically shutoff after 1 minute when no arc has been detected.
 - Wire Saver—Wire drive will automatically shutoff after 2 minutes when no arc has been detected.



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MADE IN **USA**
APPLETON, WI **USA**

Specifications (Subject to change without notice.)

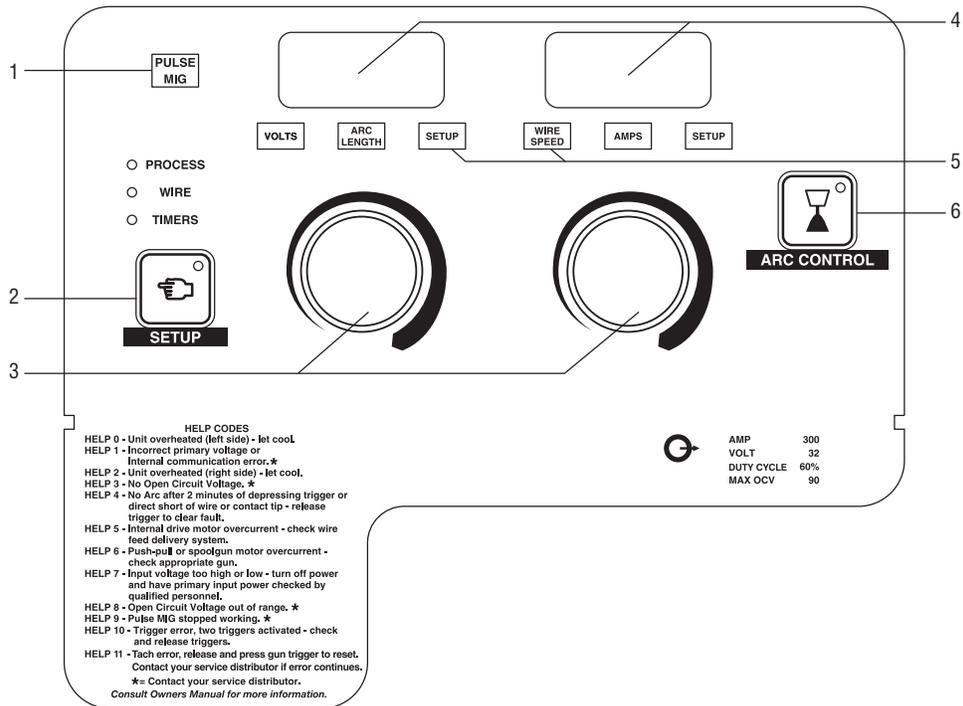


Rated Output	Amperage Range	Amps Input at Rated Output, 60 Hz						Wire Type and Diameter	Wire Feed Speed	Dimensions	Net Weight
		200 V	230 V	460 V	575 V	KVA	KW				
Three-phase 300 A at 32 V 60% Duty Cycle	25-400 A	34	30	15	12	11.6	11.5	Solid Steel: .023-.045 in (0.6-1.2 mm) Aluminum: .035-.047 in (0.9-1.2 mm) Flux Core: .030-.045 in (0.8-1.2 mm) Metal Core: .035-.052 in (0.9-1.3 mm)	MIG Gun: 50-700 IPM (1.3-18 m/min) Spool Gun and Push-Pull Gun: 50-800 IPM (1.3-20 m/min)	H: 34 in (863 mm) W: 19 in (483 mm) D: 41 in (1041 mm)	181 lb (82 kg)
Single-phase 300 A at 32 V 60% Duty Cycle		69	61	30	24	13.1	11.2				

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

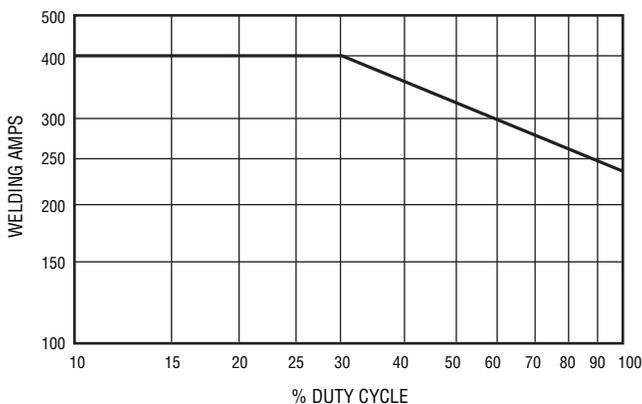
Control Panel

1. Weld Mode Indicator Lights
2. Menu Set-Up Button
3. Adjustment Knobs
4. Weld Parameter Displays
5. Weld Function Indicator Lights
6. Arc Control Button

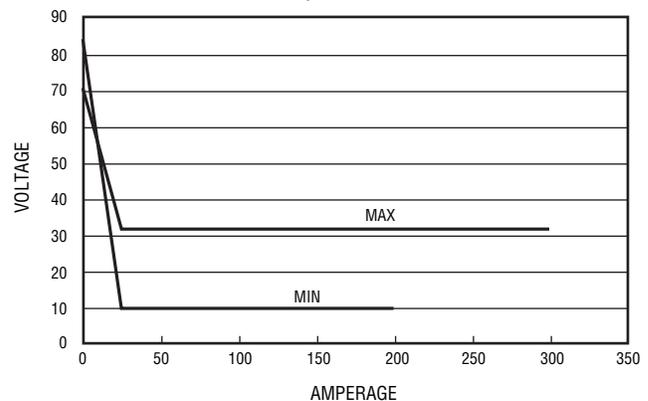


Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES





NEW! Millermatic 350P/XR-Aluma-Pro™ Push-Pull Gun Aluminum System
#907 379 200/230/460 V
#907 380 460/575 V
 The ideal aluminum welding package. Includes Millermatic 350P, 25 ft XR-Aluma-Pro™ push-pull gun, .035 and .047 (3/64) FasTip™ contact tips, and .035/.047 (3/64) reversible U-groove drive rolls. (Q300 MIG gun not included.)

Guns

Bernard® Q300 MIG Gun #229 560
 15 ft (4.6 m), 300 amp gun handles standard wire size .035–.045 in (0.9–1.2 mm). Includes Centerfire™ contact tips.



Spoolmatic® 15A Spool Gun #195 156
Spoolmatic® 30A Spool Gun #130 831

Ideal for aluminum welding jobs. 200 amp, 100% duty cycle, air-cooled, 1 lb spool gun with your choice of 15 or 30 ft (4.6 m or 9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.5.

XR-A Aluma-Pro Push-Pull Gun
#300 000 15 ft (4.6 m)
#300 001 25 ft (7.6 m)
#300 264 35 ft (10.7 m)

XR-A Pistol Push-Pull Gun
#198 127 15 ft (4.6 m)
#198 128 30 ft (9 m)

XR-A Python® Push-Pull Gun
#195 373 25 ft (7.6 m)
 Performs well on thin-gauge aluminum.

Adapter Cable #195 498
 Required for XR-Edge Guns prior to serial #LE079101.

U-Groove Aluminum Drive Roll and Accessory Kits

Note: XR-A Pistol kits include U-groove machine drive rolls, nylon wire guides, gun drive rolls and contact tips. XR-A Python/Aluma-Pro kits include U-groove machine drive rolls, nylon wire guides and contact tips.

For XR-A Pistol
#195 201 .035 in (0.9 mm)
#195 202 .047 in (1.2 mm)

For XR-A Python/Aluma-Pro
#195 311 .035 in (0.9 mm)
#195 313 .047 in (1.2 mm)

Pulsed MIG Upgrade #195 300
 Upgrades MIG-only model (Millermatic 350) to MIG/Pulsed MIG.

Dual Cylinder Rack #195 299
 Replaces single cylinder rack.

Millermatic® Protective Cover with Helmet Bag #195 142

CO₂ Regulator/Flow Gauge #212 492
 Required if using 100% CO₂ gas. (Order from Miller Service Parts.)

Power Cord Plug #213 380
 For 200- or 230-volt single-phase application. Rated at 250 VAC/50 amp NEMA-style 6-50P. (Order from Miller Service Parts.)

Consumables (Order from Miller Service Parts.)

For Bernard Q300 MIG Gun

Centerfire Contact Tips (10 per package)

- #T-023** .023 in (0.6 mm)
- #T-030** .030 in (0.8 mm)
- #T-035** .035 in (0.9 mm)
- #T-039** .039 in (1.0 mm) steel and for .035 in (0.9 mm) aluminum or stainless wires or metal core
- #T-045** .045 in (1.2 mm)
- #T-052** .052 in (1.3 mm) steel and for .047 in (1.2 mm) aluminum or stainless wires or metal core

Nozzle #N-5800C
 Screw-type copper, 5/8 in (15.9 mm) orifice flush

Nozzle Insulator Cap #10012

Diffuser #D-1
 Large Centerfire gas diffuser

Replacement Jump Liners
#QJL-2330
 .023–.030 in. (0.6–0.8 mm)

#QJL-3545 Standard
 .035–.045 in. (0.9–1.2 mm)

Replacement Liners
#43015
 .023–.030 in (0.6–0.8 mm)

#44115 Standard
 .035–.045 in. (0.9–1.2 mm)

Drive Roll Kits

Note: Drive roll kits include 4 drive rolls, an intermediate guide, and an inlet guide.

V-Grooved Drive Roll Kits
#087 132 .023/.025 in (0.6 mm)
#046 780 .030 in (0.8 mm)
#046 781 .035 in (0.9 mm)
#046 782 .045 in (1.2 mm)
#227 061 .035/.045 in (0.9/1.2 mm)
#046 783 .052 in (1.3 mm)
#046 784 1/16 in (1.6 mm)

U-Grooved Drive Roll Kits
#044 750 .035 in (0.9 mm)
#046 785 .047 in (1.2 mm)
#046 786 .052 in (1.3 mm)
#046 787 1/16 in (1.6 mm)

V-Knurled Drive Roll Kits
#046 792 .035 in (0.9 mm)
#046 793 .045 in (1.2 mm)
#046 794 .052 in (1.3 mm)
#046 795 1/16 in (1.6 mm)

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Millermatic® 350	#907 167	460/575 V, MIG unit		
	#907 299	200/230/460 V, MIG unit		
Millermatic® 350P	#907 168	460/575 V, MIG/Pulsed MIG unit		
	#907 300	200/230/460 V, MIG/Pulsed MIG unit		
NEW! Millermatic® 350P/XR-Aluma-Pro™ Push-Pull Gun Aluminum Welding System	#907 379	200/230/460 V		
	#907 380	460/575 V Includes Millermatic 350P, 25 ft XR-Aluma-Pro™ push-pull gun, .035 and .047 (3/64) FasTip™ contact tips, and .035/.047 (3/64) reversible U-groove drive rolls (MIG gun not included)		
Guns				
Bernard® Q300 MIG Gun	#229 560	15 ft (4.6 m), 300 A, .035–.045 in (0.9–1.2 mm)		
Spoolmatic® 15A Spool Gun	#195 156	15 ft (4.6 m), 200 A, .023–1/16 in (0.6–1.6 mm) for aluminum		
Spoolmatic® 30A Spool Gun	#130 831	30 ft (9 m), 200 A, .023–1/16 in (0.6–1.6 mm) for aluminum		
XR™-A Aluma-Pro Push-Pull Gun	#300 000	15 ft (4.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#300 001	25 ft (7.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#300 264	35 ft (10.7 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
Adapter Cable	#195 498	Required for XR-Edge Guns prior to serial #LE079101		
XR™-A Pistol Push-Pull Gun	#198 127	15 ft (4.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
	#198 128	30 ft (9 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
XR-A Python®	#195 373	25 ft (7.6 m), 200 A, .030–1/16 in (0.8–1.6 mm) for aluminum		
U-Groove Aluminum Drive Roll and Accessory Kit	#195 201	For XR-A Pistol Gun, .035 in (0.9 mm)		
	#195 202	For XR-A Pistol Gun, .047 in (1.2 mm)		
	#195 311	For XR-A Python/Aluma-Pro Gun, .035 in (0.9 mm)		
	#195 313	For XR-A Python/Aluma-Pro Gun, .047 in (1.2 mm)		
Accessories				
Pulsed MIG Upgrade	#195 300	Upgrades MIG-only unit to MIG/Pulsed MIG		
Dual Cylinder Rack	#195 299	Field installed, replaces single cylinder rack		
Protective Cover with Helmet Bag	#195 142			
CO ₂ Regulator/Flow Gauge	#212 492	Required if using 100% CO ₂ gas (<i>Order from Miller Service Parts.</i>)		
Power Cord Plug	#213 380	For 200/230 V, single-phase. NEMA-style 6-50P (<i>Order from Miller Service Parts.</i>)		
Electrode Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
Consumables (<i>Order from Miller Service Parts.</i>)				
Centerfire™ Consumables		See page 3		
Contact Tips				
Tapered Contact Tips				
Contact Tip Adapter				
Replacement Liners				
Nozzles				
Spot Nozzles				
Tapered Nozzles				
Drive Rolls				

Date:

Total Quoted Price:



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