

# BLUE STAR

## Power Systems Inc.

Diesel Product Line

208-600 Volt

JD40-03

60 Hz / 1800 RPM

40 kWe

Standby

### Ratings

	240V	208V	240V	480V	600V
<b>Phase</b>	1	3	3	3	3
<b>PF</b>	1.0	0.8	0.8	0.8	0.8
<b>Hz</b>	60	60	60	60	60
<b>Generator Model</b>	UCI224D	UCI224C	UCI224C	UCI224C	UCI224C
<b>Connection</b>	12 LEAD DD	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
<b>kWe</b>	40	40	40	40	40
<b>AMPS</b>	167	139	120	60	48
<b>Temp Rise</b>	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C	125°C / 40°C

### Standard Equipment

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <p><b>Engine</b></p> <ul style="list-style-type: none"> <li>- Radiator Cooled Unit Mounted (50°C)</li> <li>- Radiator Duct Flange (OPU Only)</li> <li>- Blower Fan &amp; Fan Drive</li> <li>- Starter &amp; Alternator</li> <li>- Oil Pump &amp; Filter</li> <li>- Oil Drain Extension w/Valve</li> <li>- Governor - Electronic Isochronous</li> <li>- 12V Battery System &amp; Cables</li> <li>- Air Cleaner (Dry Single Stage)</li> <li>- Critical Grade Silencer Mounted</li> <li>- Flexible Fuel Connector</li> <li>- EPA Certified Tier 3</li> </ul> | <p><b>Generator</b></p> <ul style="list-style-type: none"> <li>- Brushless Single Bearing</li> <li>- Automatic Voltage Regulator</li> <li>- ± 1% Voltage Regulation</li> <li>- 4 Pole, Rotating Field</li> <li>- 125°C Standby Temperature Rise</li> <li>- 100% of Rated Load - One Step</li> <li>- 5% Maximum Harmonic Content</li> <li>- NEMA MG 1, IEEE and ANSI Standards Compliance for Temperature Rise</li> </ul> | <p><b>Additional</b></p> <ul style="list-style-type: none"> <li>- Single Source Supplier</li> <li>- UL 2200 &amp; cUL Listed</li> <li>- CSA Certified</li> <li>- Seismic Certified to IBC 2021</li> <li>- NFPA 110 / CSA C282 Compliant</li> <li>- Microprocessor Based Digital Control Panel Mounted in NEMA 12 Enclosure</li> <li>- Base - Formed Steel</li> <li>- Main Line Circuit Breaker Mounted &amp; Wired</li> <li>- Battery Charger 12V 6 Amp</li> <li>- Jacket Water Heater -20°F 1500W 120V w/Isolation Valves</li> <li>- Vibration Isolation Mounts</li> <li>- 2 Year / 2000 Hour Standby Warranty</li> <li>- Standard Colors - White / Gray</li> </ul> |
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### Application Data

#### Engine

Manufacturer:	John Deere	Displacement - Cu. In. (lit):	275 (4.50)
Model:	4045TF280	Bore - in. (cm) x Stroke - in. (cm):	4.19 (10.6) x 5.00 (12.7)
Type:	4-Cycle	Compression Ratio:	19.0:1
Aspiration:	Turbo Charged	Rated RPM:	1800
Cylinder Arrangement:	4 Cylinder Inline	Max HP Stby (kWm):	75.0 (56.0)

#### Exhaust System

#### Standby

Gas Temp. (Stack): °F (°C)	945 (507)
Gas Volume at Stack Temp: CFM (m³/min)	448 (12.7)
Maximum Allowable Exhaust Restriction 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)	38.0 (144)
Heat Rejection to Coolant: BTUM (kW)	1,821 (31.9)
Heat Radiated to Ambient: BTUM (kW)	842 (14.7)

#### Air Requirements

Aspirating: CFM (m³/min)	180 (5.09)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)	4,760 (135)
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)	3.50 (13.2)
At 75% of Power Rating: gal/hr (lit/hr)	2.76 (10.4)
At 50% of Power Rating: gal/hr (lit/hr)	1.99 (7.53)

#### Fluids Capacity

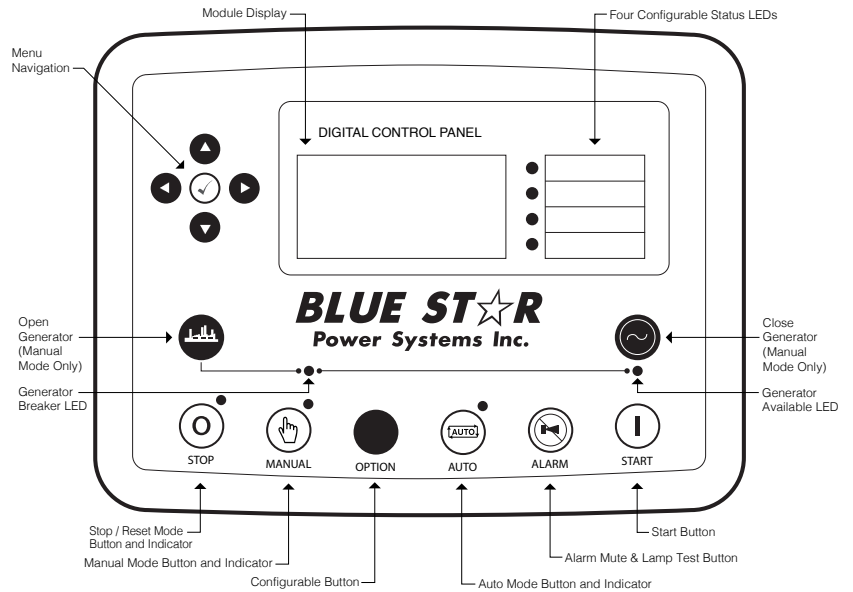
Total Oil System: gal (lit)	3.88 (14.7)
Engine Jacket Water Capacity: gal (lit)	2.25 (8.52)
System Coolant Capacity: gal (lit)	5.38 (20.4)

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.

## DCP7310 Control Panel

### Standard Features

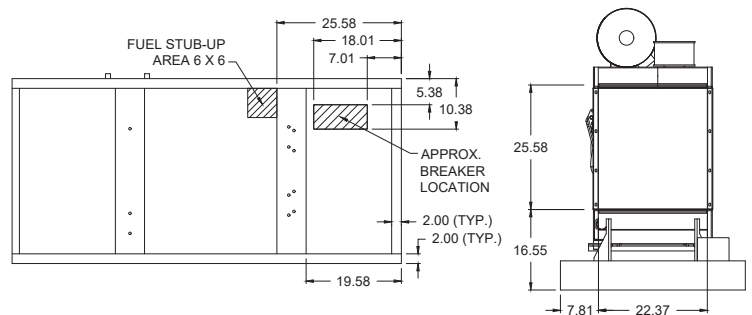
- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- CAN Bus (J1939) ECU Communications
- Windows-Based Software
- Multilingual Capability
- Remote Communications to DSE2548 Remote Annunciator
- 8 Programmable Contact Inputs
- 10 Contact Outputs
- RS485 Communicator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



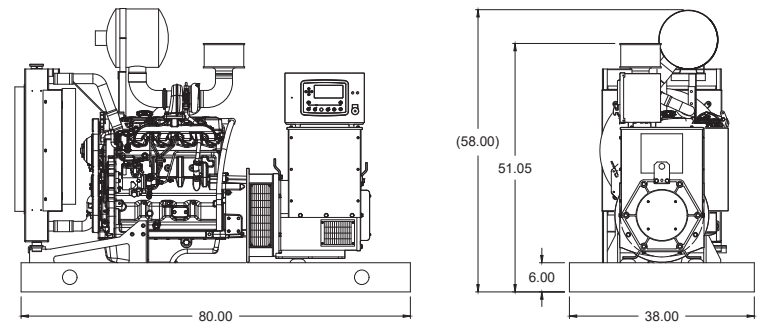
## Weights / Dimensions / Sound Data

	L x W x H	Weight lbs
<b>OPU</b>	80 x 38 x 58 in	2,100
<b>Level 1</b>	90 x 38 x 60 in	2,575
<b>Level 2</b>	90 x 38 x 60 in	2,625
<b>Level 3</b>	120 x 38 x 60 in	2,775

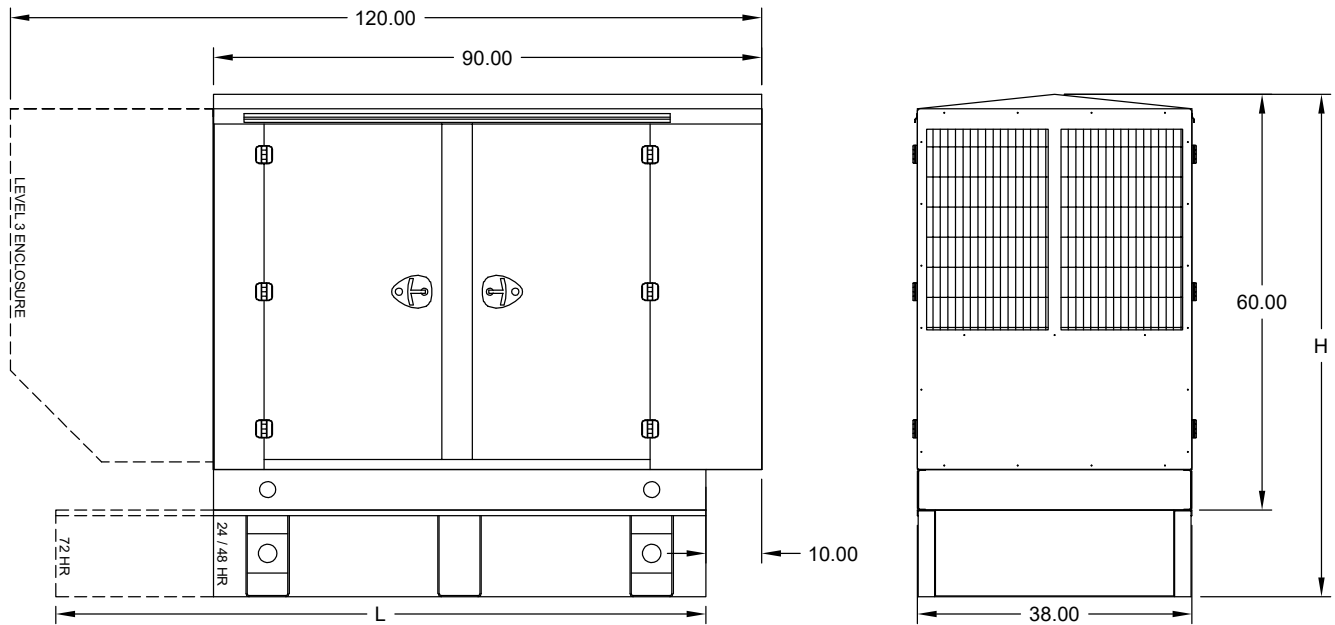
Please allow 6-12 inches for height of exhaust stack.



	No Load	Full Load
<b>OPU</b>	73 dBA	77 dBA
<b>Level 1</b>	71 dBA	73 dBA
<b>Level 2</b>	68 dBA	70 dBA
<b>Level 3</b>	63 dBA	65 dBA



## 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 120 Gallon	48 Hour 240 Gallon	72 Hour 360 Gallon
<b>L</b>	80.00	80.00	108.00
<b>H</b>	80.00	96.00	96.00

### 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 Owned



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