

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

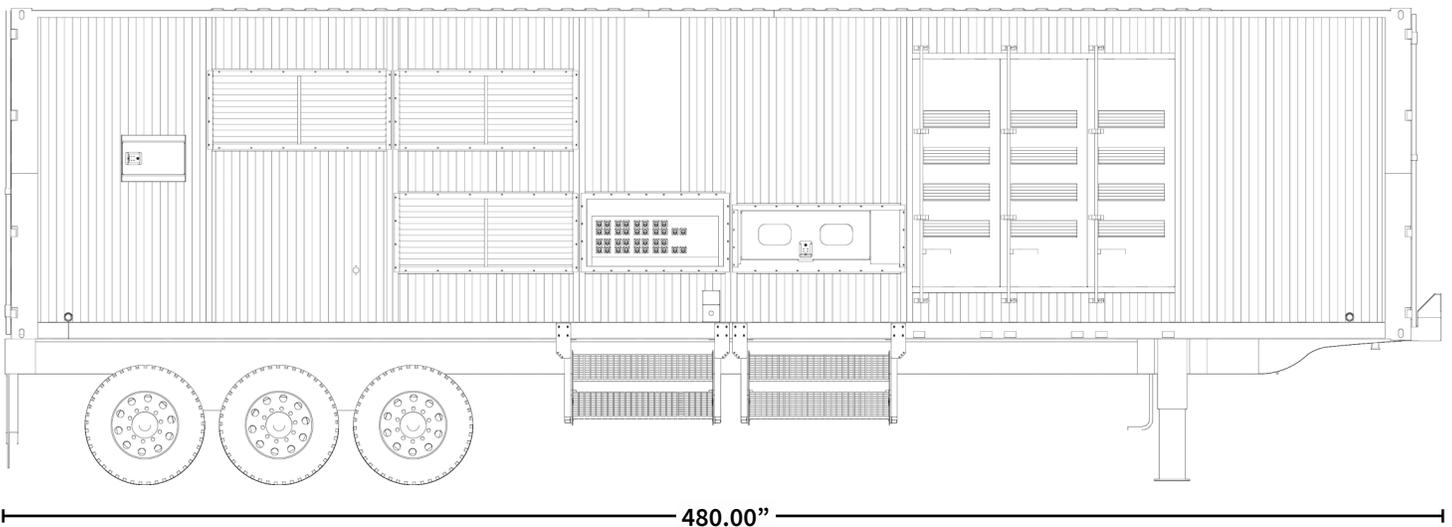


Deep Sea 8004 Remote Display Module

- 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.

