BLUE ST R Power Systems Inc.

Diesel Product Line

208-4160 Volt

MD1600-01 60 Hz / 1800 RPM

1600 kWe Standby

Ratings

| | 208V | 240V | 480V | 600V | 4160V |
|-----------------|-----------------|-----------------|--------------|--------------|--------------|
| Phase | 3 | 3 | 3 | 3 | 3 |
| PF | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Hz | 60 | 60 | 60 | 60 | 60 |
| Generator Model | Consult Factory | Consult Factory | S7L1D-D | S7L1D-D | MVWI734H |
| Connection | 4 LEAD WYE | 4 LEAD DELTA | 4 LEAD WYE | 4 LEAD WYE | 6 LEAD WYE |
| kWe | 1600 | 1600 | 1600 | 1600 | 1600 |
| AMPS | 5558 | 4817 | 2408 | 1927 | 278 |
| Temp Rise | Consult Factory | Consult Factory | 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
- 24V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Critical Grade Silencer Mounted
- Flexible Fuel Connector
- EPA Certified Tier 2

Generator

- Brushless Single Bearing
- Automatic Voltage Regulator
- ± 0.50% 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 through 600VAC
- CSA Certified through 600VAC
- Seismic Certified to IBC 2021
- NFPA 110 / CSA C282 Compliant
- Microprocessor Based Digital Control Panel
 Mounted in NEMA 12 Enclosure
- Base Structural Steel
- Main Line Circuit Breaker Mounted & Wired
- Battery Charger 24V 5 Amp
- Jacket Water Heater (Qty 2) -20°F 9000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- 2 Year / 2000 Hour Standby Warranty
- Standard Colors White / Gray

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Diesel Product Line

1600 kWe



174.4 (660)

Application Data

System Coolant Capacity: gal (lit)

Consult factory for site conditions above these parameters.

Deration Factors: Rated Power is available up to 3280 ft (1000 m) at ambient temperatures to 104°F (40°C).

| Application D | ata | | | | |
|-------------------------------|--|--------------------------------------|--|--|--|
| Engine | | | | | |
| Manufacturer: | Mitsubishi | Displacement - Cu. In. (lit): | 3,989 (65.4) | | |
| Model: | S16R-Y2PTAW-1 | Bore - in. (cm) x Stroke - in. (cm): | 6.69 (17.0) x 7.09 (18.0) | | |
| Type: | 4-Cycle | Compression Ratio: | 14.5:1 | | |
| Aspiration: | Turbo Charged, H2O/Air Intercooled | Rated RPM: | 1800 | | |
| Cylinder Arrangement: | 16 Cylinder Vee | Max HP Stby (kWm): | 2,346 (1,750) | | |
| Exhaust System | | | Standby | | |
| Gas Temp. (Stack): °F (°C) | | | 940 (504) | | |
| Gas Volume at Stack Temp: | CFM (m³/min) | | 15,642 (443) | | |
| Maximum Allowable Exhaus | t Restriction: in. H ₂ O (kPa) | | 23.6 (5.9) | | |
| Cooling System | | | | | |
| Ambient Capacity of Radiato | or: °F (°C) | | 122 (50.0) | | |
| Maximum Allowable Static P | Pressure on Rad. Exhaust: in. H ₂ O (kPa) | | 0.50 (0.12) | | |
| Jacket Water Pump Flow Ra | ate: GPM (lit/min) | | 489 (1,851) | | |
| Intercooler Pump Flow Rate: | : GPM (lit/min) | | 243 (920) | | |
| Heat Rejection to Jacket Co | olant: BTUM (kW) | | 36,167 (633) | | |
| Heat Rejection to Intercooler | r: BTUM (kW) | | 36,167 (633) | | |
| Heat Radiated to Ambient: E | BTUM (kW) | | 31,609 (553) | | |
| Air Requirements | | | | | |
| Aspirating: CFM (m³/min) | | | 5,932 (168) | | |
| Air Flow Required for Rad. C | Cooled Unit: CFM (m³/min) | | 75,053 (2,124) | | |
| Air Flow Required for Heat E | xchanger/Rem. Rad. CFM (m³/min) | Consult Factory F | Consult Factory For Remote Cooled Applications | | |
| Fuel Consumption | | | | | |
| At 100% of Power Rating: g | al/hr (lit/hr) | | 127 (481) | | |
| At 75% of Power Rating: ft3 | /hr (m3/hr) | | 96.0 (363) | | |
| At 50% of Power Rating: ft3 | /hr (m3/hr) | | 67.7 (256) | | |
| Fluids Capacity | | | | | |
| Total Oil System: gal (lit) | | | 60.8 (230) | | |
| Engine Jacket Water Capaci | ity: gal (lit) | | 44.9 (170) | | |
| | | | | | |

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Diesel Product Line

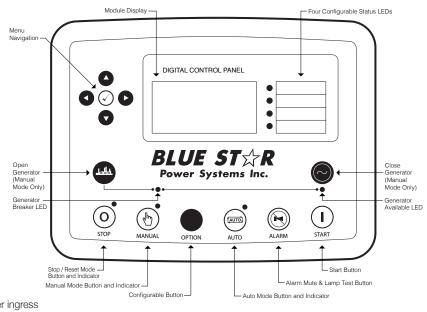
1600 kWe



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

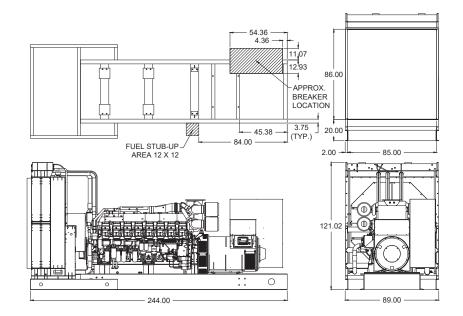


Weights / Dimensions / Sound Data

| | LxWxH | Weight lbs |
|---------|--------------------|------------|
| OPU | 244 x 89 x 121 in | 34,450 |
| Level 1 | 282 x 110 x 145 in | 39,850 |
| Level 2 | 282 x 110 x 145 in | 40,050 |
| Level 3 | 378 x 110 x 145 in | 42,475 |

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

| | No Load | Full Load | |
|---------|---------|-----------|--|
| OPU | 92 dBA | 94 dBA | |
| Level 1 | 85 dBA | 87 dBA | |
| Level 2 | 83 dBA | 85 dBA | |
| Level 3 | 80 dBA | 82 dBA | |



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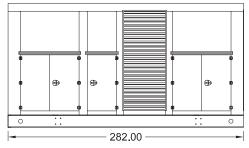
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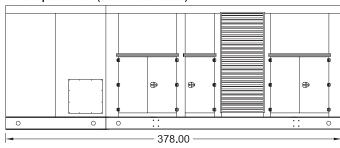


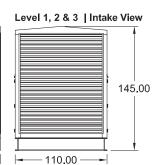
Enclosures

Level 1 & 2 | Side View (Weather Proof)



Level 3 | Side View (Sound Attenuated)

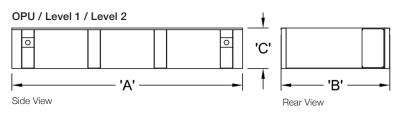




- All enclosure models are 200 MPH wind rating certified in accordance with IBC2021 and ASCE/SEI 7-16 standards.
- Level 2 & 3 enclosures include sound attenuation foam
- Level 3 enclosure includes frontal sound & exhaust hood.
- Enclosure height does not include exhaust stack.

Α В C

Double Wall UL 142 Listed Fuel Tanks



| Level 3 | | | ţ | | |
|-----------|-----|---|-----|-----------|--|
| 0 | | 0 | 'C' | | |
| | 'A' | | 1 | 'B' | |
| Side View | | | | Rear View | |

| | 1925 Gallon | 3850 Gallon | 7700 Gallon |
|---|-------------|-------------|-------------|
| Α | 282.00 | 312.00 | 576.00 |
| В | 110.00 | 110.00 | 110.00 |
| С | 22.00 | 36.00 | 36.00 |
| | 12 Hour | 24 Hour | 48 Hour |

24 Hour

12 Hour

| | 12 Hour 1925 Gallon | 24 Hour 3850 Gallon | 48 Hour 7700 Gallon |
|---|------------------------|------------------------|------------------------|
| | 378.00 | 378.00 | 576.00 |
| 3 | 110.00 | 110.00 | 110.00 |
| ; | 16.00 | 28.00 | 36.00 |

American Owned

48 Hour



American Made

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.

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