

SP-1000

Power When You Need It!

Hardy Diesel

Powered by:

Perkins®



Sample Unit

Generator Ratings @ 1800 RPM

| Voltage | Ph | Hz | Standby Output kW (kVA) | Prime Output kW (kVA) | Standby Max Amp Output | Number of Wires |
|---------|----|----|-------------------------|-----------------------|------------------------|-----------------|
| 120/240 | 1 | 60 | 100 (100) | 90 (90) | 417 | 12 |
| 120/208 | 1 | 60 | 100 (125) | 90 (113) | 347 | 12 |
| 120/240 | 1 | 60 | 100 (125) | 90 (113) | 301 | 12 |
| 277/480 | 1 | 60 | 100 (125) | 90 (113) | 150 | 12 |

Standard Generator Set Features

- Perkins Diesel Engine Model 1104D-E44TAG2 Tier 3
- AC, Single bearing direct coupled alternator with class 'H' insulation, sized for 130°C temperature rise.
- Engine and alternator mounted on vibration isolators.
- Radiator sized for 120°F ambient clearance.
- High coolant temp. and low oil pressure safety shutdowns.
- Dry type air cleaner.
- 12-VDC Starter, engine mounted battery charging alternator, battery cables and rack along with grounding strap.
- Microprocessor based control panel w/ metering, alarms, shut down, under / over frequency & voltage protection.



Optional Equipment

- Weather protective enclosure constructed of marine grade aluminum 0.125 thickness, SS hardware white powder coat paint finish on both sides sound insulation resistant to high temperatures, fuel and oil. Hinged, removable, keyed alike doors residential rated interior mounted exhaust silencer vertical radiator and exhaust discharge. Oil & coolant drain lines with brass check valves.
- Mainline circuit breaker.
- Digital or analog control panels.
- Automatic transfer switch.
- Starting battery.
- Automatic battery chargers 6 or 10 amps.
- Thermostat controlled jacket water heater.
- Low coolant level switch.
- Single wall tanks.
- UL 142 fuel tanks.
- Day tanks.
- Water separator fuel filter.
- Space heater.
- Permanent Magnet Generator (PMG) with voltage regulator upgrade
- Generator drip covers.
- 17 Light remote annunciator panel.
- 120V Receptacle for battery charger and / or coolant heater.
- D.O.T trailers, single or dual axle with brakes.
- Enviro - friendly custom color options.

*Stand by ratings are applicable for the duration of any power outage. No overload is available at these ratings. Prime ratings are continuous per BS 5514, DIN 6271, ISO3046 & IEC 34-1. Overload capacity on prime-power ratings is 10% for one hour in each twelve hours of operation. All single phase ratings are based on a 1.0 power factor, three (3) phase ratings based on a 0.8 power factor. Ratings are established based on 85°F (29°C) and an elevation of 1,000 feet (305 meters). Please consult your **Steline** representative for information concerning derates for temperature, altitude & humidity.

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Engine Specifications

Model: Perkins 1104D-E44TAG2 Tier 3

Max. power: 149 bhp / 111 kW@ 1800 rpm
Cubic capacity: 269 in³ / 4.41 L
Bore & stroke: 4.13" x 5" (105mm x 127mm)
Turbocharged, 4 cylinder vertical in-line, 4 stroke
direct injection

Governor type: Electronic
Frequency regulation: Isochronous, steady-state

Fluids: Oil capacity total system - 2.11 quarts (8 liters)
Coolant capacity w/ radiator - 4.49 gallons (17 liters)

Fuel Consumption: US gallon (liters) /hr @ 1800 rpm

50% load - 4.23 (16.0)
75% load - 5.81 (22.0)
100% load - 7.32 (27.7)

General: Oil filter - spin-on type.

Air filter- Dry element type

Electrical system: 12v Starter, 65 amps alternator DC output

Minimum recommended battery size: 1190 CCA

Fuel type: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2

Alternator Specifications

Marathon Electric: Brushless, 4pole rotating field.
Voltage regulation + / - 1%, Volts/Hertz, Electronic, EMI filtered.
Class insulation 'H' to NEMA MG-1-1.66
Rated temp. standby 130 C° rise / 40 C° ambient.
Coupling, SAE adapter, flexible disc, direct.
Load acceptance, one step, 100% per NFPA 110.

Features: Self ventilated drip-proof construction. Superior voltage waveform achieved by a 2/3 pitch and skewed rotor.
Vacuum-impregnated windings with fungus-resistant epoxy for dependability and long-life. Compliance with NEMA, IEEE and ANSI standards for temp. rise. Sustained short-circuit capability enabling down-line circuit breakers to trip without collapsing the generator field.
No load to full-load regulation of +/- 2%.

Control Panel Specifications

DGC2020

Microprocessor based, navigation key with large LCD display, event recording transfer switch control (main failures).
SAE J1939 CANBUS communication multilingual capability. Suitable for rental application. Remote communication capability (optional).

Operational features

- Alternator protection: under / over voltage, under / over frequency.
- Engine protection: Low oil pressure, high coolant temperature, over speed & over crank, sender unit failure, fuel leak/fuel sender failure, battery charger failure.
- All protections are programmable as alarms or pre-alarms.
- Operating power: Nominal 12-24 Vdc.

- consumption 14.2W run mode
- Metering (ample range): Volts, current, Hz, watts, VA, Pf, oil pressure, coolant temperature, rpm, DC volts, fuel level, engine running time.
- Engine control with timers
- External remote start input (on or off load)
- 16 programmable contact inputs.
- 7 Contact outputs

Agency Approvals: UL 508 R CSA C22.2 No 14 NFPA 110

CE Compliance: EC LVD-73/23/EEC EN 61000-6-4:2001 EMC EN 50178:1997 EMC- 89/336/EEC EN 610000 6-2:2001 EMC Immunity

One complete set Owners / Operators, Engine, Alternator and Accessory manuals

Dimensional and Mounting Specifications

Inches (mm): 103 (2616) L x 36.7 (932) W x 56.5 (1435)H w/ Enclosure Only Less Fuel Tank
Estimated Overall Dry Weight lb. (kg): 3050 (1385) Less Fuel Tank

Note: The above dimensions and weights would change if a sub-base fuel tank was added. An electrical stub area is positioned at the rear of the sub-base fuel tanks. Spacing from rear access cover to the tank is approximately 9 inches (228.6 mm).

Specifications subject to change without notice



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