

Auto Deltaweld®

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**Robotic Power Source
and Control**



Quick Specs



Industrial Robotic Applications

Construction Machinery
Automotive Manufacturing
Truck and Trailer Manufacturing
Recreational Equipment
Farm Equipment

Processes

MIG (GMAW)
Flux Cored (FCAW)

Input Power 230/460/575 VAC, 60 Hz, 3-phase

Rated Output 450 A at 38 VDC, 100% Duty Cycle

Max. Open-Circuit Voltage 48

Weight 384 lb (174 kg)

The Power of Blue.®

Integrated welding power source and robotic interface that combines the proven technologies of Miller's Deltaweld 452 and Auto Invision II. An adaptable, high-performance unit which reduces the complexity of a system for easy installation and set-up.

NEW! 1/4-turn steel connector allows faster installation of system.

Sharp Start™ patented process feature provides consistent arc starts time after time.

Easy interface of connections for flow switch and remote wire jog signals.

Blocking Diode included — required when using the touch sense capability from the robot.

AMD-115G four-drive-roll wire feeder system for positive feed. Includes volt sensing, enclosed gas valve, as well as quick-change drive rolls.

Standard high-flex cable with molded strain reliefs provides longer life in rigorous robotic work cells.



Large **easy-to-read display** indicates process and operating information.

Capabilities

Front Panel Features

- Wire Jog Forward Button
- Wire Jog Reverse Button
- Purge Button
- Display Meters: Digital Voltage, Digital Wire Feed Speed, Ammeter

Digital Outputs

- Arc On
- Wire Stick
- Welder Ready

Digital Inputs

- Start
- Jog Forward
- Jog Reverse
- Purge
- E-Stop

Analog Outputs

- Voltage
- Current

Analog Inputs

- Voltage
- Wire Feed Speed

Auto Setup (Patent-Pending)

- No User Set-up Required

Fan-On-Demand™ cooling system operates only when needed. Reduces the amount of airborne contaminants pulled through the machine. Reduces noise in the workplace and enhances electrical efficiency because fan doesn't run constantly.

115 VAC duplex receptacle provides 10 amp circuit-breaker-protected auxiliary power for water circulators or other such devices.



Wire feeder is warranted for 3 years, parts and labor.

MADE IN **USA**
APPLETON, WI



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com



Specifications (Subject to change without notice.)



Auto Deltaweld

Input Power	Rated Output	Voltage Range In CV Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz					Dimensions	Net Weight
3-phase, 230/460/575 VAC, 60 Hz	100% Duty Cycle, 450 A at 38 VDC	10–38 V	48 VDC	230 V	460 V	575V	KVA	KW	H: 27-1/4 in (692 mm) W: 22-1/4 in (565 mm) D: 36 in (914 mm)	384 lb (174 kg)

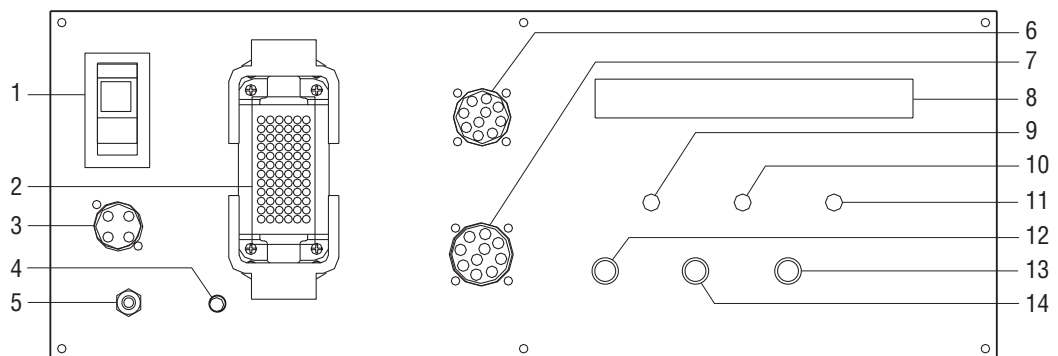
AMD-115G Wire Feed Motor with Volt Sense Kit

Gas Valve	Type of Input Power	Interconnect Cable	Wire Feed Speed Range	Wire Diameter Range	Dimensions	Ship Weight
Included and enclosed	115 VDC (from Auto Invision-II)	50 ft (15.2 m)	50–780 IPM (1.3–19.8 mpm)*	.030–1/8 in (0.8–3.2 mm)	H: 10 in (254 mm) W: 12 in (305 mm) D: 15 in (381 mm)	33 lb (15 kg)

*This is the wire feed speed range while using MIG. With pulsed MIG, the wire feed speed range may be more limited.

Control Panel

1. Power Switch
2. Robot Connections
3. Volt Sense Lead Connection
4. High Temperature Shutdown
5. Circuit Breaker
6. Motor Connector
7. Peripheral Connector
8. Main Display (displays system state, active program, error messages, and weld parameters at idle and during welding)
9. Wirefeed Indicator LED
10. Gas Indicator LED
11. Contactor Indicator LED
12. Jog Forward Pushbutton
13. Purge Pushbutton
14. Jog Reverse Pushbutton



Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	“V” groove for hard wire	“U” groove for soft wire or soft-shelled cored wires	“V” knurled for hard-shelled cored wires	“U” cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)
.030 in (0.8 mm)	#151 025	—	—	—
.035 in (0.9 mm)	#151 026	#151 036	#151 052	—
.040 in (1.0 mm)	#161 190	—	—	—
.045 in (1.1/1.2 mm)	#151 027	#151 037*	#151 053	#151 070
.052 in (1.3/1.4 mm)	#151 028	#151 038	#151 054	#151 071
1/16 in (1.6 mm)	#151 029	#151 039	#151 055	#151 072
.068/.072 in (1.8 mm)	—	—	#151 056	—

Genuine Miller Options and Accessories

Hi-Flex Cable with Molded Strain Reliefs
#195 044 Field
 50 ft (15.2 m) gas/motor cable for longer life in rigorous robotic work cells.

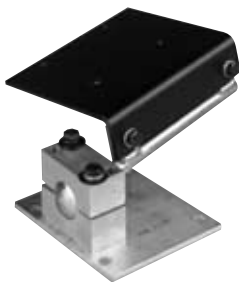


Motor/Volt Sense Robotic Kit #195 042
 Includes AMD-115G left-hand drive 50–780 IPM (1.3–19.8 MPM), motor cable, and volt sense lead.

Adapter Kits

One required per machine.

#194 793 ABB
#194 791 Fanuc
#194 790 Motoman
#194 860 Kawasaki
#194 874 Nachi
#195 002 Universal



Swivel Mount Kit #043 807
 (Emulates mounting of A1D-4 drive motor.)

Shell Connector #194 847
 For use by anyone wishing to interface peripherals but not wanting to source the appropriate female amphenol connector.



Water Flow Switch #043 576
 To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50 ft cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on the Auto Invision or as desired elsewhere.

Adapter, Auto Deltaweld #194 788
 Allows the use of the old-style peripheral cable to the Auto Deltaweld.

Adapter, AMD-4G Motor to Auto Deltaweld
#194 789
 Allows the use of the old-style motor cable to the Deltaweld.

Adapter, AMD-115G to Auto Deltaweld
#194 857
 Allows the use of the new-style motor cable to the Auto Deltaweld.



AMD-115G Motor #194 856
 Left-hand drive 50–780 IPM (1.3–19.8 MPM).



AMD-115GR Motor #194 873
 Right-hand drive 50–780 IPM (1.3–19.8 MPM).



AMD-115 GH Motor #194 872
 High-speed four-drive-roll wire feeder with enclosed gas valve. Left-hand drive 80–1400 IPM (2.0–35.6 MPM).

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Auto Deltaweld® Package	#951 020	Includes Auto Deltaweld (230/460/575 V) and motor volt sense kit		
Auto Deltaweld® <i>(Robotic receptacle kit sold separately)</i>	#907 040	230/460/575 V		
Motor/Volt Sense Robotic Kit	#195 042	Includes AMD-115G, 50 ft (15.2 m) gas motor cable, 50 ft (15.2 m) volt sense lead		
Adapter Kits <i>(One required per machine)</i>	#194 793	ABB		
	#194 791	Fanuc		
	#194 790	Motoman		
	#194 860	Kawasaki		
	#194 874	Nachi		
	#195 002	Universal		
Drive Roll Kit		See page 2		
Motors				
AMD-115G Motor	#194 856	Left-hand drive 50–780 IPM (1.3–19.8 MPM)		
AMD-115GR Motor	#194 873	Right-hand drive 50–780 IPM (1.3–19.8 MPM)		
AMD-115 GH Motor	#194 872	High-speed, left-hand drive 80–1400 IPM (2.0–35.6 MPM)		
Adapters				
Adapter, Auto Deltaweld	#194 788	Old-style peripheral cable to the Auto Deltaweld		
Adapter, AMD-4G to Auto Deltaweld	#194 789	Old-style motor cable to the Auto Deltaweld		
Adapter, AMD-115G to Auto Deltaweld	#194 857	New-style motor cable to the Auto Deltaweld		
Accessories				
Hi-Flex Cable	#195 044	50 ft (15.2 m) gas/motor cable for rigorous applications		
Swivel Mount Kit	#043 807	For AMD-115G wire feed motor		
Shell Connector	#194 847	For peripheral		
Water Flow Switch	#043 576			

Date:

Total Quoted Price:



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