

# Blue Star® Series

Issued February 2010 • 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 models: 40 – 145 A  
185 DX: 55 – 185 A

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

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

### Weight

145: 263 lb (119 kg)  
145 DX: 309 lb (140 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.



Blue Star  
185 DX shown

Three 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 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 (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



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

Equipment Sales US and Canada  
Phone: 866-931-9730  
FAX: 800-637-2315  
International Phone: 920-735-4554  
International FAX: 920-735-4125

Web Site  
www.MillerWelds.com



# Specifications (Subject to change without notice.)



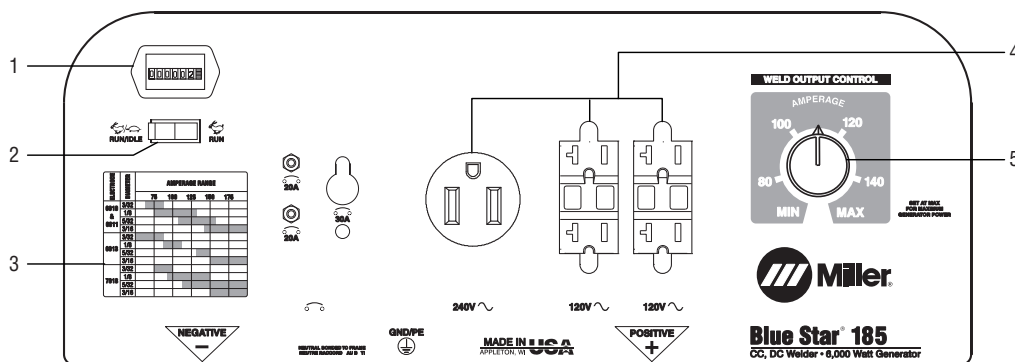
	Model	Welding Mode	Weld Output Range	Weld Output Rated at 104 F (40°C)*	Single-Phase Generator Power	Dimensions	Net Weight (without fuel)
Gasoline	Blue Star® 145	CC/DC (Stick/TIG)	40–145 A	145 A at 25 V, 20% Duty Cycle 100 A at 25 V, 60% Duty Cycle	4500 Watts Peak 4000 Watts Continuous 34 A at 120 V, 17 A at 240 V	H: 22-3/4 in (578 mm) W: 22-3/4 in (578 mm) D: 31-5/8 in (803 mm)	263 lb (119 kg)
	Blue Star® 145 DX						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: 22-3/4 in (578 mm) W: 22-3/4 in (578 mm) D: 31-5/8 in (803 mm)	315 lb (143 kg)

\*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	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)	5 gal (18.9 L)		
Blue Star® 185 DX	Kohler CS12.75 2-year warranty	12.75 HP at 3600 RPM	1-cylinder, 4-cycle, air-cooled, OHV	3750 RPM (2500 RPM at idle)	5 gal (18.9 L)	1.1 qt (1.04 L)	Standard

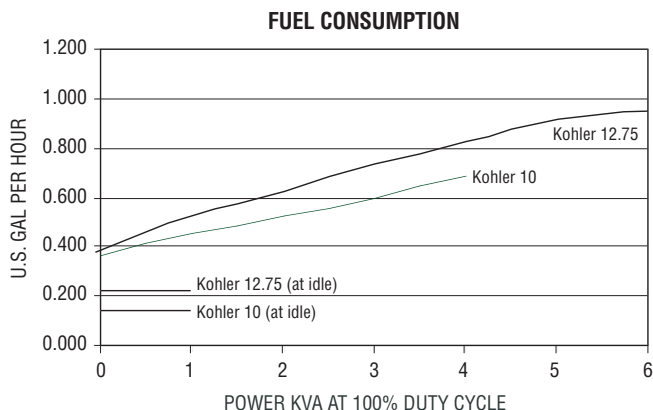
## Control Panel



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

# 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.

## Weld Leads #195 195

Consists of 50 ft (15.2 m), No. 2 electrode cable with insulated electrode holder and lug, 50 ft (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 ft 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 Kits

**#221 584** Field. Kohler CS10/12

**#221 581** Field. Kohler CS10 (recoil)

Tune-up kits include spark plug and engine filter.



**Spectrum® 375 #903 891**  
115/230 V with 20 ft torch. Cuts up to 3/8 in mild steel. See Lit. Index No. PC/9.1.

## Spark Arrestor #195 351

For DX Models only. Standard models include engine manufacturer's spark arrestor. Mandatory when operating on California grasslands, brush, or forest-covered land and all National Forests. For other areas, check your state and local laws.

## 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

Power Source and Options	Stock No.	Description	Qty.	Price
Blue Star® 145	#907 266	Kohler engine, recoil start		
Blue Star® 145 with GFCI	#907 266-01-1	Kohler engine, recoil start, GFCI 120 V receptacles.		
Blue Star® 145 DX	#907 267	Kohler engine, electric start, 5-gallon fuel tank, auto idle		
Blue Star® 145 DX with GFCI	#907 267-01-2	Kohler engine, electric start, 5-gallon fuel tank, auto idle, GFCI 120 V receptacles		
Blue Star® 145 DX (no battery)	#907 267-01-3	Kohler engine, electric start, 5-gallon fuel tank, auto idle. (With no battery)		
Blue Star® 185 DX	#907 269	Kohler engine, electric start, 5-gallon fuel tank, auto idle		
Blue Star® 185 DX with GFCI	#907 269-01-2	Kohler engine, electric start, 5-gallon fuel tank, auto idle, GFCI 120 V receptacles		
Blue Star® 185 DX (no battery)	#907 269-01-3	Kohler engine, electric start, 5-gallon fuel tank, auto idle. (With no battery)		
<b>Accessories</b>				
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	For DX models only. (Standard models include engine manufacturer's spark arrestor)		
Remote Oil Drain Kit	#224 831	Quick connect for easy engine maintenance. (Purchase from Miller Service Parts)		
Receptacle Kit	#088 297	6 ft cord with 240 V plug. (Purchase from Miller Service Parts)		
240 V Electrical Plug	#213 380	For use with 240 V receptacle. (Purchase from Miller Service Parts)		
Engine Tune-Up Kits		See above. (Purchase from Miller Service Parts)		
<b>Stick Accessories</b>				
Weld Leads	#195 195	Includes 50 ft, No. 2 electrical cable and holder, 50 ft work cable with clamp and lug		
Stick Electrodes				
<b>TIG Accessories</b>				
TIG Torch, Consumables, Tungsten				
<b>Plasma Accessories</b>				
Spectrum® 375	#903 891	115/230 V, 20 ft torch. See Lit. Index No. PC9.1		

Date:

Total Quoted Price:

Distributed by:

