

# TMC550V



## EPA Certified Tier 4 Final

OUTPUT POWER OPTIONS					125°C RISE STANDBY RATING		105°C RISE CONTINUOUS RATING		sKVA
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	kW/kVA	Amps	30% Voltage Dip
Stamford	277/480	HCI534F311	3	60	550/688	828	500/625	753	2300
	120/208	HCI534F311	3	60	550/688	1911	500/625	1737	1750
	120/240	HCI534F311	3	60	550/688	1656	500/625	1505	1750



## Engine Data

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. <sup>3</sup> )	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
Speed Regulation	±2.0%

## 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 <sup>3</sup> /min)	1626.6 (46.1)
Cooling Air Flow: CFM (m <sup>3</sup> /min)	29876 (846)
Max Air Intake Restriction: in. H <sub>2</sub> O (kPa)	20.1 (5.0)

## Exhaust System

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

## Sound Level

Open Unit Without Exhaust: dBA 3.2 ft (1M)	101.4
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## Filters and Quantity

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

## Fuel Consumption - 125°C

At 100% of Power Rating: gal/hr (L/hr)	39.89 (151.00)
At 75% of Power Rating: gal/hr (L/hr)	28.80 (109.00)
At 50% of Power Rating: gal/hr (L/hr)	19.02 (72.00)
At 25% of Power Rating: gal/hr (L/hr)	N/A

## Fuel Consumption - 105°C

At 100% of Power Rating: gal/hr (L/hr)	35.93 (136.00)
At 75% of Power Rating: gal/hr (L/hr)	25.89 (98.00)
At 50% of Power Rating: gal/hr (L/hr)	17.44 (66.00)
At 25% of Power Rating: gal/hr (L/hr)	N/A

## 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. All single-phase units are rated at 1.0 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	Stamford
Type	PMG
Insulation NEMA Rise/Temp	NEMA H/125°C
Hertz	60
Phase	3
RPM	1800
Leads	12
Amortisseur Windings	Full
CFM Cooling Required	2780
Voltage Regulator	MX321
Sensing	Three Phase
Voltage Regulation, No Load - Full Load	0.5%

## Features

- BS EN 60034, BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, and AS1359 complaint
- IP23 enclosure
- Dynamically balanced to exceed BS6861:Part 1 Grade 2.5 vibration standard
- Quality assurance to BS EN ISO 9001
- Self-ventilated and drip proof construction
- Two-thirds pitch stator and skewed rotor
- Heavy duty bearings
- Fully guarded
- Overexcitation protection
- Under frequency protection
- Analog input
- Overvoltage protection
- Paralleling compatible



## DGC2020 Digital Controller

- Integrated engine-genset control, protection, and metering
- Microprocessor allows for exact measurement, setpoint adjustment, and timing functions
- Front panel 3 position controls and indicators enable quick and simple operation
- Emergency stop push button and an Alarm Horn with silence button
- A wide temperature-range liquid crystal display (LCD) with backlighting
- SAE J1939 Engine ECU communications
- Remote RS-485 communications for Optional RDP-110 Remote Annunciator
- 4 programmable contact inputs and 10 contact outputs (2ADC rated)
- Modbus Communications with RS-485, Battery Backup for Real Time Clock, UL recognized, CSA certified, CE approved, HALT (Highly Accelerated Life Tests) tested
- IP 54 Front Panel rating with integrated gasket and NFPA 110 Level 1 Compatible.
- Manual Override Keyswitch

## Analog Controller with Emergency Bypass Key Switch

- Automatic CANBUS Engine Control
- Oil Pressure, Water Temperature, Battery Voltage and RPM Gauges
- Automatic Gauge Zeroing on Shutdown
- AC Voltage, Frequency, Percent of Load, and Run-Time Metering
- 3-Position Auto-Off-Manual Control Switch
- LED Status Lights: Low Oil Pressure, High Temperature, Overcrank, Overspeed, & Engine Start



**Warranty**

1 Year or 3000 Hours

**Standard Features:**

- Heavy Duty Steel Base
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery Rack & Cables
- High Ambient Unit Mounted Radiator
- Trailer w/Integral Fuel Tank
- Battery Charging Alternator
- Factory Powder
- Coating
- Factory Test

**Controller Options**

DGC-2020HD Controller for Paralleling
Fiber Optic Ethernet (DGC-2020HD)
Generator Protection (DGC-2020)
Remote Mount Break Glass E-Stop Switch

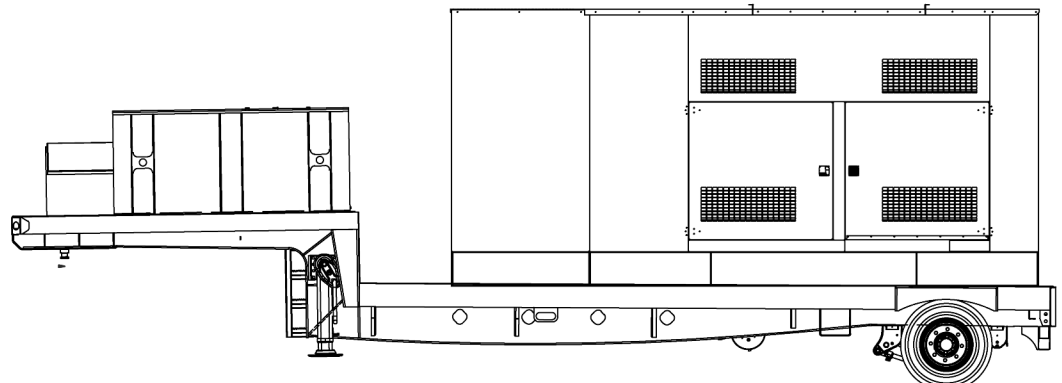
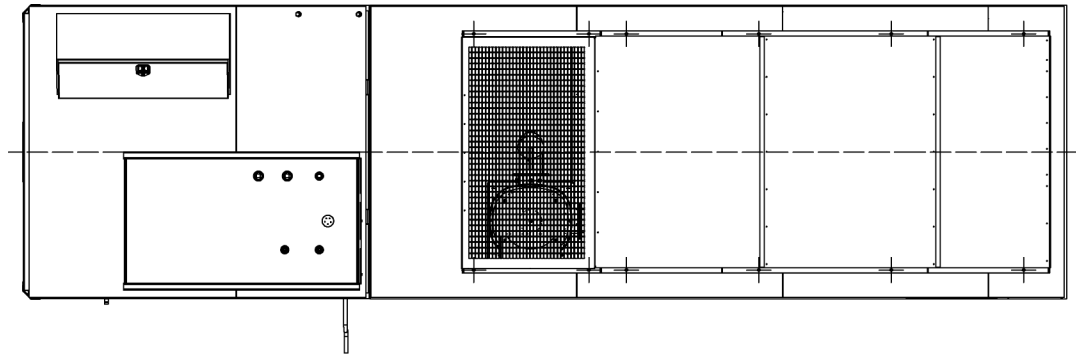
**Miscellaneous Options:**

- Pad Type Battery Heater
- Battery Heater Blanket
- Oil Pan Heater
- Generator Strip Heater
- Diesel Locomotive Cable
- Extenda-Lites
- Hydraulic Brake Kit
- Pintle Ring Hitch
- Spare Tire Kit
- Lug Wrench
- Hydraulic Jack
- Single Point Lift
- Battery Charger
- Coolant Drain Kit
- Block Heater
- Line Circuit Breaker
- Output Power Cable
- Multi-Voltage Switch
- 20 Amp 120V & GFI Receptacle
- 20 Amp 120v GFI & 30 Amp 120/240V Twist-Lock Receptacle
- 30 Amp 120V RV Receptacle
- Cam-Lok Receptacle

**Standard Enclosed Unit**

**Options:**

- Sound Attenuated Enclosure
- Load Center, Lights & GFI Receptacle



**Note: The above drawings are provided for reference only and should not be used for planning installation. Contact your local distributor for more information.**