

# SP-24



## 2.2L Perkins Powered Generator— Diesel

### SP Series 24kW



EPA Emissions Compliant

### Standard Features

- Perkins Diesel Engine Model 404D-22G
- AC, Single Bearing direct coupled Alternator with Class 'H' insulation, Sized for 130°C Temperature Rise
- Control Panel with Auto-Start -Stop Deep Sea DSE4510 MKII
- Engine and Alternator mounted to steel base on vibration isolators
- Radiator sized for 120°F ambient clearance
- Thermostatically controlled Jacket Water Heater
- High Coolant Temp., 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
- Battery Charger—6 Amp
- Complete set owner/operator, engine, alternator and accessory manuals



Sample unit shown w/o exhaust silencer

### Generator Ratings—1800 RPM Diesel

Voltage	Ph	Hz	Standby Output kW (kVA)	Prime Output kW (kVA)	Standby Max Amp Output	Wires
120/240	1	60	24 ( 24 )	21 ( 21 )	100	12
120/208	3	60	24 ( 30 )	21 ( 26 )	83	12
120/240	3	60	24 ( 30 )	21 ( 26 )	72	12
277/480	3	60	24 ( 30 )	21 ( 26 )	36	12

### Optional Equipment

#### Deluxe Enclosure—Features

- Weather Protective Enclosure constructed of 0.125" marine grade aluminum
- Sound attenuating insulation
- Weather proof and wind resistant up to 150mph
- Powder coat finished exterior and interior (standard grey)
- Removable, hinged doors (pictured) with keyed alike locks
- Interior mounted, residential grade exhaust silencer
- Battery Charger—6 Amp
- 120V Receptacle for battery charger and / or coolant heater
- Vertical radiator and exhaust discharge
- Oil & coolant drain lines with brass ball valves



Sample Deluxe model shown

#### Deluxe Enclosure—Options

- Custom color options
- Exterior mounted Emergency stop button with clear cover
- Exterior accessible GFCI outlet (s) with weather protective cover

#### Additional Gen-set Options

- Mainline circuit breaker (s)
- Permanent Magnet Generators (PMG) with Voltage Regulator upgrade
- Low coolant level switch
- Starting batteries
- 120V Receptacle for battery charger and / or coolant heater
- Sub-base fuel tank
- "Stand-Alone" fuel tank (s)
- Transfer switches
- UL 2200 Certification (Ask your representative for availability)

\*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 Stateline representative for information concerning derates for temperature, altitude & humidity.

Manufactured by:

Stateline Power Corp • 650 Pine Street • Greenville, OH 45331 • 800-524-8344 [www.statelinepower.com](http://www.statelinepower.com)

# SP-24 Technical Data



## Engine Specifications

### Model: Perkins Diesel Engine 404D-22G

Indirect injection, Vertical In-line 4 cycle, 4 Cylinder

Naturally Aspirated, Dry type Air Cleaner

Max. Power.....24 kWm (32 bhp) @ 1800 RPM

Cubic Capacity.....135 in<sup>3</sup> / 2.2 L

Bore & Stroke.....3.30" x 3.90" (84mm x 100mm)

Compression Ratio.....23.3:1

Governor type.....Mechanical

Frequency Regulation.....Isochronous, Steady-State ± 0.5%

Oil capacity Total system.....11.2 Qts. (10.6 liters)

Coolant capacity w/ Radiator.....1.8 Gal. (7.0 liters)

### Installation Data

Air requirement:

Air Flow for Rad CFM (m<sup>3</sup>/min.).....N/A (N/A)

Exhaust System:

Recommended Outlet size.....2" (50.8mm)

Filtration:

Oil Filter.....Spin-on type

Air Filter.....Dry element type

### Fuel Consumption:

Load Percentage (%)	50	75	100
US Gal. / h	.92	1.2	1.6

Fuel Supply Line inlet.....3/8" NPT

Pressure.....7-11 in. H<sub>2</sub>O

Fuel Type.....BS2869: Part 2 1998 Class A2 or ASTM D975 D2

### General:

12V Starter, 65 Amps Alternator DC output Electric System

Recommended Battery.....12V, 1190 CCA

Recommended Oil.....SAE 5W-30 for 0°F and above

## Alternator Specifications

Type	Pole	Voltage Regulation	Class Insulation	Rated Temp. Standby	Coupling	Load Acceptance
Brushless	4 Pole Rotating Field	+/- 1%, Volts/Hz, Electronic, EMI filtered	'H' to NEMA MG-1 -1.66	130°C Rise / 40°C Ambient	SAE Adapter, Flexible Disc, Direct.	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

### DSE4510 MKII

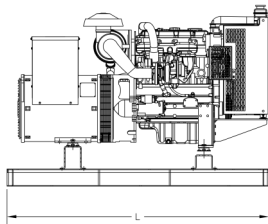
- Manual and Automatic start/stop modes
- LED indication lights
- Engine monitoring and protection features
- Front panel mounting and programming
- Remote start capabilities
- Configurable inputs/outputs, timers, and exercising schedule

### Operational features

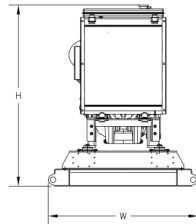
- Alternator Protection: under/over voltage, under/over frequency and Over Load.
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- Operating Power: Nominal 8-35V

- Fuel and start outputs (configurable on CAN)
- Heated display option available
- Fully configurable via DSE Configuration Suite PC Software

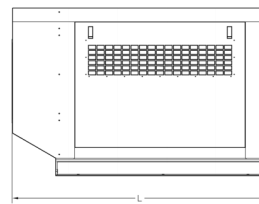
## Dimensions & Weight



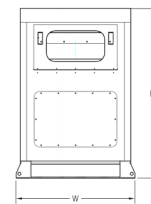
**Open:** (inches) 62L x32W x48H



Weight (lbs.) 1400



**Deluxe:** (inches) 75L x32W x49H



Weight (lbs.) 1660