

SJ-85



4.5L John Deere Powered Generator— Diesel

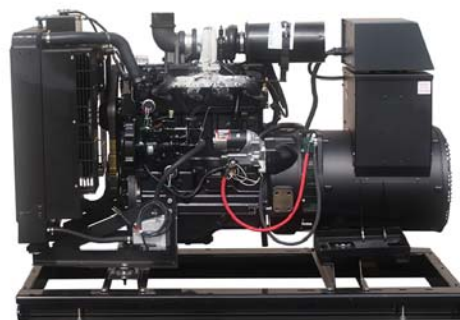
SJ Series 85kW



EPA Emissions Compliant

Standard Features

- John Deere Diesel Engine Model 4045HF285
- AC, Single Bearing direct coupled Alternator with Class 'H' insulation, Sized for 130°C Temperature Rise
- Control Panel with Auto-Start -Stop Deep Sea 703
- 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 | 85 (85) | 77 (77) | 354 | 12 |
| 120/208 | 3 | 60 | 85 (106) | 77 (96) | 295 | 12 |
| 120/240 | 3 | 60 | 85 (106) | 77 (96) | 256 | 12 |
| 277/480 | 3 | 60 | 85 (106) | 77 (96) | 128 | 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
- 17 Light remote enunciator panel
- 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

SJ-85 Technical Data



Engine Specifications

Model: John Deere Diesel Engine 4045HF285
 Direct injected, Vertical In-line 4 cycle, 4 Cylinder
 Turbocharged & Air cooled, Dry type Air Cleaner
 Max. Power.....94 kWm (126 bhp) @ 1800 RPM
 Cubic Capacity.....275 in³ / 4.5L
 Bore & Stroke.....4.19" x 5.00" (106mm x 127mm)
 Compression Ratio.....19.0:1
 Governor type.....Electronic
 Frequency Regulation.....Isochronous, Steady-State ± 0.5%
 Oil capacity Total system.....16.5 Qts. (15.7 liters)
 Coolant capacity w/ Radiator.....5.5 Gal. (20.8 liters)

Filtration:

Oil Filter.....Spin-on type
 Air Filter.....Dry element type

Fuel Consumption:

| Load Percentage (%) | 50 | 75 | 100 |
|---------------------|-----|-----|-----|
| US Gal. / h | 3.9 | 5.2 | 6.4 |

Fuel Supply Line inlet.....3/8" NPT
 Pressure.....80 in. H₂O
 Fuel Type.....BS2869: Part 2 1998 Class A2 or ASTM D975 D2

Installation Data

Exhaust System:

Recommended Outlet size.....4" (101.6mm)
 Gas Temp. (stack).....1069°F / 576°C
 Gas Volume @ stack Temp. CFM (m³/min).....651 (18.4)
 Max. allowable back pressure.....30 in. H₂O / 7.5kPa

General:

12V Starter, 65 Amps Alternator DC output Electric System
 Recommended Battery.....12V, 800 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

DGC2020

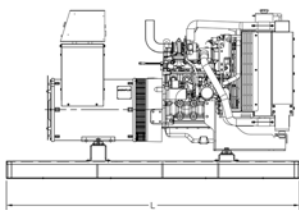
- Microprocessor Based, Navigation key with large LCD display
- Event Recording
- Transfer Switch Control (main failures)
- SAE J1939 CANBUS Communication
- Multilingual Capability
- Suitable for Rental application
- Remote Communication capability

Operational features

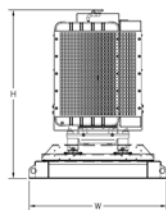
- Alternator Protection: under/over voltage, under/over frequency and Over Load.
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- 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
- 4 Contact outputs

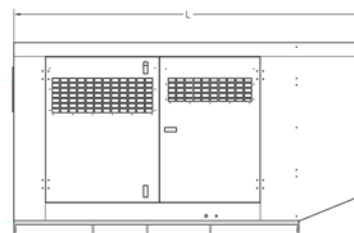
Dimensions & Weight



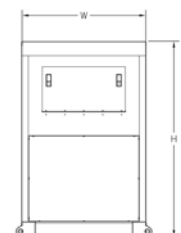
Open: (inches) 91L x40W x48H



Weight (lbs.) 2625



Deluxe: (inches) 103 x36W x57H



Weight (lbs.) 3045