

Blue Star® Series

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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: 40–145 A 185: 55–185 A

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

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

Weight 145: 263 lb (119 kg) 145 DX: 309 lb (140 kg)
185: 267 lb (121 kg) 185 DX: 315 lb (143 kg)

The Power of Blue.®

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

Large 5-gallon fuel capacity (DX models) leads its class. Longer run time for welder or generator usage. See page 2 for fuel consumption data.

Standard Auto Idle (DX models) 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.



Four Blue Star models to choose from. See Page 3 for comparison information.

Blue Star Series

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

Single-range amperage control makes setting amperage levels easy.

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

Bulletproof technology eliminates use of complicated circuit boards.

Hour meter provides easy tracking of run hours for maintenance intervals (DX models).

Receptacle covers improve reliability by protecting receptacles from debris.

240 V and 120 V receptacles provide power for jobsite tools. Receptacles are circuit-breaker protected (optional 120 VAC GFCI receptacles are available).



Welder/generator is warranted by Miller for 3 years, parts and labor.
Engine is warranted 2 years by engine manufacturer.

MADE IN USA
APPLETON, WI



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An Illinois Tool Works Company
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Specifications (Subject to change without notice.)



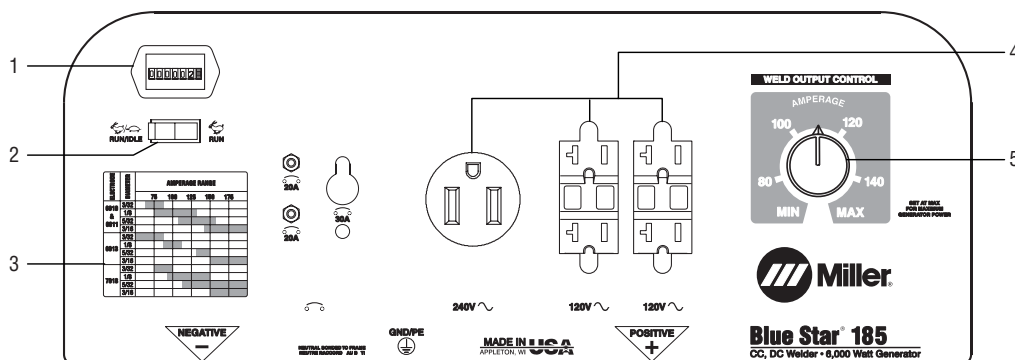
	Model	Welding Mode	Weld Output Range	Weld Output Rated at 104° F (40° C)*	Single Phase Generator Power	Dimensions	Net Weight (without fuel)
Gasoline	Blue Star® 145	CC/DC (Stick/TIG)	40 – 145 A	145 A at 25 V, 20% Duty Cycle	4500 Watts Peak 4000 Watts Continuous 34 A at 120 V, 17 A at 240 V	H: 22.75 in (578 mm) W: 22.75 in (578 mm) D: 31.6 in (803 mm)	263 lb (119 kg)
	Blue Star® 145 DX			100 A at 25 V, 60% Duty Cycle			309 lb (140 kg)
	Blue Star® 185	CC/DC (Stick/TIG)	55 – 185 A	185 A at 25 V, 20% 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: 31.6 in (803 mm)	267 lb (121 kg)
	Blue Star® 185 DX			130 A at 25 V, 60% Duty Cycle			315 lb (143 kg)

*Rated at sea level.

Engine Specifications (Subject to change without notice.)

Model	Engine	HP	Type	Engine Speeds	Fuel Capacity	Oil Capacity	Automatic Engine Shutdown
Blue Star® 145	Kohler CS10 2 year warranty	10 HP at 3600 RPM	1-cylinder, 4-cycle, air-cooled, OHV	3750 RPM	1.8 gal (6.8 L)	1.1 qt (1.04 L)	Standard
Blue Star® 145 DX				3750 RPM (2500 RPM at idle)			
Blue Star® 185	Honda GX390 2 year warranty	13 HP at 3600 RPM	1-cylinder, 4-cycle, air-cooled, OHV	3750 RPM	1.7 gal (6.4 L)	1.16 qt (1.10 L)	Standard
Blue Star® 185 DX				Kohler CS12.75 2 year warranty			

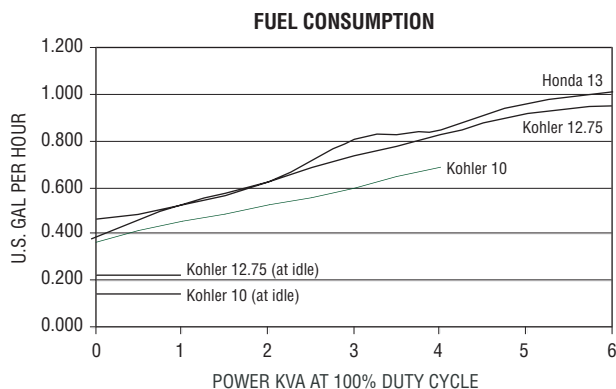
Control Panel



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

*DX Models only.

Performance Data



Fuel Consumption Data

- 5-gallon fuel capacity on DX models. 1.7 and 1.8 gallon on standard models.
- 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% duty cycle), the Blue Star 185 DX would run for about 15 hours of operation.

Why Upgrade?



- 96% 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	Blue Star 145 DX	Blue Star 185	Blue Star 185 DX
Generator Power	4500 W Peak	4500 W Peak	UPGRADE 6000 W Peak	6000 W Peak
DC Stick/TIG Output	145 A at 25 VDC	145 A at 25 VDC	UPGRADE 185 A at 25 VDC	185 A at 25 VDC
Engine	Kohler CS10	Kohler CS10	UPGRADE Honda GX390	Kohler CS12.75
Receptacle Covers	Standard	Standard	Standard	Standard
Fuel Capacity	1.8 Gallons	UPGRADE 5 Gallons	1.7 Gallons	UPGRADE 5 Gallons
Auto Idle	No	UPGRADE Yes	No	UPGRADE Yes
Hour Meter	No	UPGRADE Yes	No	UPGRADE Yes
Engine Starting	Recoil Only	UPGRADE Electric Start	Recoil Only	UPGRADE Electric Start

Power Usage Guide

The Power Generator is designed to provide **strong power** while keeping the voltage within 10% of 120/240 VAC. 120/240 VAC ±10% 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	1,400	1,400
Table Saw, 10 inch	6,300	1,800
Band Saw, 14 inch	2,500	1,100
Air Compressor		
1/2 Horsepower	3,000	1,000
1-1/2 Horsepower	8,200	2,200
Electric Chain Saw		
1/2 Horsepower, 12 in	1,100	1,100
2 Horsepower, 14 in	1,100	1,100
Flood Lights		
HID	125	100
Metal Halide	313	250
Mercury	1000	—
Vapor	1,250	1,000
Submersible Pump, 400 gph	600	200
Centrifugal Pump, 900 gph	900	500
High Pressure Washer		
1/2 Horsepower	3,150	950
1 Horsepower	6,100	1,600
Wet & Dry Vac,		
1.7 Horsepower	900	900

Typical Farm Equipment

Machine	Starting Watts	Running Watts
Portable Conveyor, 1/2 HP	3,400	1,000
Farm Duty Motors (e.g. Conveyors, Feed Augers, Air Compressors)		
1/3 Horsepower	1,720	720
1-1/2 Horsepower	8,200	2,200
Washer, 2 gal/min		
550 PSI	4,500	1,400
700 PSI	6,100	1,600

Typical Industrial Motors

Motor	Starting Watts	Running Watts
Split Phase		
1/8 Horsepower	800	300
1/2 Horsepower	3,175	875
Capacitor Start — Induction Run		
1/3 Horsepower	2,020	720
1-1/2 Horsepower	8,200	2,200
Capacitor Start — Capacitor Run		
1-1/2 Horsepower	8,100	2,000
Fan,		
1/8 Horsepower	1,000	400
1/2 Horsepower	3,500	1,100

Typical Household

Appliance	Starting Watts	Running Watts
Dishwasher,		
Cool Dry	1,400	700
Hot Dry	1,400	1,450
Electric Range,		
6-in element	0	1,500
8-in element	0	2,100
Microwave Oven, 625 watts	800	625
Refrigerator or Freezer	2,200	700
Automatic Washer	2,300	1,150
Clothes Dryer, Gas	1,800	700
Electric	1,800	5,750
Garage Door Opener,		
1/4 HP	1,100	550
1/2 HP	1,400	725
Furnace Fan, gas/fuel oil		
1/8 Horsepower	500	300
1/6 Horsepower	750	500
1/4 Horsepower	1,000	600
1/3 Horsepower	1,400	700
1/2 Horsepower	2,350	875
Lights	0	as indicated
Radio	0	50–200
Well Pump, 1/3 Horsepower	1,400	750
1/2 Horsepower	2,100	1,000
Sump Pump, 1/3 Horsepower	1,300	800
1/2 Horsepower	2,150	1,050
Central Air Conditioner		
10,000 BTU	2,200	1,500
20,000 BTU	3,300	2,500
24,000 BTU	4,950	3,800
32,000 BTU	6,500	5,000
40,000 BTU	7,800	6,000