

BLUE STAR

Power Systems Inc.

Diesel Product Line

208-480 Volt

VD150-02FT4MP

60 Hz / 1800 RPM

150 kWe / 150 kWe

Standby / Prime

Ratings

	240V	208V	240V	480V	Multi-Voltage
Phase	1	3	3	3	3 / 1
PF	1.0	0.8	0.8	0.8	0.8 / 1.0
Hz	60	60	60	60	60
Generator Model	431CSL6206	431CSL6204	431CSL6204	431CSL6204	431CSL6206
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	12 LEAD CONFIGURABLE
Standby					
kWe	150	150	150	150	150
AMPS	625	521	452	226	625/521/452/226
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C
Prime					
kWe	150	150	150	150	150
AMPS	625	521	452	226	625/521/452/226
Temp Rise	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C	105°C / 40°C

Standard Equipment

Engine

- ▶ Radiator Cooled Unit Mounted (55°C)
- ▶ Blower Fan & Fan Drive
- ▶ Starter & Alternator
- ▶ Oil Pump & Filter
- ▶ Oil Drain Extension w/Valve
- ▶ Governor - Electronic Isochronous
- ▶ 24V Battery System & Cables
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ▶ EPA Certified Tier 4 Final

Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± .25% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 105°C Standby Temperature Rise
- ▶ 105°C Prime Temperature Rise
- ▶ 100% of Rated Load - One Step
- ▶ 5% Maximum Harmonic Content
- ▶ NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise

Additional

- ▶ Single Source Supplier
- ▶ Microprocessor Based Digital Control
- ▶ Control Panel Mounted in NEMA 12 Enclosure
- ▶ Base - Formed Steel
- ▶ Level 3 Enclosure
- ▶ Trailer with Integrated 250 Gallon Fuel Tank
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ SCR Catalyst / Silencer Mounted
- ▶ Battery Charger 24V 5 Amp
- ▶ Jacket Water Heater -20°F 2500W 240V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ▶ 2YR / 2000HR Standby Warranty
- ▶ 1YR / 1500HR Prime Warranty
- ▶ Standard Color - White

Diesel Product Line

150 kWe / 150 kWe



Application Data

Engine		
Manufacturer:	Volvo Penta	Displacement - Cu. In. (lit): 470 (7.70)
Model:	TAD871VE	Bore - in. (cm) x Stroke - in. (cm): 4.33(11.0) x 5.31 (13.5)
Type:	4-Cycle	Compression Ratio: 17.5:1
Aspiration:	Turbo Charged, CAC	Rated RPM: 1800
Cylinder Arrangement:	6 Cylinder Inline	Max HP Stby (kWm): 252 (185)

Exhaust System	Standby	Prime
Gas Temp. (Stack): °F (°C)	709 (376)	709 (376)
Gas Volume at Stack Temp: CFM (m³/min)	886 (25.1)	886 (25.1)
Maximum Allowable Exhaust Restriction (Post SCR Cat.): in. H₂O (kPa)	32.0 (8.00)	32.0 (8.00)

Cooling System		
Ambient Capacity of Radiator: °F (°C)	131 (55.0)	131 (55.0)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H₂O (kPa)	0.50 (0.12)	0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)	123 (465)	123 (465)
Heat Rejection to Coolant: BTUM (kW)	7,285 (128)	7,285 (128)
Heat Rejection to CAC: BTUM (kW)	1,666 (29.3)	1,666 (29.3)
Heat Radiated to Ambient: BTUM (kW)	2,135 (37.4)	2,135 (37.4)

Air Requirements		
Aspirating: CFM (m³/min)	445 (12.6)	445 (12.6)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	16,961 (480)	16,961 (480)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications	

Fuel Consumption		
At 100% of Power Rating: gal/hr (lit/hr)	11.5 (43.5)	11.5 (43.5)
At 75% of Power Rating: gal/hr (lit/hr)	9.62 (36.4)	9.62 (36.4)
At 50% of Power Rating: gal/hr (lit/hr)	6.81 (25.8)	6.81 (25.8)
DEF Consumption (% of fuel consumption)	± 6.00%	± 6.00%

Fluids Capacity		
Total Oil System: gal (lit)	7.13 (27.0)	7.13 (27.0)
Engine Jacket Water Capacity: gal (lit)	4.50 (17.0)	4.50 (17.0)
System Coolant Capacity: gal (lit)	11.6 (43.9)	11.6 (43.9)
DEF Tank Capacity: gal (lit)	18.5 (70.0)	18.5 (70.0)

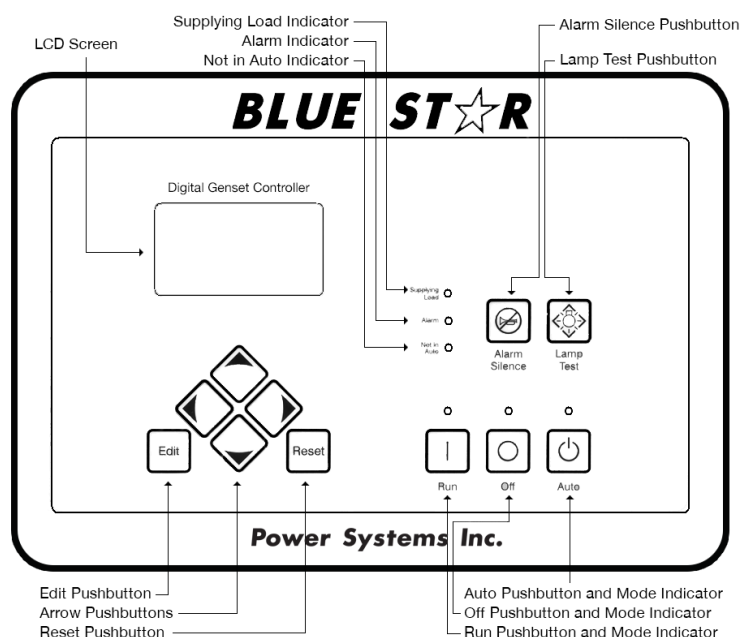
Deration Factors

Rated Power is available up to 4,921 Ft (1500m) at ambient temperatures to 122°F (50°C) standby and prime.
Consult factory for site conditions above these parameters.

DGC-2020 Control Panel

Standard Features

- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible



Convenience Panel

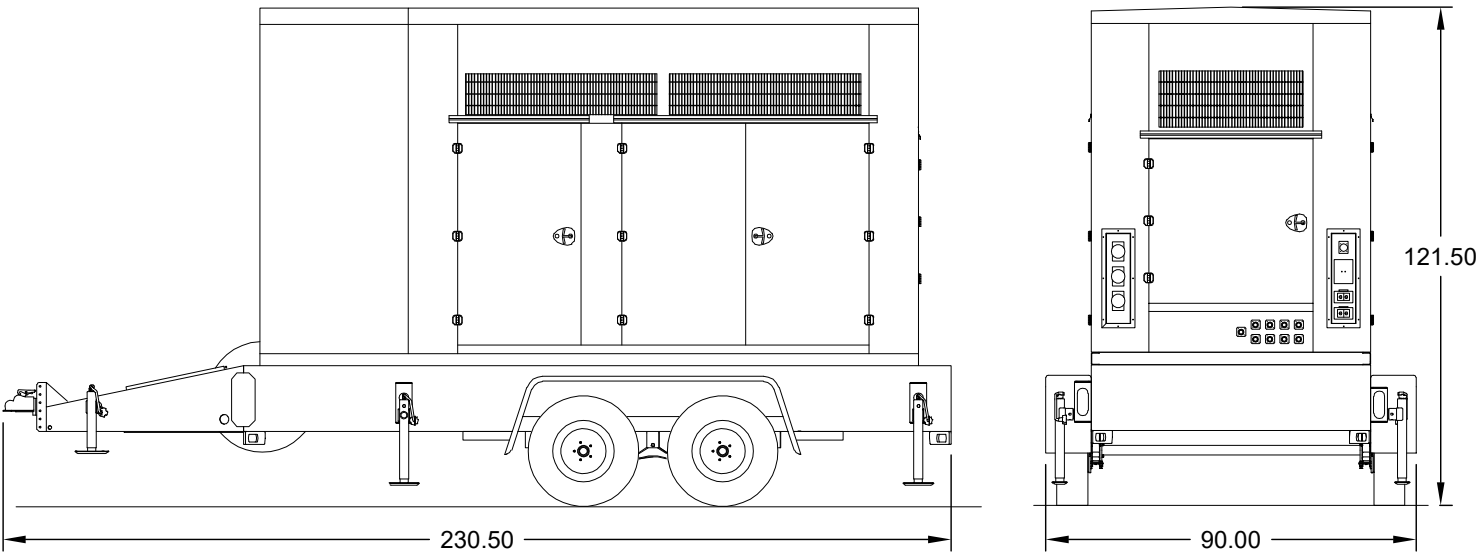
- ▶ 2-50A 125/250VAC 3P4W Twist Lock Non-Nema CS6369
- ▶ 1-30A 125/250VAC 3P4W Twist Lock Nema L14-30R
- ▶ 2-20A 120VAC Duplex GFCI Nema 5-20R
- ▶ Thumb Screw Terminals for 2-Wire Remote Start
- ▶ 20A 240VAC Male Receptacle for Jacket Water Heater Shore Power Connection
- ▶ 15A 120VAC Male Receptacle for Battery Charger Shore Power Connection
- ▶ 9-400A Rated Female Cam Style Locking Receptacles for Load Connection

Diesel Product Line

150 kW_e / 150 kW_e



Dimensions



	No Load	Full Load
Sound Data	67 dBA	69 dBA

Approximate Ship Weight: 10,300 lbs.
Approximate Wet Weight: 12,100 lbs.
Weights based on standard trailer package. Additional options may increase weight.
Sound data measured at 23 feet (7 meters) in accordance with ISO 8528-10.

All specification sheet dimensions are represented in inches.
All enclosures and fuel tanks are based on the standard standby unit configuration. Any deviation can change dimensions.
Materials and specifications subject to change without notice.



Distributed By:

Blue Star Power Systems, Inc.
2250 Carlson Drive
North Mankato, Minnesota 56003
Phone + 1 507 345 1776
bluestarps.com
quote.bluestarps.com
sales@bluestarps.com