# BLUE ST R Power Systems Inc.

## Diesel Product Line

208-600 Volt

JD80-02 60 Hz / 1800 RPM

80 kWe Standby

## Ratings

	240V	208V	240V	480V	600V
Phase	1	3	3	3	3
PF	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	UCI274E	UCI274C	UCI274C	UCI224G	UCI224G
Connection	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe	80	80	80	80	80
AMPS	333	278	241	120	96
Temp Rise	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C

## Standard Equipment

#### **Engine**

- Radiator Cooled Unit Mounted (50°C)
- Radiator Duct Flange (OPU Only)
- Blower Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension w/Valve
- Governor Electronic Isochronous
- 12V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Critical Grade Silencer Mounted
- Flexible Fuel Connector
- EPA Certified Tier 3

#### Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 1% Voltage Regulation
- 4 Pole, Rotating Field
- 125°C Standby 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
- UL 2200 & cUL Listed
- CSA Certified
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel
   Mounted in NEMA 12 Enclosure
- Base Formed Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 12V 6 Amp
- Jacket Water Heater -20°F 1500W 120V w/Isolation Valves
- Vibration Isolation Mounts
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

JD80-02 1 of 4

# Diesel Product Line

## 80 kWe



# **Application Data**

Engine			
Manufacturer:	John Deere	Displacement - Cu. In. (lit):	275 (4.50)
Model:	4045HF285	Bore - in. (cm) x Stroke - in. (cm):	4.19 (10.6) x 5.00 (12.7)
Туре:	4-Cycle	Compression Ratio:	19.0:1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	126 (94.0)
Exhaust System			Standby
Gas Temp. (Stack): °F (°C)			1,069 (576)
Gas Volume at Stack Temp: CFM (m <sup>3</sup>	³/min)		651 (18.4)
Maximum Allowable Exhaust Restric	tion: in. H <sub>2</sub> O (kPa)		30.0 (7.50)
Cooling System			
Ambient Capacity of Radiator: °F (°C)			122 (50.0)
Maximum Allowable Static Pressure	on Rad. Exhaust: in. H <sub>2</sub> O (kPa)		0.50 (0.12)
Water Pump Flow Rate: GPM (lit/min)			48.0 (182)
Heat Rejection to Coolant: BTUM (kV	V)		2,990 (52.3)
Heat Rejection to CAC: BTUM (kW)			672 (11.8)
Heat Radiated to Ambient: BTUM (kV	V)		1,632 (28.6)
Air Requirements			
Aspirating: CFM (m³/min)			234 (6.62)
Air Flow Required for Rad. Cooled Ur	nit: CFM (m³/min)		6,541 (185)
Air Flow Required for Heat Exchange	r/Rem. Rad. CFM (m³/min)	Consult Factory For Remote Cooled Applications	
Fuel Consumption			
At 100% of Power Rating: gal/hr (lit/h	nr)		6.34 (24.0)
At 75% of Power Rating: gal/hr (lit/hr)			5.21 (19.7)
At 50% of Power Rating: gal/hr (lit/hr)			3.92 (14.8)
Fluids Capacity			
Total Oil System: gal (lit)			3.43 (13.0)
Engine Jacket Water Capacity: gal (lit	)		2.24 (8.50)
System Coolant Capacity: gal (lit)			5.40 (20.4)

Deration Factors: Rated Power is available up to 10,000 ft (3,048 m) at ambient temperatures to 122°F (50°C). Consult factory for site conditions above these parameters.

JD80-02 2 of 4

# Diesel Product Line

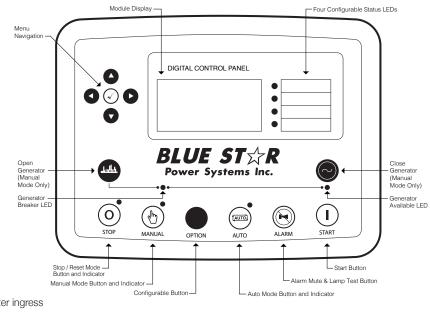
## 80 kWe



## DCP7310 Control Panel

#### Standard Features

- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator Interface
- cULus Listed, CE Approved
- Event Recording
- IP 65 rating (with supplied gasket) offers increased resistance to water ingress
- NFPA 110 Level 1 Compatible

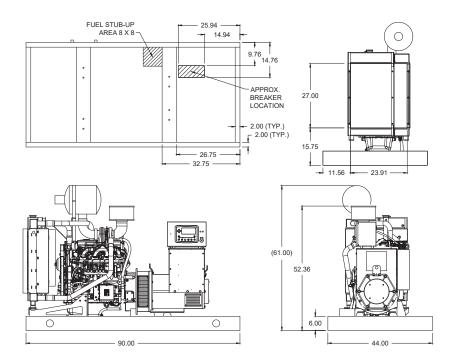


# Weights / Dimensions / Sound Data

	LxWxH	Weight lbs
OPU	90 x 44 x 61 in	2,650
Level 1	102 x 44 x 66 in	3,275
Level 2	102 x 44 x 66 in	3,325
Level 3	132 x 44 x 66 in	3,500

Please allow 6-12 inches for height of exhaust stack.

	No Load	Full Load
OPU	77 dBA	81 dBA
Level 1	74 dBA	77 dBA
Level 2	71 dBA	73 dBA
Level 3	65 dBA	67 dBA



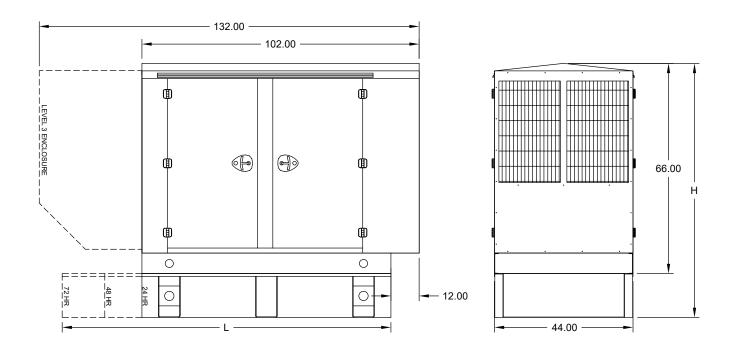
JD80-02 3 of 4

# Diesel Product Line

## 80 kWe



## **Enclosures & Fuel Tanks**



- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 and ASCE/SEI 7-16 standards.
- Level 2 & 3 enclosures include sound attenuation foam
- $-\,$  Level 3 enclosure includes frontal sound & exhaust hood.
- Enclosure height does not include exhaust stack.

	24 Hour 250 Gallon	48 Hour 500 Gallon	72 Hour 750 Gallon
L	90.00	120.00	174.00
Н	94.00	102.00	102.00

## Notes

- All specification sheet dimensions are represented in inches.
- All drawings based on standard 480 volt standby generator. Lengths may vary with other voltages. All drawings and dimensions subject to change without notice.
- All enclosures and fuel tanks are based on the standard unit configuration. Any requested deviation can change dimensions.
- Sound data is measured at 23 feet (7 meters) in accordance with ISO 8528-10.
- All materials and specifications subject to change without notice.



American Made

#### 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

JD80-02 4 of 4