

Syncrowave® 200

Issued May 2009 • Index No. AD/4.4

TIG/Stick Welding
Power Source 

Quick Specs

Light Industrial Applications

Light Metal Fabrication
Maintenance/Repair Operations
Light Manufacturing
Automotive Repair
Vocational Training
Hobbyist

Processes

TIG (GTAW) Welding
Stick (SMAW) Welding
Pulsed TIG (GTAW-P) Welding
Air Carbon Arc (CAC-A)
5/32 in maximum

Input Power Requires 1-Phase Power

Amperage Range 5–200 A

Rated Output 150 A at 26 V, 40% Duty Cycle

Weight Base Model: 238 lb (108 kg)
Runner: 271 lb (123 kg)

The Power of Blue.®

Squarewave output with AC balance control features adjustable penetration and cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

Cable management system uses dual cable hangers and foot control storage conveniently attach to the power source side panels to allow all weld cables and the remote foot control to be neatly stored, preventing torch, cable or remote damage.

Syncro Start™ allows the operator to choose from three different starting conditions to optimize the application (Soft/Standard/Hot).

Runner has low cylinder rack to eliminate the need for lifting when changing gas cylinders.

Fan-On-Demand™ improves power efficiency and reduces noise and maintenance by lessening the amount of airborne contaminants pulled through the machine.

Adaptive Hot Start™ for Stick arc starts automatically increases the output amperage at the start of a weld should the start require it. Prevents the electrode from sticking and creating an inclusion.

Weldcraft® WP1712MFD150 TIG torch. 150 A, air-cooled torch features mono flex (MF) braided nylon power cable for maximum flexibility.



Syncrowave 200 Runner

Auto-Postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage—for adequate shielding every time without waste and no need for adjustment.

Dual digital meters with alpha-numeric displays allow for quick and easy viewing and preset values for voltage, amperage and other key variables. Allows for greater accuracy and repeatability in the welding procedure.

Built-in pulse control enhances weld bead and puddle control for improved appearance and quality—reduce burn through, coordinate the addition of filler material, and reduce the warping effects of distortion by reducing the average heat input.

115 V auxiliary power receptacle is conveniently located on the front panel, allowing for operation of a Coolmate™ torch coolant system or other small tools.

Arc hour/cycle counter records actual welding time and number of arc starts.

DIG control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

TRUE BLUE®
3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

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



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

Web Site
www.MillerWelds.com



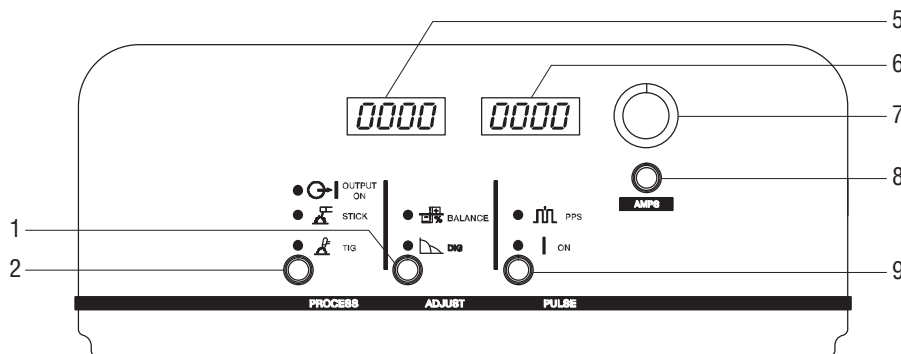
Specifications (Subject to change without notice.)



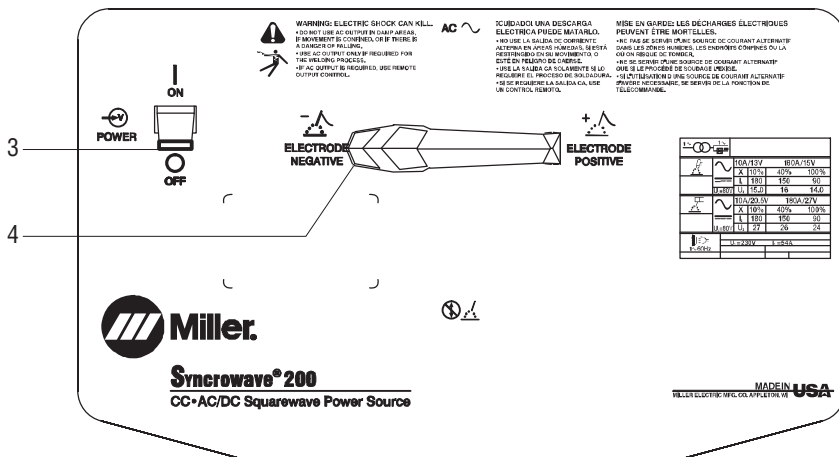
Input Power	Rated Output at 40% Duty Cycle	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz	KVA	KW	Dimensions	Net Weight
208-230 V	150 A at 26 V	5–200 A	80	54	12.3	6.0	H: 30-1/8 in (765 mm)	238 lb (108 kg)
460 V				27	12.52	6.0	W: 21-1/8 in (537 mm)	
575 V				22	12.35	6.0	D: 21-1/2 in (546 mm)	

Certified to both the Canadian and U.S. Standards for welding equipment.

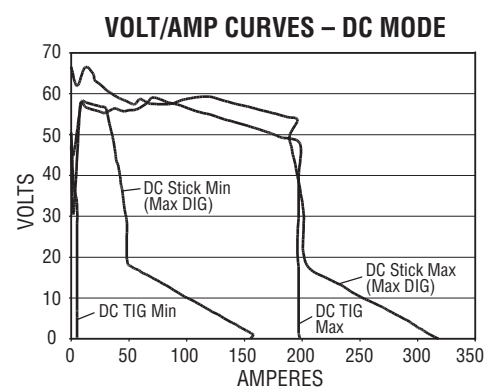
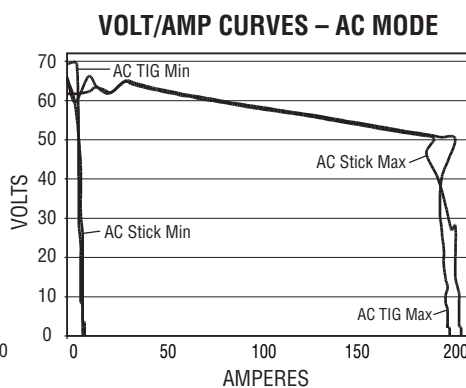
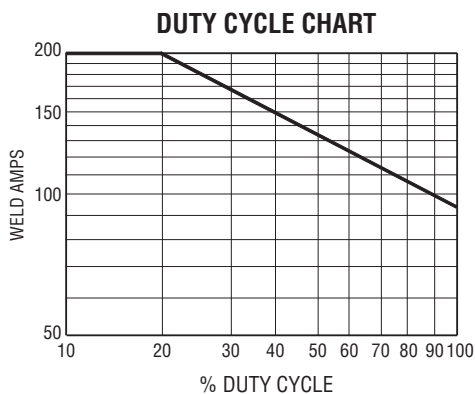
Control Panel



1. Balance/DIG Pushbutton Control
2. Process Pushbutton Control
3. Power Switch
4. Polarity Switch
5. Voltmeter and Parameter Adjust
6. Ammeter and Parameter Adjust
7. Encoder Adjustment Control
8. Main Amps Pushbutton (Amperage Control)
9. Pulse Pushbutton Control



Performance Data



Genuine Miller Accessories

Runner® Package

Syncrowave® 200 Runner

#907 308-00-1 208–230 V, 50/60 Hz
#907 309-00-1 460/575 VAC, 50/60 Hz
Includes Syncrowave 200, No. 39 running gear, 150 amp WP1712MFD150 Weldcraft torch with quick-connect, 12 ft (3.7 m) work cable with clamp and quick-connect, electrode holder with quick-connect, RFCS-14 remote foot control with 20 ft (6 m) cord, regulator/flow gauge and gas hose. *Primary cord is included with 208–230 V model only.*

Remote Controls



RFCS-14 HD Foot Control #194 744

For all Miller solid-state power sources after serial

number JK674521. This new design increases stability with a larger base and durability with a heavier cord. Maximum flexibility is accomplished with a reconfigurable cord that can exit the front, back or either side of the pedal. Foot pedal provides remote current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.



RCCS-14 Remote Contactor and Current Control #043 688 14-pin plug

For all Miller solid-state power sources after serial number JK674521. North/south rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Great for applications that require a finer amperage control. Includes 26.5 ft (8 m) control cord.



RCC-14 Remote Contactor and Current Control #151 086 14-pin plug

For all Miller solid-state power sources after serial number JK674521. Side-to-side (east/west) rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Great for production or contractors that need quick ramp-up. Includes 26.5 ft (8 m) control cord.



RMLS-14 Switch #129 337

For all Miller solid-state power sources after serial number JK674521. Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and backward for momentary contact. Includes 26.5 ft (8 m) cord and 14-pin plug.



RMS-14 On/Off Control #187 208

For all Miller solid-state power sources after serial number JK674521. Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5 ft (8 m) cord and 14-pin plug.



RHC-14 Hand Control #129 340

Miniature hand control for remote current and contactor control.

Dimensions:

4 x 4 x 3-1/4 in (102 x 102 x 82 mm).
Includes 20 ft (6 m) cord and 14-pin plug.

Running Gear and Covers



No. 39 Running Gear #300 009

Includes low cylinder rack, two 8 in (203 mm) wheels and two 4 in (102 mm) casters. Two compartments have been integrated for filler materials and will accommodate one gas cylinder up to 60 in (152 cm) high measuring 9 in (23 cm) in diameter.

Protective Cover #300 059

Heavy-duty, water- and mildew-resistant. Protects and maintains the finish of the welder.

Water Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.



Coolmate™ 1 #300 360 115 VAC
Light industrial, 1-gallon cooler designed for water-cooled torches on power sources rated up to 200 A.

When used with Syncrowave 200 requires:

#40V83R-6 6 ft (1.8 m) Extension Hose

#057 020 Water Coupler

#195 380 Torch Adapter

#WP2025RM Water-cooled Torch

Low-Conductivity Coolant (Clear, Pre-Mixed) #043 810

For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.



Water-Cooled TIG Torch Adapter 50 mm International Flow Thru #195 380

Used with (WP125, WP24W, WP25, WP20) water-cooled torch.

TIG (Gas Tungsten Arc Welding) Handbook #170 555

To order, call the Miller Literature Distribution Center at 1-920-751-2120, or FAX 1-920-751-2121. A comprehensive, text on all aspects of the TIG process.

Package Components

Complete Packages!

No. 39 Running Gear

Regulator/Flow Gauge and Hose

Electrode Holder with Quick-Connect

150 A WP1712MFD150 TIG Torch with Quick-Connect



Syncrowave 200 Runner

Power Source with 8 ft (2.4 m) Primary Cord (Cord included with 208–230 V model only)

RFCS-14 Foot Control with 20 ft (6 m) Cord

12 ft (3.7 m) Work Cable with Clamp and Quick-Connect

Syncrowave 200

Regulator/Flow Gauge and Hose

Electrode Holder with Quick-Connect

150 A WP1712MFD150 TIG Torch with Quick-Connect



Power Source with 8 ft (2.4 m) Primary Cord (Cord included with 208–230 V model only)

RFCS-14 Foot Control with 20 ft (6 m) Cord

12 ft (3.7 m) Work Cable with Clamp and Quick-Connect

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Syncrowave® 200	#907 308	208-230 V, 50/60 Hz		
	#907 309	460/575 VAC, 50/60 Hz		
Syncrowave® 200 Runner	#907 308-00-1	208-230 V, 50/60 Hz		
	#907 309-00-1	460/575 VAC, 50/60 Hz		
Running Gear and Covers				
No. 39 Running Gear	#300 009			
Protective Cover	#300 059			
Remote Controls				
RFCS-14 HD	#194 744	Heavy-duty foot control		
RCCS-14	#043 688	North/south fingertip control		
RCC-14	#151 086	Side-to-side fingertip control		
RMLS-14	#129 337	Momentary/maintained rocker control		
RMS-14	#187 208	Momentary rubber dome switch		
RHC-14	#129 340	Miniature hand control		
Coolant Systems				
Coolmate™ 1	#300 360	115 VAC water cooler		
Low-Conductivity Coolant	#043 810	Sold in multiples of (4) 1-gallon plastic bottles		
Water Extension Hose, 6 ft (1.8 m)	#40V83R-6	5/8-18 left hand threads. <i>Order from Miller Parts</i>		
Water Coupler	#057 020	5/8-18 left hand female. <i>Order from Miller Parts</i>		
Water-Cooled TIG Torch Adapter	#195 380	50 mm flow thru adapter. <i>Order from Miller Parts</i>		
Water-Cooled TIG Torch	#WP2025RM	25 ft (7.6 m) torch. Requires adapter #195 380. <i>Order from Miller Parts</i>		
Air-Cooled TIG Torch	#WP1712MFD150 #WP1725MFD150	12 ft (3.7 m) torch. <i>Order from Miller Parts</i> 25 ft (7.6 m) torch. <i>Order from Miller Parts</i>		
Flow-Thru Air-Cooled TIG Torch Adapter	#194 722	<i>Order from Miller Parts</i>		
Consumables, Tungsten		<i>Order from Miller Parts</i>		
Gas Cylinder				
Stick Accessories				
Stick Electrodes				
Educational Resources				
TIG (Gas Tungsten Arc Welding) Handbook	#170 555	<i>Order at MillerWelds.com/resources/tools/</i>		
TIG Calculator	#171 086	<i>Order at MillerWelds.com/resources/tools/</i>		

Date:

Total Quoted Price:



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