
EPS POWER SOLUTIONS

470KW SOUNDPROOF CONTAINER



Generator shown on optional trailer.

- * Industrial, Rental Yards, or High Grade Commercial generator system powered by an industrial diesel engine Twin TAD1170VE VOLVO Tier 4F compliant genpac. Urea Injection with SCR exhaust system.
- * **65 dB (A) at 24 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

475 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	235/647
277/480	900 at .8 PF	235/647

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 - °F (°C):	104 (40)
Temperature deration factor % per 10°F:	1

Application Data

Engine Specifications

Manufacture	Volvo
Model	Twin TAD1170VE
Type	4-Cycle
Aspiration	Turbocharged/Aftercooled
Cylinder arrangement	6 In Line
Displacement-cu.in.(L)	661 (10.84)
Bore and stroke-in.(mm)	4.84 X 5.98 (123 X 52)
Compression ratio	17.1:1

Main Bearing: type Replaceable Insert

Rated rpm 2100
Max. power at rated rpm-hp (kW) 320(235)

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 (°C) 772 (411)
Exhaust Flow- CFM 1737
Silencer Type Cylindrical
Maximum allowable back pressure-in. H₂O 40.2
Exhaust outlet size at hook-up-in. 5

Lubrication System

Type Full Pressure
Oil pan capacity-qts 33.80
Total Oil Capacity w/Filters-qts. 40.00
Oil Pressure at Rated Speed-psi 45-75

Fuel System

Fuel Pump Maximum Lift-ft.(m) 8 (2.5)
Fuel Consumption-gal/hr 4-12
@ 25% Load TBV
@ 50% Load TBV
@ 75% Load TBV
@ 100% Load TBV
Total Flow-gal/hr 28.5

Filter Micron Size-98% Efficiency 10
Fuel Capacity in Tank (GA.) 800

Cooling System

Engine Heat Rejection-BTU/min 15355
Coolant Flow- gal/min 42
Thermostat-°F (°C) 180 (82)
Coolant Capacity-qt(l) 18 (10)

Engine Electrical System

Battery charging alternator ground (negative/positive) Negative
Volts 24
Ampere 35
Starter motor rated voltage 24
Minimum recommended battery for 0°C/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.
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Control Panel Features

- High - Engine - Temp. safety shut-down.
 - Low oil pressure safety shut-down.
 - Battery Volt Meter
 - Engine control switch
 - Automatic or manual start
 - Over speed safety
 - Voltmeter
 - Voltmeter selector sw. (L-L,L-N)
 - Frequency meter
 - Indicating lights
 - Water temp. gauge
 - Hour meter
 - Oil pressure gauge
 - Ammeter
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Standard Features

- Vibration isolation
 - Mounting base
 - Radio suppression to commercial standards
 - Cooling for 123°F (50°C) ambient
 - Polyimide blade cooling fan
 - Solenoid shutoff 24 VDC
 - Parallel operation
 - Aluminum housing
 - Outlet panel
 - Voltage change over switch
 - Line circuit breakers
 - Water/Fuel separator
 - Single Point Lifting Eye
 - Forklift tubes
 - Oil drain extension
 - 24 VDC battery (2)
 - Stainless steel door hinges
 - Operating instructions
 - Bolt on drawbar
 - Load share
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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 / Solar charging system
- 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'

