Diesel Product Line

MD1250-01
1250 kWe

208-4160 Volt
60 Hz / 1800 RPM

Standby Ratings

<table>
<thead>
<tr>
<th>Phase</th>
<th>208V</th>
<th>240V</th>
<th>480V</th>
<th>600V</th>
<th>4160V</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Hz</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Generator Model</td>
<td>Consult Factory</td>
<td>Consult Factory</td>
<td>742RSL4048</td>
<td>743RSS4288</td>
<td>742FSM4366</td>
</tr>
<tr>
<td>Connection</td>
<td>4 LEAD WYE</td>
<td>4 LEAD DELTA</td>
<td>4 LEAD WYE</td>
<td>4 LEAD WYE</td>
<td>6 LEAD WYE</td>
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</tbody>
</table>

Standby

<table>
<thead>
<tr>
<th>kW</th>
<th>AMPS</th>
<th>Temp Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1250</td>
<td>4342</td>
<td>Consult Factory</td>
</tr>
<tr>
<td>1250</td>
<td>3763</td>
<td>Consult Factory</td>
</tr>
<tr>
<td>1250</td>
<td>1881</td>
<td>130°C / 27°C</td>
</tr>
<tr>
<td>1250</td>
<td>1505</td>
<td>130°C / 27°C</td>
</tr>
<tr>
<td>1250</td>
<td>217</td>
<td>130°C / 27°C</td>
</tr>
</tbody>
</table>

Standard Equipment

Engine
- Radiator Cooled Unit Mounted (50°C)
- Blower Fan & Fan Drive
- Starter & Alternator
- Oil Pump & Filter
- Oil Drain Extension w/Valve
- Governor - Electronic Ischronous
- 24V Battery System & Cables
- Air Cleaner (Dry Single Stage)
- Flexible Fuel Connector
- EPA Certified Tier 2

Generator
- Brushless Single Bearing
- Automatic Voltage Regulator
- ± .25% Voltage Regulation
- 4 Pole, Rotating Field
- 130°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
- Microprocessor Based Digital Control
- Interface Connection Box
- Control Panel Mounted in NEMA 12 Enclosure
- Base - Structural Steel
- Main Line Circuit Breaker Mounted & Wired*
- Critical Grade Silencer Mounted
- Battery Charger 24V 5 Amp
- Jacket Water 2 Qty: 9000W 240V w/Isolation Valves
- Vibration Isolation Mounts (Pad Type)
- Radiator Duct Flange (OPU Only)
- Single Source Supplier
- 2YR / 2000HR Standby Warranty
- Standard Colors - White / Gray

*Through 600VAC
# Diesel Product Line

## 1250 kWe

### Application Data

#### Engine
- **Manufacturer:** Mitsubishi
- **Model:** S12R-Y2PTAW-1
- **Type:** 4-Cycle
- **Aspiration:** Turbocharged, H₂O/Air Intercooled
- **Cylinder Arrangement:** 12 Cylinder Vee
- **Displacement - Cu. In. (lit):** 2,992 (49.0)
- **Bore - in. (cm) x Stroke - in. (cm):** 6.69 (17.0) x 7.09 (18.0)
- **Compression Ratio:** 14.5:1
- **Rated RPM:** 1800
- **Max HP Stby (kWm):** 1,881 (1,403)

#### Exhaust System
- **Gas Temp. (Stack): °F (°C)**
  - Standby: 927 (497)
  - Gas Volume at Stack Temp: CFM (m³/min)
  - Maximum Allowable Exhaust Restriction: in. H₂O (kPa)
  - 23.6 (5.90)

#### Cooling System
- **Ambient Capacity of Radiator: °F (°C)**
  - 122 (50.0)
- **Maximum Allowable Static Pressure on Rad. Exhaust:** in. H₂O (kPa)
  - 0.50 (0.12)
- **Jacket Water Pump Flow Rate:** GPM (lit/min)
  - 489 (1,851)
- **Intercooler Pump Flow Rate:** GPM (lit/min)
  - 70.0 (265)
- **Heat Rejection to Jacket Coolant:** BTUM (kW)
  - 29,045 (508)
- **Heat Rejection to Intercooler:** BTUM (kW)
  - 29,045 (508)
- **Heat Radiated to Ambient:** BTUM (kW)
  - 6,703 (118)

#### Air Requirements
- **Aspirating:** CFM (m³/min)
  - 4,767 (135)
- **Air Flow Required for Rad.Cooled Unit:** CFM (m³/min)
  - 62,756 (1,776)
- **Air Flow Required for Heat Exchanger/Rem. Rad.**
  - Consult Factory For Remote Cooled Applications

#### Fuel Consumption
- **At 100% of Power Rating:** gal/hr (lit/hr)
  - 103 (392)
- **At 75% of Power Rating:** gal/hr (lit/hr)
  - 75.1 (284)
- **At 50% of Power Rating:** gal/hr (lit/hr)
  - 51.0 (193)

#### Fluids Capacity
- **Total Oil System:** gal (lit)
  - 47.6 (180)
- **Engine Jacket Water Capacity w/Intercooler:** gal (lit)
  - 34.3 (130)
- **System Coolant Capacity:** gal (lit)
  - 140.6 (532)

**Derivation Factors**
- Rated power available up to 3280 ft (1000 m) at ambient temperatures to 104°F (40°C).
- Consult factory for site conditions above these parameters.
Diesel Product Line

1250 kWe

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 Compatible

Weights / Dimensions / Sound Data

<table>
<thead>
<tr>
<th></th>
<th>L x W x H</th>
<th>Weight lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPU</td>
<td>220 x 95 x 112 in</td>
<td>27,375</td>
</tr>
<tr>
<td>Level 1</td>
<td>252 x 106 x 129 in</td>
<td>32,450</td>
</tr>
<tr>
<td>Level 2</td>
<td>252 x 106 x 129 in</td>
<td>32,675</td>
</tr>
<tr>
<td>Level 3</td>
<td>342 x 106 x 129 in</td>
<td>35,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>No Load</th>
<th>Full Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPU</td>
<td>89 dBA</td>
<td>91 dBA</td>
</tr>
<tr>
<td>Level 1</td>
<td>83 dBA</td>
<td>85 dBA</td>
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<tr>
<td>Level 2</td>
<td>81 dBA</td>
<td>83 dBA</td>
</tr>
<tr>
<td>Level 3</td>
<td>77 dBA</td>
<td>79 dBA</td>
</tr>
</tbody>
</table>

Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice.

Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.
Diesel Product Line

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Enclosures

Double Wall UL 142 Listed Fuel Tanks

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:

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