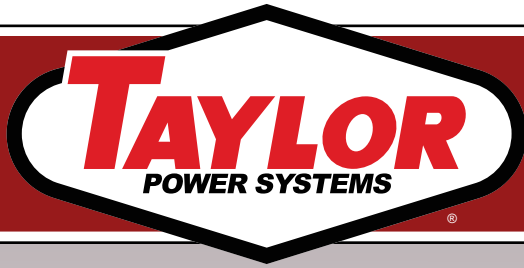


TM1000



| OUTPUT POWER OPTIONS | | | | | | 75°C CONTINUOUS | | sKVA |
|----------------------|----------|---------|------------|-------|-------|-----------------|------|-----------------|
| Operation Mode | Make | Voltage | Alternator | Phase | Hertz | kW/kVA | Amps | 30% Voltage Dip |
| Single Genset | Marathon | 277/480 | 573RSL4033 | 3 | 60 | 500/625 | 753 | 2300 |
| | | 120/208 | 573RSL4033 | 3 | 60 | 460/575 | 1598 | 1730 |
| Dual Genset | | 277/480 | 573RSL4033 | 3 | 60 | 1000/1250 | 1505 | 4600 |
| | | 120/208 | 573RSL4033 | 3 | 60 | 920/1150 | 3196 | 3460 |





Engine Data (Single Genset)

| | |
|-------------------------------------|--------------------------|
| Manufacturer | Volvo |
| Model | TWD1672GE |
| Aspiration | Turbocharged |
| EPA Tier | 4 Final |
| Charge Air Cooling System | Air-to-Air |
| Arrangement | Vertical Inline, 4-Cycle |
| Firing Order | 1-5-3-6-2-4 |
| Displacement: L (in. ³) | 16.12 (983.70) |
| Bore: mm (in.) | 144.00 (5.67) |
| Stroke: mm (in.) | 165.00 (6.50) |
| Compression Ratio | 16.8:1 |
| Horsepower | 836 |
| Rated RPM | 1800 |
| Governor | Isochronous |

Engine Liquid Capacity

| | |
|----------------------------------|---------------|
| Oil System: qt. (L) | 50.72 (48.00) |
| Cooling System Capacity: gal (L) | 15.85 (60.00) |

Engine Electrical

| | |
|---------------------|------|
| Electric Volts: DC | 24 |
| Cold Cracking Amps | 2200 |
| Battery(s) Required | 2 |

Fuel System

| | |
|------------------------------------|-------------------------|
| Fuel Pump Rate: gal/hr (L/hr) | 55.48 (210.00) |
| Return Rate: gal/hr (L/hr) | 6.60 (25.00) |
| Supply Max. Restriction: psi (kPa) | 4.35 (30.00) |
| Max Fuel Inlet Temp.: °F (°C) | 140.00 (60.00) |
| Recommended Fuel | Ultra Low Sulfur Diesel |

Air Requirements

| | |
|--|---------------|
| Air Filter(s) Type | Dry |
| Combustion Air Flow: CFM (m ³ /min) | 1626.6 (46.1) |
| Cooling Air Flow: CFM (m ³ /min) | 29876 (846) |
| Max Air Intake Restriction: in. H ₂ O (kPa) | 20.1 (5.0) |

Exhaust System

| | |
|---|----------------|
| Gas Temperature: °F (°C) | 793.4 (423.0) |
| Gas Flow: CFM (m ³ /min) | 4025.9 (114.0) |
| Max Exhaust Back Pressure: in. H ₂ O (kPa) | 76.3 (19.0) |
| Exhaust Outlet Size: in (mm) | 8.00 (203.2) |

Filters and Quantity

| | |
|-------------------------|---|
| Air Cleaner Quantity | 1 |
| Oil Filter(s) Quantity | 1 |
| Fuel Filter(s) Quantity | 2 |

Fuel Consumption - 105°C

| | |
|--|----------------|
| At 100% of Power Rating: gal/hr (L/hr) | 30.30 (114.71) |
| At 75% of Power Rating: gal/hr (L/hr) | 22.96 (86.91) |
| At 50% of Power Rating: gal/hr (L/hr) | 15.93 (60.29) |
| At 25% of Power Rating: gal/hr (L/hr) | 9.09 (34.41) |

DEF Consumption - 105°C

| | |
|--|---------------|
| At 100% of Power Rating: gal/hr (L/hr) | 2.00 (114.71) |
| At 75% of Power Rating: gal/hr (L/hr) | 1.68 (86.91) |
| At 50% of Power Rating: gal/hr (L/hr) | 1.05 (60.29) |
| At 25% of Power Rating: gal/hr (L/hr) | 0.56 (34.41) |

Cooling System

| | |
|---------------------------------------|-------------|
| Rejection to Charge Cooler: kW (BTUM) | 187 (10635) |
| Rejection to Coolant & Oil: kW (BTUM) | 203 (11544) |
| Rejection to Radiation: kW (BTUM) | 24 (1365) |
| Rejection to Exhaust: kW (BTUM) | 409 (23259) |
| Coolant Flow: gal/min (L/min) | 95 (360) |

General Guidelines for Deration: Altitude: Derate 0.5% per 100m (328 ft.) Elevation above 1000m (3279 ft.) Temperature: Derate 1.0% per 10°C (18°F) temperature above 25°C (77°F)

Ratings: All three-phase units are rated at 0.8 power factor.

105° Ratings: 105° ratings apply to installations where utility power is unavailable or unreliable. At varying load the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS5514, AS2789, and DIN 6271. For limited running time and base load ratings consult the factory. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Alternator Data

| | |
|---|-------------------|
| Manufacturer | Marathon |
| Type | PMG |
| Insulation NEMA Rise/Temp | NEMA Class N/75°C |
| Hertz | 60 |
| Phase | 3 |
| RPM | 1800 |
| Leads | 12 |
| Amortisseur Windings | Full |
| CFM Cooling Required | 1400 |
| Voltage Regulator | PM500 |
| Sensing | Three Phase |
| Voltage Regulation, No Load - Full Load | 0.25% |

Features

- NEMA MG1-32, BS5000, and IEC 34-1 compliant; CE & CSA Certified and UL Listed
- Self-ventilated and drip proof construction
- Two-thirds pitch stator and skewed rotor
- Wet wound, epoxied field windings
- Designed to withstand overspeeds of up to 125%
- Hybrid analog/digital voltage regulator
- Under frequency protection
- Under frequency indication light
- Less than one cycle response time
- Over excitation protection
- Over excitation indication light
- Easy access front-panel adjustments
- Over voltage protection shutdown
- Analog input for paralleling

DeepSea 8610 MK II Digital Controller

- Full synchronizing & loadsharing capabilities
- Built in governor and AVR control
- Base load control
- Positive & negative kVAr control
- Mains (utility) decoupling protection
- 3 phase generator sensing and protection
- Generator current and power monitoring
- Over current protection
- Unbalanced load protection
- Breaker control via fascia buttons
- Back-lit LCD display
- Remote SCADA monitoring

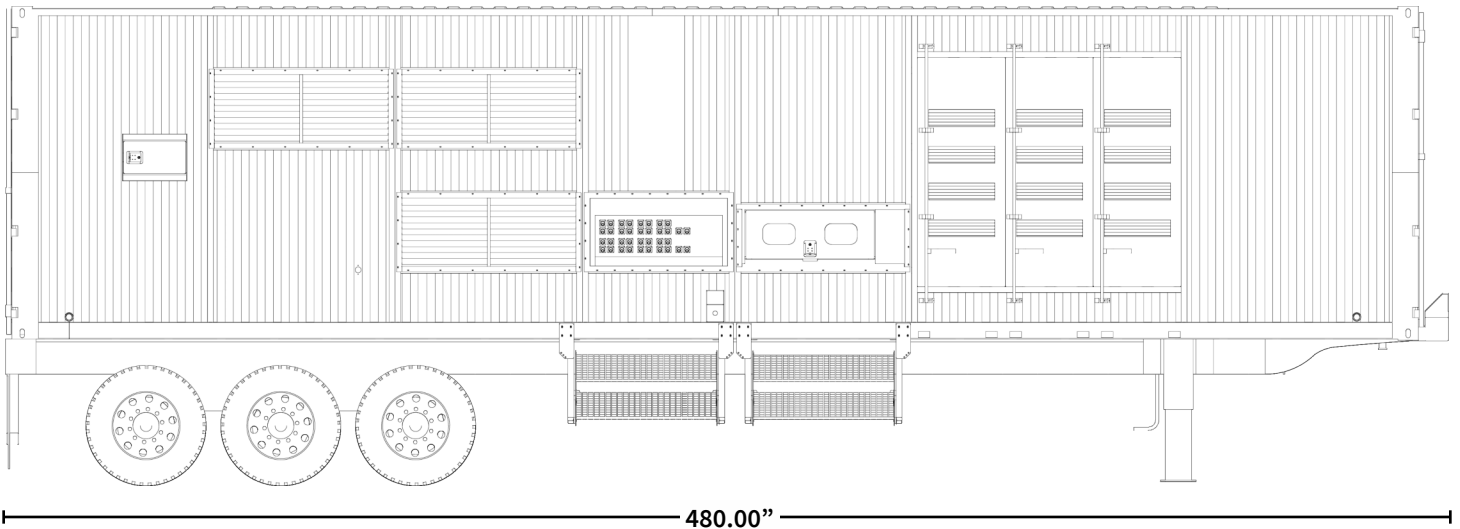


Deep Sea 8004 Remote Display Module

- External operation of both gensets
- LCD touch-screen
- Audible alarm
- Configurable display options
- Trend Analysis
- Configurable graphical user interface with software 'widgets'

Standard Features

| | | |
|-------------------------------|---|---|
| Tier 4 Final Compliant | Automatic Single or Dual Genset Operation Based on Load | Dual Fuel & DEF Tanks for 24 Hour Runtime |
| External Operation Panel | Cam-Lok Receptacles | Block Heaters & Battery Chargers |
| High Ambient Radiator | External Fuel & DEF Fill | (4) Unit Mounted Emergency Stops |
| Isochronous Governor | Sound Attenuated Container | Factory Load Test |
| Side Maintenance Access Doors | Independent Breaker for Each Genset | One Year Warranty |
| Integral 120/240V Load Center | | |



Sound Attenuated Enclosed Unit

OVERALL SIZE: 480"L x 95.75"W x 163.25"H

Approximate Shipping Weight: 55,680 lbs.

Note: Dimensions and weights reflect standard unit and are subject to change. Drawings are provided for reference only and should not be used for planning installation.

