

# Big Blue® Turbo

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Engine-Driven  
Welder/Generator 

## Quick Specs



### Heavy Industrial Applications

Heavy Construction  
Structural Steel  
Maintenance and Repair Rigs  
Mining Maintenance  
Process Piping  
Sheet Metal

### Processes

Stick (SMAW)  
MIG (GMAW)  
Flux Cored (FCAW)  
DC TIG (GTAW)  
Submerged Arc (SAW)  
Stud Welding 1/2 in (12.7 mm)  
Air Carbon Arc (CAC-A)  
1/2 in (12.7 mm) Carbons  
Air Plasma Cutting  
with Optional Spectrum Models

### Output Range

DC Stick 45–750 A MIG/FCAW 14–40 V  
DC TIG 20–450 A

### Weld Output Rated at 104°F (40°C)

Stick 600 A, 44 V, 26.4 kW, 100% Duty Cycle  
MIG/FCAW 600 A, 36 V, 21.6 kW, 100% Duty Cycle

### Generator Output Rated at 104°F (40°C)

5,500 Watts Peak — 4,000 Watts Continuous

**Accu-Rated™—Not Inflated  
Generator Power**

## The Power of Blue.®

**Welder/generator.** One machine that will do it all without compromising anything. Designed and built to be the most reliable high-output system in the world.

**Weatherproof Lexan® nameplate** resists cracking and fading, and is color-coded for ease of operation.

**Enclosed robust case design** protects internal components from impact and allows air flow to cool and prolong the life of the engine. Also reduces sound levels.

**GFCI receptacle** as required on most job sites to protect operators from electrical hazards.

**Quiet** at only 70 dB (95 Lwa) at idle, 79 dB (104 Lwa) at maximum output. Improves work site communications.


**Low cost of ownership.** Extended routine maintenance schedule with single-side access to engine and remote drains make unit quick and easy to maintain.

# BUILT TOUGH

**Improved!**

**Maintenance Displays!**



 turbocharged four-cylinder diesel engine provides ample power at high altitudes. Works at altitudes greater than 3 miles (5000 m) without loss of output.

### NEW! Meter maintenance display

- Hour meter function
- Oil Change interval
- Diesel: High coolant temperature and low oil pressure shutdowns
- Diesel: Low fuel shutdown — engine shuts down before system runs out of fuel making restarts easy

**Idles** when not welding. Conserves fuel and reduces noise.

**Hot Start™** provides positive stick electrode starts to make it easy to start all types of electrodes.

**Arc-Drive** makes welding easy. Automatically enhances Stick welding, especially on pipe, by focusing the arc and preventing the electrode from going out.

## TRUE BLUE®

3YR. WARRANTY

Welder/generator is warranted by Miller for 3 years, parts and labor.  
Engine is warranted by Deutz for 3 years.

MADE IN **USA**  
APPLETON, WI



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

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International FAX: 920-735-4125

**Web Site**  
www.MillerWelds.com



# Specifications (Subject to change without notice.)



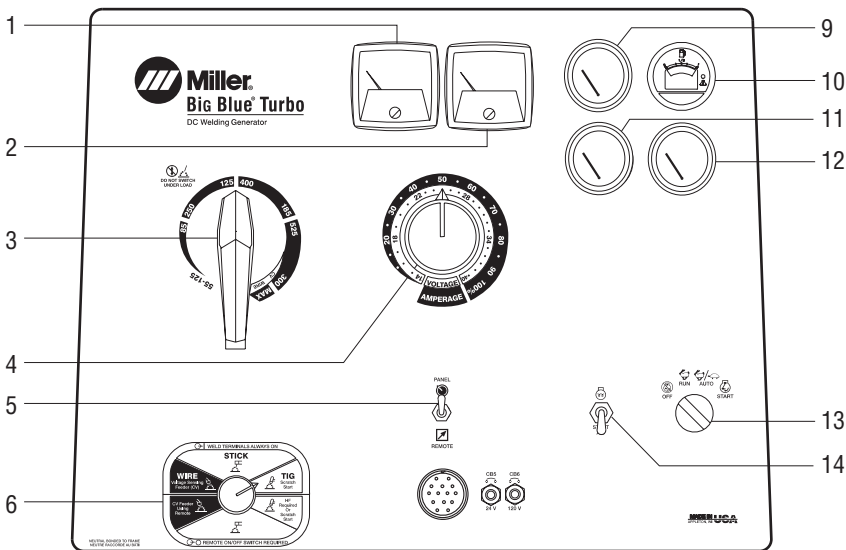
Welding Mode	Weld Output Range	Weld Output Rated at 104° F (40° C) NEMA Amperage and Voltage	Max. Open-Circuit Voltage	Generator Output Rated at 104° F (40° C)	Dimensions*	Weight Without Fuel**
CC/DC	20–750 A	600 A, 44 V, 26.4 kW, 100% Duty Cycle	95	<b>Peak:</b> 5500 watts <b>Continuous:</b> 4000 watts, 120/240 VAC, 34/17 A, 60 Hz while welding	H: 43 in (1092 mm) W: 28-1/2 in (724 mm) D: 67-1/2 in (1715 mm)	<b>Net:</b> 1755 lb (796 kg) <b>Ship:</b> 1780 lb (807 kg)
CV/DC	14–40 V	600 A, 36 V, 21.6 kW, 100% Duty Cycle	56			

Meets NEMA and IEC output ratings. \*Additional 7 in (178 mm) to top of exhaust. \*\*Additional 190 lb (86 kg) when fuel tank is full.

## Engine (Subject to change without notice.)

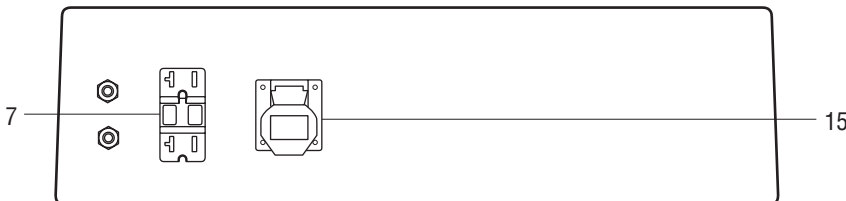
Engine Brand	Features	HP	Type	Engine Speeds	Fuel Capacity	Oil Capacity	Automatic Engine Shutdowns
 Deutz Diesel TD2011L04w	Tier IVi, EPA-certified, turbocharged direct-injected, liquid-cooled (oil) engine. Right side service access with 500 hr intervals for oil and filters. MSHA approved with purchase of certificate from Deutz dealer.	63.4	Four-cylinder, industrial, liquid-cooled engine	1850 Run 1235 Idle	25 gal (95 L)	11 qt (10.4 L)	Oil pressure Oil temperature

## Control Panel



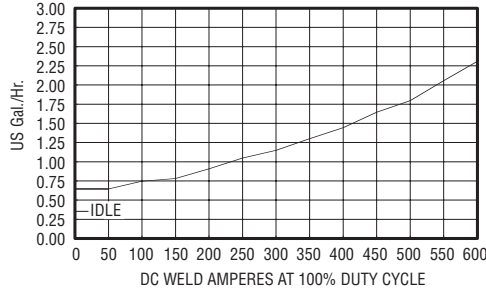
1. Voltmeter
2. Ammeter
3. Amperage Range Switch
4. Amperage/Voltage Adjust Control
5. Amperage/Voltage Adjust Switch and Remote Amperage/Voltage Adjust 14-Pin Receptacle
6. Process/Contactor Selector Switch
7. 120 VAC, 20 A GFCI Duplex Receptacle
8. 240 VAC, 30 A TwistLock Receptacle (NEMA L6-30)
9. Engine Oil Pressure Gauge
10. Fuel Gauge—displays engine hours and oil change intervals
11. Engine Coolant Temperature Gauge
12. Battery Voltmeter
13. Engine Control Switch
14. Starting Aid Switch
15. International Model 240 VAC, 16 A Pin and Sleeve Receptacle

International Model

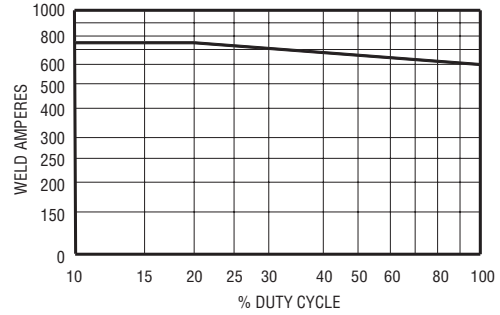


# Performance Data

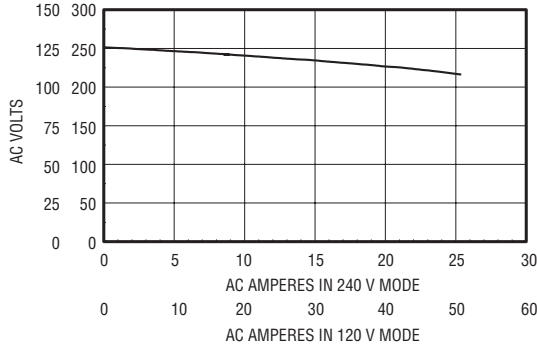
**FUEL CONSUMPTION CURVE**



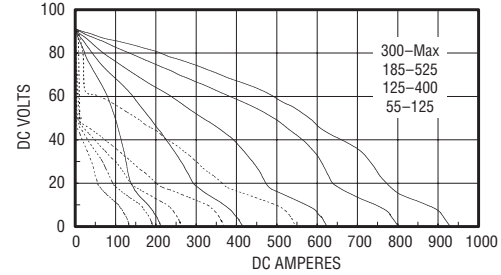
**DUTY CYCLE CURVE**



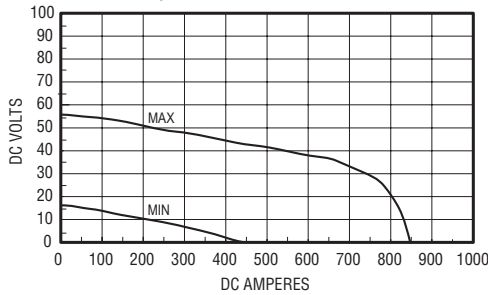
**5.5 kW RATING CHART**



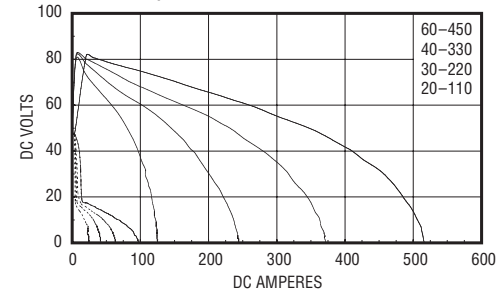
**VOLT/AMP CURVE – STICK MODE**



**VOLT/AMP CURVE – MIG MODE**



**VOLT/AMP CURVE – DC TIG MODE**



## The Vault

### Superior Circuit Board Design

Miller's critical circuit boards are engineered to carry *low power* and *low heat* to reduce thermal stress and minimize expansion and contraction. In contrast, our competitor's boards carry *high power* and *high heat*, making them more vulnerable to failure.



### “The Vault” Makes Upgrading to Miller CC/CV Units Worry-Free

Concerns with circuit board reliability have resulted in some operators steering clear of CC/CV welder/generators — even though they offer a superior arc and multiple welding processes. Miller's circuit board reliability isn't a concern since all PRO 300 and Big Blue multiprocess industrial engine drives feature the Vault.

Created out of two aluminum halves sealed with silicone, as well as watertight harness connections, the Vault provides a clean circuit board environment, protecting the electronics — and controlling output — in heavy industrial applications. No other competitor protects their electronics with a sealed vault, leaving critical circuit boards exposed to harsh elements that can disrupt the machine's electronics, and therefore, its operation.

## Toolless Generator Brushes



100% copper-wound generator features quick and easy brush and slip ring inspection. Brushes can be removed and/or replaced in a matter of seconds.