

Blue Star® Series

Issued April 2013 • Index No. ED/2.5

Gas Engine-Driven
Welder/AC Generator 

Quick Specs

Industrial Applications

Maintenance
Repair
Farm/Ranch Applications
Construction
Stand-Alone Generator

Processes

Stick (SMAW)
DC TIG (GTAW)
Air Plasma Cutting and Gouging
with optional Spectrum models

Weld Output Range for DC Stick/TIG

145 DX: 40–145 A
185 DX: 55–185 A

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

145 DX: 4500 Watts Peak, 4000 Watts Continuous
185 DX: 6000 Watts Peak, 5500 Watts Continuous

Weight

145 DX: 309 lb. (140 kg)
185 DX: 315 lb. (143 kg)

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

The Power of Blue.®

Reliable Blue Star engine drives are the standard for portable welder/generators.

Large five-gallon fuel capacity leads its class. Longer run time for welder or generator usage. See page 2 for fuel consumption data.

Standard electric start for easy engine start-up.

Standard auto idle. Idles engine while not in use. Reduces fuel consumption and noise.

Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

Reliable air-cooled OHV engines ensure consistent engine performance.

Quick-reference parameter chart provides convenient amperage setting guidance.



Blue Star
185 DX shown

Two Blue Star models to choose from. See page 3 for comparison information.

Blue Star Series
Blue Star 145 DX
Blue Star 185 DX (shown)

Single-range amperage control makes setting amperage levels easy.

Class-leading 6000-watt peak power of regulated power (185 DX model) to extend power tool life.

Bulletproof technology eliminates use of complicated circuit boards.

Hour meter provides easy tracking of run hours for maintenance intervals.

Receptacle covers improve reliability by protecting receptacles from debris.

120 V GFCI and 240 V receptacles provide power for jobsite tools. Receptacles are circuit-breaker protected.

Accu-Rated™ peak generator power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting.



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



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MillerWelds.com



Specifications (Subject to change without notice.)



Model	Welding Mode	Weld Output Range	Weld Output Rated at 104° F/40° C*	Single-Phase Generator Power	Dimensions	Net Weight (without fuel)
Gasoline Blue Star® 145 DX	CC/DC (Stick/TIG)	40 – 145 A	145 A at 25 V, 20% Duty Cycle 100 A at 25 V, 60% Duty Cycle	4500 Watts Peak 4000 Watts Continuous 34 A at 120 V, 17 A at 240 V	H: 22.75 in. (578 mm) W: 22.75 in. (578 mm) D: 31.625 in. (803 mm)	309 lb. (140 kg)
	Blue Star® 185 DX	CC/DC (Stick/TIG)	55 – 185 A	185 A at 25 V, 20% Duty Cycle 130 A at 25 V, 60% Duty Cycle	6000 Watts Peak 5500 Watts Continuous 40 A at 120 V, 23 A at 240 V	H: 22.75 in. (578 mm) W: 22.75 in. (578 mm) D: 31.625 in. (803 mm)

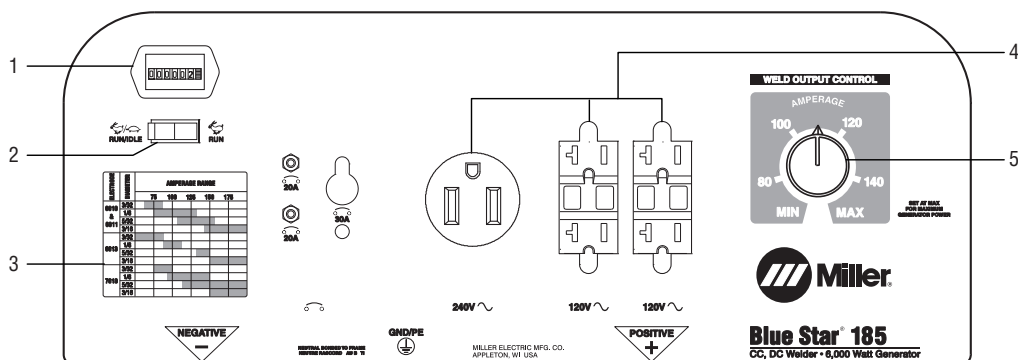
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

*Rated at sea level.

Engine Specifications (Subject to change without notice.)

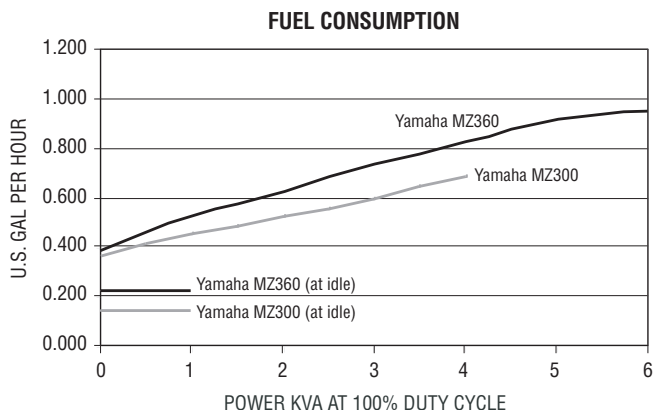
Model	Engine/Warranty	Horsepower (HP)	Type	Engine Speeds	Fuel Capacity	Oil Capacity	Automatic Engine Shutdown
Blue Star® 145 DX	Yamaha MZ300 3-year warranty	9.1 HP at 3600 RPM	One-cylinder, four-cycle, air-cooled, OHV	3750 RPM (2500 RPM at idle)	5 gal. (18.9 L)	1.1 qt. (1.04 L)	Standard
Blue Star® 185 DX	Yamaha MZ360 3-year warranty	10.2 HP at 3600 RPM					

Control Panel



1. Engine Hour Meter
2. Auto Idle Switch
3. Quick-Reference Parameter Chart
4. 120 VAC GFCI and 240 VAC Receptacles
5. Single-Range Amperage Control

Performance Data



Fuel Consumption Data

- Five-gallon fuel capacity.
- Under a continuous load of 3000 watts of generator power, the Blue Star 185 DX would run for about 6.5 hours.
- Welding at 130 amps (at 30 percent duty cycle), the Blue Star 185 DX would run for about 15 hours of operation.

Why Upgrade?



- 96 percent of current owners rated their Blue Star as “good to very good value.”

**Based on an independent survey of thousands of Blue Star owners.*

Feature	Blue Star 145 DX	Blue Star 185 DX
Generator Power	4500 W Peak	UPGRADE 6000 W Peak
DC Stick/TIG Output	145 A at 25 VDC	UPGRADE 185 A at 25 VDC
Engine	Yamaha MZ300	UPGRADE Yamaha MZ360
Receptacle Covers	Standard	Standard
Fuel Capacity	5 Gallons	5 Gallons
Auto Idle	Yes	Yes
Hour Meter	Yes	Yes
Engine Starting	Electric Start	Electric Start

Power Usage Guide

The Power Generator is designed to provide **strong power** while keeping the voltage within 10 percent of 120/240 VAC. 120/240 VAC ±10 percent is the range where tools and motors are designed to operate. **This increases tool/motor performance and tool/motor life.**

Typical Contractor Tools

Tool	Starting Watts	Running Watts
Hand Drill		
1/4 inch	350	350
1/2 inch	600	600
Circular Saw		
6-1/2 inch	500	500
8-1/4 inch	1400	1400
Table Saw (10 inch)	6300	1800
Band Saw (14 inch)	2500	1100
Air Compressor		
1/2 HP	3000	1000
1-1/2 HP	8200	2200
Electric Chain Saw		
1/2 HP, 12 inch	1100	1100
2 HP, 14 inch	1100	1100
Flood Lights		
HID	125	100
Metal Halide	313	250
Mercury	1000	—
Vapor	1250	1000
Submersible Pump (400 gph)	600	200
Centrifugal Pump (900 gph)	900	500
High Pressure Washer		
1/2 HP	3150	950
1 HP	6100	1600
Wet & Dry Vac (1.7 HP)	900	900

Typical Farm Equipment

Machine	Starting Watts	Running Watts
Portable Conveyor (1/2 HP)	3400	1000
Farm Duty Motors (e.g. Conveyors, Feed Augers Air Compressors)		
1/3 HP	1720	720
1-1/2 HP	8200	2200
Washer (2 gal/min.)		
550 PSI	4500	1400
700 PSI	6100	1600

Typical Industrial Motors

Motor	Starting Watts	Running Watts
Split Phase		
1/8 HP	800	300
1/2 HP	3175	875
Capacitor Start — Induction Run		
1/3 HP	2020	720
1-1/2 HP	8200	2200
Capacitor Start — Capacitor Run		
1-1/2 HP	8100	2000
Fan		
1/8 HP	1000	400
1/2 HP	3500	1100

Typical Household

Appliance	Starting Watts	Running Watts
Dishwasher		
Cool Dry	1400	700
Hot Dry	1400	1450
Electric Range		
6-inch Element	0	1500
8-inch Element	0	2100
Microwave Oven (625 watts)	800	625
Refrigerator or Freezer	2200	700
Automatic Washer	2300	1150
Clothes Dryer		
Gas	1800	700
Electric	1800	5750
Garage Door Opener		
1/4 HP	1100	550
1/2 HP	1400	725
Furnace Fan (Gas/Fuel Oil)		
1/8 HP	500	300
1/6 HP	750	500
1/4 HP	1000	600
1/3 HP	1400	700
1/2 HP	2350	875
Lights	0	As Indicated
Radio	0	50–200
Well Pump		
1/3 HP	1400	750
1/2 HP	2100	1000
Sump Pump		
1/3 HP	1300	800
1/2 HP	2150	1050
Central Air Conditioner		
10,000 BTU	2200	1500
20,000 BTU	3300	2500
24,000 BTU	4950	3800
32,000 BTU	6500	5000
40,000 BTU	7800	6000

Genuine Miller® Options and Accessories



Lifting Eye #195 353
Secure lift point when picking up machine.



No. 38 Hand Running Gear #195 352
Compact, balanced, lightweight, wheelbarrow-style running gear designed for easy on-site mobility.



Spectrum® 375 #907 532
115/230 V with 20-foot torch. Cuts up to 3/8-inch mild steel. See Lit. Index No. PC/9.1.

Spark Arrestor #195 351
Mandatory when operating on California grasslands, brush, or forest-covered land and all National Forests. For other areas, check your state and local laws.

GFCI Receptacles #300 880 Field Kit contains two GFCI 120 VAC duplex receptacles. (240 VAC GFCI receptacle not required).

Weld Leads #300 836
Consists of 50-foot (15.2 m), No. 2 electrode cable with insulated electrode holder and lug, and 50-foot (15.2 m) No. 2 work cable with clamp and lug.

Order the following from Miller Service Parts.

Remote Oil Drain Kit #224 831
Quick connect for easy engine maintenance.

Receptacle Kit #088 297
6-foot cord with NEMA 6-50P plug to adapt to any 240 V application.

240 V Electrical Plug #213 380
For use with 240 V receptacle.

Engine Tune-Up Kit #258 078 Field For Yamaha MZ300 and MZ360. Tune-up kit includes spark plug and engine filter.

Protective Cover #195 193
Blue with logo. Attractive, mildew-resistant, odor-free, water-resistant cover protects your machine's finish and includes easy-off handles.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Blue Star® 145 DX	#907 590	Yamaha engine, with 120 V GFCI receptacles		
Blue Star® 185 DX	#907 591	Yamaha engine, with 120 V GFCI receptacles		
GFCI Receptacles	#300 880	Field		
Accessories				
Lifting Eye	#195 353	Provides safe and secure lifting of machine		
Protective Cover	#195 193	Blue with logo		
No. 38 Hand Running Gear	#195 352	Balanced running gear for easy transport		
Spark Arrestor	#195 351			
Remote Oil Drain Kit	#224 831	Quick connect for easy engine maintenance. <i>(Order from Miller Service Parts)</i>		
Receptacle Kit	#088 297	6-ft. cord with 240 V plug. <i>(Order from Miller Service Parts)</i>		
240 V Electrical Plug	#213 380	For use with 240 V receptacle. <i>(Order from Miller Service Parts)</i>		
Engine Tune-Up Kit	#258 078	Includes spark plug and engine filter. <i>(Order from Miller Service Parts)</i>		
Stick Accessories				
Weld Leads	#300 836	Includes 50-ft., No. 2 electrical cable and holder, 50-ft. work cable with clamp and lug		
Plasma Accessories				
Spectrum® 375	#907 532	115/230 V, 20-ft. torch. See Lit. Index No. PC9.1		

Date: _____ Total Quoted Price: _____



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