

Deltaweld® Series

MIG Welding
Power Source 

Quick Specs



Heavy Industrial Applications

Heavy Equipment Manufacturing
Truck and Trailer Manufacturing
Ship and Boat Building
Tank/Pressure Vessel Fabrication
Manufacture of Automotive Equipment
Railcar/Locomotive Fabrication and Repair
Furniture Manufacture
Structural Steel Fabrication
Sheet Metal Fabrication
Maintenance

Processes

MIG (GMAW)
Flux Cored (FCAW)
Air Carbon Arc (CAC-A)
Cutting and Gouging
Submerged Arc (SAW)

Input Power

3-Phase Power on all models

Rated Output

302/402: 300 A at 32 VDC, 100% Duty Cycle
452/602: 450 A at 38 VDC, 100% Duty Cycle
652/852: 650 A at 44 VDC, 100% Duty Cycle

Net Weight

302/402: 323 lb. (147 kg)
452/602: 384 lb. (174 kg)
652/852: 472 lb. (214 kg)

Superior arc welding performance with MIG welding.

Internal digital voltage control (DVC) enables operator to preset weld voltage before striking an arc.

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by ± 10 percent.

Power efficient for exceptional value and return on your investment.

Two positive output terminals provide high/low stabilizer selection. Allows operator to optimize arc performance.

115 VAC duplex receptacle provides 15 amps of auxiliary power.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

Power cord strain relief provided for your convenience at installation.



**Deltaweld® 452
MIGRunner™
Package shown**

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.



Build your own system at MillerWelds.com/equiptoweld or see the **Stationary and MIGRunner™ Packages** (page 5).

Digital voltmeter and ammeter are easy to read, even at 30 feet (9.2 m).

Simple control panel provides easy, efficient operation.

14-pin receptacle provides quick, direct connection to Miller 14-pin wire feeders and accessories.

Remote on/off capabilities allow operator to turn power source on and off from a distance.

Remote voltage control allows operator to change voltage from feeder.

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

PC board protection prevents the wire feeder power or other stray voltages (less than 115 VAC) from harming the power source PC board.



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



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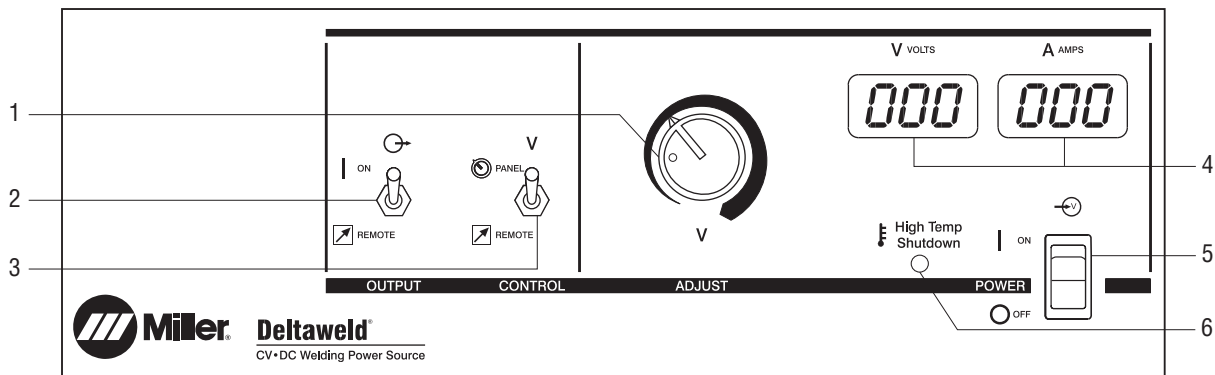
Deltaweld® 302/402 Specifications (Subject to change without notice.)



Voltage Range	Recommended Welding Range	Rated Output	Amps Input at Rated Output, 50/60 Hz										Max. Open-Circuit Voltage	Dimensions	Net Weight
			200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW				
10–32 V	15–32 V	300 A at 32 VDC, 100% duty cycle	48	42	27	25	23	21	17	16.9	12.9	42 VDC	H: 30 in. (762 mm) (including lift eye) W: 23 in. (585 mm) D: 30.5 in. (775 mm) (including strain relief)	323 lb. (147 kg)	

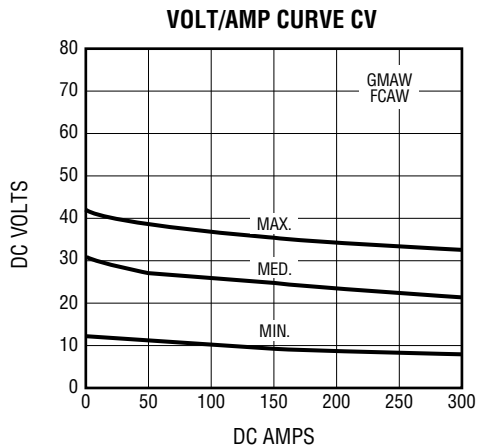
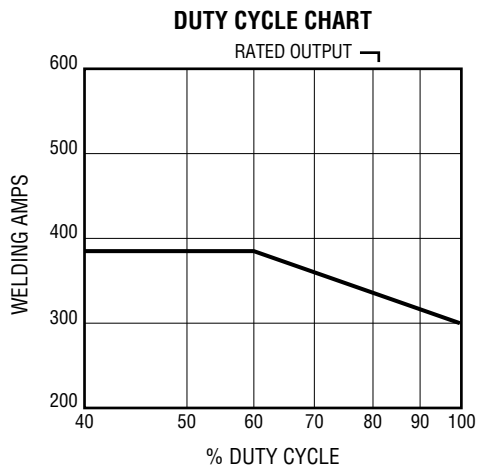
Note: For input conductor and fuse size information consult the Owner's Manual.

Control Panel



- 1. Voltage Adjustment Control
- 2. Output Switch
- 3. Remote Voltage Control Switch
- 4. Digital Meters
- 5. Power Switch with Indicator Light
- 6. High Temperature Shutdown Light

Performance Data



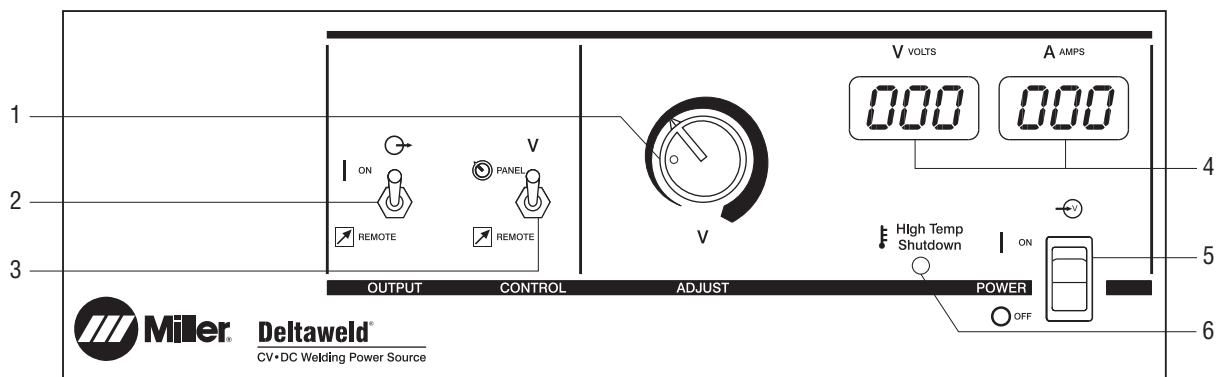
Deltaweld® 452/602 Specifications (Subject to change without notice.)



Voltage Range	Recommended Welding Range	Rated Output	Amps Input at Rated Output, 50/60 Hz									Max. Open-Circuit Voltage	Dimensions	Net Weight
			200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
10-38 V	15-38 V	450 A at 38 VDC, 100% duty cycle	72	63	39	37	33	32	25	25.1	21.1	48 VDC	H: 30 in. (762 mm) (including lift eye) W: 23 in. (585 mm) D: 38 in. (966 mm) (including strain relief)	384 lb. (174 kg)

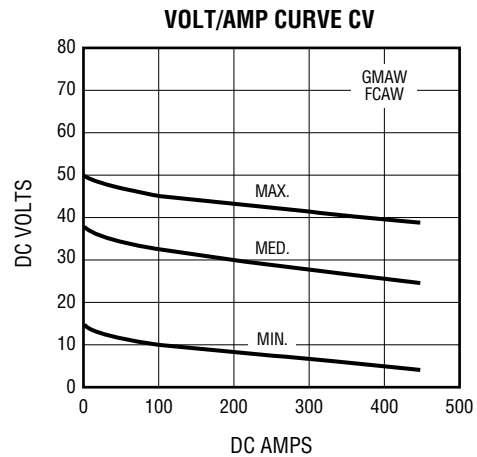
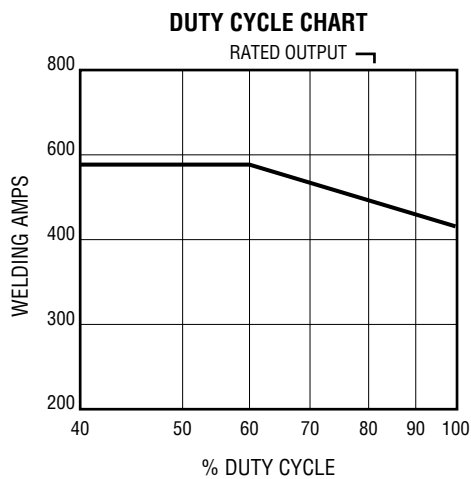
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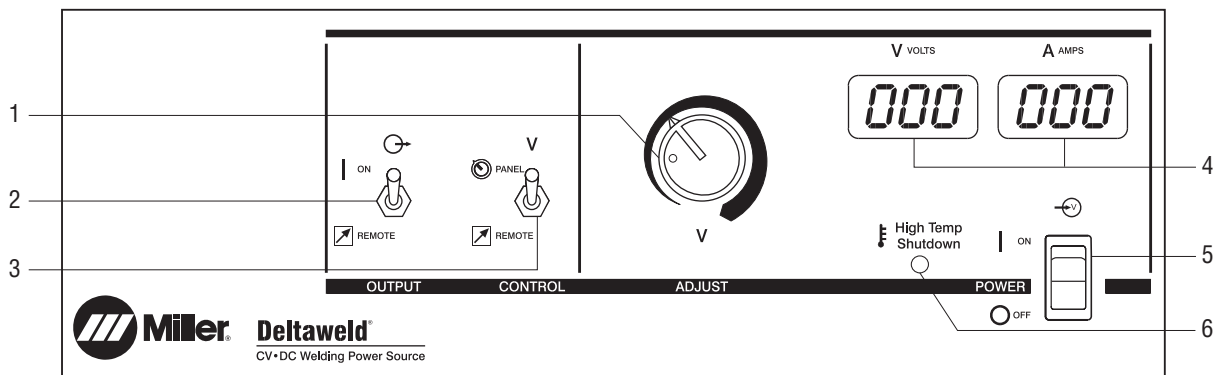
Performance Data



Voltage Range	Recommended Welding Range	Rated Output	Amps Input at Rated Output, 50/60 Hz								Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
10-44 V	15-44 V	650 A at 44 VDC, 100% duty cycle	96	58	54	50	48	38	38.2	34.2	54 VDC	H: 30 in. (762 mm) (including lift eye) W: 23 in. (585 mm) D: 38 in. (966 mm) (including strain relief)	472 lb. (214 kg)

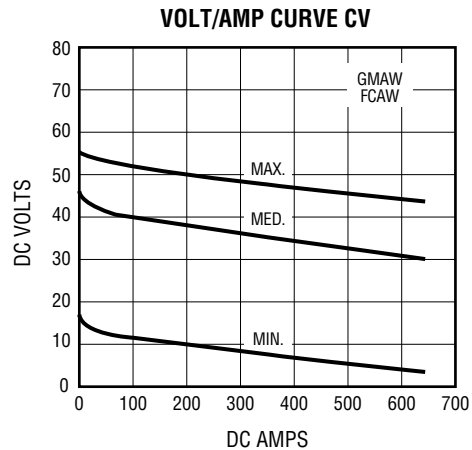
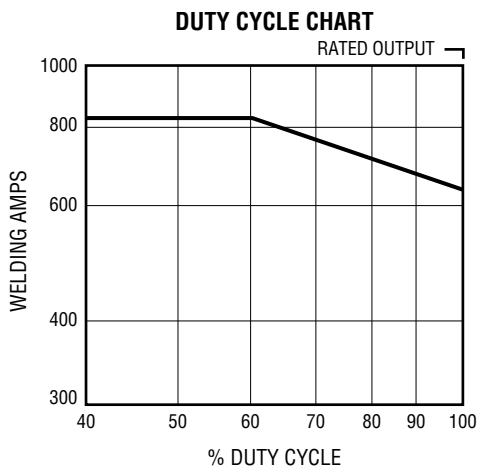
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Control Panel



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Performance Data



Packages



Option #1: Deltaweld® Power Source Only

Purchase components separately.

Deltaweld 302

#903 376 (200-208/230/460 V, 60 Hz)

#903 392 (230/460/575 V, 60 Hz)

Deltaweld 452

#903 377 (200-208/230/460 V, 60 Hz)

#903 394 (230/460/575 V, 60 Hz)

Deltaweld 652

#903 396 (230/460/575 V, 60 Hz)



Build your own system at
MillerWelds.com/equiptoweld



Option #2: Deltaweld® Stationary Package

Stationary display without running gear or cylinder rack.

Deltaweld 302 Stationary Package

#951 235 (200-208/230/460 V, 60 Hz)

Deltaweld 452 Stationary Package

#951 237 (200-208/230/460 V, 60 Hz)

#951 301 (230/460/575 V, 60 Hz)

Comes complete with:

- Deltaweld power source
- S-74D wire feeder
- Bernard™ Q-Gun™
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10-ft. (3 m) gas hose, 10-ft. (3 m) 4/0 feeder weld cable with lugs, and 15-ft. (4.6 m) work cable with 600-amp C-clamp



Option #3: Deltaweld® MIGRunner™ Package

MIGRunner system with factory-installed standard running gear and cylinder rack.

Deltaweld 302 MIGRunner Package

#951 234 (200-208/230/460 V, 60 Hz)

#951 300 (230/460/575 V, 60 Hz)

Deltaweld 452 MIGRunner Package

#951 236 (200-208/230/460 V, 60 Hz)

#951 302 (230/460/575 V, 60 Hz)

Deltaweld 652 MIGRunner Package

#951 238 (230/460/575 V, 60 Hz)

Comes complete with:

- Deltaweld power source
- S-74D wire feeder
- Bernard™ Q-Gun™
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10-ft. (3 m) gas hose, 10-ft. (3 m) 4/0 feeder weld cable with lugs, and 15-ft. (4.6 m) work cable with 600-amp C-clamp
- Factory-installed standard running gear and cylinder rack

Genuine Miller® Options and Accessories

Ground Current Sensor #195 048 Field
Disables power source if weld current is present on primary ground.

Extension Cables for 14-Pin Plugs to 14-Pin Sockets*

#242 208 025 25 ft. (7.6 m)

#242 208 050 50 ft. (15.2 m)

#242 208 080 80 ft. (24.4 m)

Extension cables make a direct connection between the power source and remote control or 24 VAC wire feeder. No messy splicing or adapting required.

*For additional lengths visit MillerWelds.com/equiptoweld.



Industrial MIG 4/0 Kit #300 390

Includes flowmeter regulator with 10-foot (3 m) gas hose, 10-foot (3 m) 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp.

Polarity Control #042 871

This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Control Selector #042 872

Allows you to easily change weld processes. Also includes features of Polarity Control.



Standard Running Gear #042 886

The large 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as weld cable holder.

Standard Cylinder Rack #042 887

Holds two cylinders. Only installs on Standard Running Gear.

Coolant Systems

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



Coolmate™ 3

#043 007 115 VAC

#043 008 230 VAC

For use with water-cooled torches rated up to 500 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.



Coolmate™ 4 #042 288 115 VAC

For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Coolant #043 810

Sold in cases of four one-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37 degrees Fahrenheit (-38° C) or boiling to 227 degrees Fahrenheit (108° C). Also contains a compound that resists algae growth.