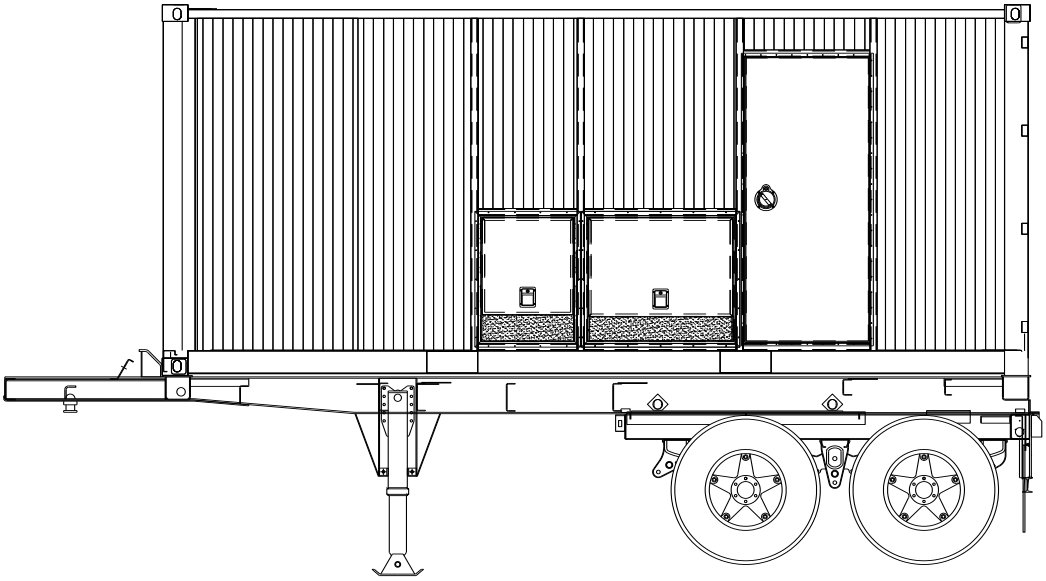
EPS POWER SOLUTIONS

600KW SOUNDPROOF GENERATOR



Generator shown on optional trailer.

* Industrial, Rental Yards, or High Grade Commercial generator system powered by an industrial diesel engine TWD1663GE VOLVO Tier 4 compliant genpac. Urea Injection with SCR exhaust system.

* **75 dB(A) at 21 feet.** Critical sound attenuating design including sound baffles; critical exhaust silencer; oversized radiator with slow-speed high efficiency fan; two layers of acoustical insulation designed for generator silencing; engine mounting isolators to eliminate vibration and sound transfer.

* Extremely clean power under any loads for voltage/frequency sensitive applications. Electronic governor and voltage regulator holds frequency to 0.1% and voltage to 1%.

* Steel fuel tank for lightweight and durability.

Ratings and Performance

600 kW AC Generator includes a voltage reconnect switch for 120/208 VAC 3 phase, 120/240 VAC 1-Phase and 277/480, 3 phase. Below are output ratings for each voltage.

Voltage	Amps per Line	Prime kW/kVA Rating
120/208	2100 at .8 PF	600/647
277/480	900 at .8 PF	600/647

Deration Factors

Maximum altitude before derating required - ft (m):	3300 (1000)
Altitude deration factor % per 1000 ft or 305 m:	3
Maximum intake air temperature before derating required - ºF (ºC):	104 (40)
Temperature deration factor % per 10ºF:	1

Application Data

Engine Specifications

Manufacture	Volvo
Model	TWD1663GE
Type	4-Cycle
Aspiration	Turbocharged/Aftercooled
Cylinder arrangement	6 In Line
Displacement-cu.in.(L)	983 (16.12)
Bore and stroke-in.(mm)	5.67 X 6.50 (165 X 144)
Compression ratio	18.1:1
Main Bearing: type	Replaceable Insert
Rated rpm	1800
Max. power at rated rpm-hp (kW)	932 (685)
Cylinder head material	Cast Iron
Crankshaft material	Forged Steel
Valves Material	Chromium-Silicon Steel
Governor type	Electronic
Frequency regulation	
no-load to full load	±.1%HZ
steady state	±.1%HZ
Air cleaner type-all models	Dry, Element

Exhaust System

Exhaust temp at rated kW dry exhaust-°F (ºC)	422 (792)
Exhaust Flow- CFM	4201
Silencer Type	Cylindrical
Maximum allowable back pressure-in. H_2O	40.2
Exhaust outlet size at hook-up-in.	5

Lubrication System

Type	Full Pressure
Oil pan capacity-qts.	48
Total Oil Capacity w/Filters–qts.	30
Oil Pressure at Rated Speed-psi	45-75

Fuel System

Fuel Pump Maximum Lift-ft.(m)	8 (2.5)
Fuel Consumption-gal/hr	
@ 25% Load	11.2
@ 50% Load	21.1
@ 75% Load	28.7
@ 100% Load	42.3
Total Flow-gal/hr	55
Filter Micron Size-98% Efficiency	10
Fuel Capacity in Tank (GA.)	600

Cooling System

Engine Heat Rejection-BTU/min	15355
Coolant Flow- gal/min	42
Thermostat-°F (ºC)	180 (82)
Coolant Capacity-qt(l)	25 (10)

Engine Electrical System

Battery charging alternator ground (negative/positive)	Negative
Volts	24
Ampere	35
Starter motor rated voltage	24
Minimum recommended battery for 0ºC/cold cranking performance	750

Generator Application Data

Make	Magna Max Marathon
Model	572RSL-4031
Number of leads	12
Generator type	Rotating field
Voltage regulator	Solid State
Insulation-NEMA	
MG1-1.66	
Material	Class-H
Temperature rise	Class-H
Bearing, number, type	1, sealed
Coupling	Flexible Disc
Amortisseur winding	Full
Voltage regulation	
no-load to full load-%	±1% Maximum
One step load acceptance	
% of rating per NFPA-110	100
Peak motor starting HP	100
Generator efficiency at full load	93 %
Phase sequence	CBA
L-L harmonic max total	3.5%
L-L harmonic max single	2.5%
Voltage dip upon full load application (1 step)	10% for .6 of a second
Voltage rise upon full load rejection (1 step)	12% for .6 of a second

- Generator protection for overload and short circuit..
- Generator is designed and built within NEMA, IEEE and ANSI standards for temperature rise.
- Single-phase, brushless exciter.
- Skewed rotor for smooth voltage wave form.
- Vacuum impregnated epoxy varnish - Fungus resistant per MIL-I-24092.
- Sustain short circuit current at 300% of rated current up to 10 seconds.

Control Panel Features

- High - Engine - Temp. safety shut-down.
- Low oil pressure safety shut-down.
- Battery Volt Meter
- Voltmeter selector sw. (L-L,L-N)
- Automatic or manual start
- Overspeed safety
- Voltmeter
- Ammeter
- Frequency meter
- Indicating lights
- Water temp. gauge
- Volts Adjust
- Hourmeter
- Oil pressure gauge
- Engine control switch
- Remote start contacts

Standard Features

- Vibration isolation
- Mounting base
- Radio suppression to commercial standards
- Cooling for 123ºF (50ºC) ambient
- Polymide blade cooling fan
- Solenoid shutoff 24 VDC
- Load sharing
- Aluminum housing
- Outlet panel
- Voltage change over switch
- Line circuit breakers
- Water/Fuel separator
- Single Point Lifting Eye
- Parallel operation
- Oil drain extension
- 24 VDC battery (2)
- Stainless steel door hinges
- Operating instructions
- Bolt on axles & fenders
- Bolt on drawbar
- Forklift tubes

Accessories and Options

- Larger Fuel Capacity Tank
- Automatic transfer switch (supplied loose)
- Custom paint
- Custom Controls
- Valve for internal or external fuel supply
- AC battery charger
- Manual transfer switch
- Block heater
- Oil heater with thermostat
- Exterior lights
- Additional voltage selections

Weights and Dimensions

Weight Dry: 30,000 pounds (with trailer option) Cube Container 8’6” x 20’