



GS Model GS26DE

Standby Power Range: 21.5 - 28.8 kW 60Hz
Prime Power Range: 21.5 - 28.8 kW 60Hz

Generator Set Technical Data Sheet

GS Series Delta Diesel Series

| Genset Model | Alternator Brand | Hz | Standby kW | | Prime kW | |
|--------------|------------------|----|------------|------|----------|------|
| | | | 3 ph | 1 ph | 3 ph | 1 ph |
| GS26DE-LM | Mecc Alte | 60 | 26.4 | 22.5 | 26.4 | 22.5 |
| GS26DE-LN | Newage | 60 | 26 | 21.5 | 26 | 21.5 |
| GS26DE-LM | Mecc Alte | 50 | 22 | 18.7 | 22 | 18.7 |
| GS26DE-LN | Newage | 50 | 21.6 | 17.9 | 21.6 | 17.9 |

Rating Conditions: All ratings calculated at sea level, 77°F and 30% humidity with generator set at normal operating temperature.

Standby Rating: The power that the generator set will deliver continuously under normal varying load factors for the duration of a power outage.

Prime Power: Power that the generator set will deliver when used as a utility type power plant under normal varying load factors to run continuously. This rating requires a minimum momentary overload capability of 10%.



GS Series Open Set Shown

The set illustrated is not necessarily the standard build.

Standard Features and Options (*consult with factory for full list of options)

Standard Features

- ◆ Lister Petter Delta engine
- ◆ Full flow fuel and oil filters
- ◆ Self-priming fuel system
- ◆ Mechanical governor
- ◆ 12 volt starter and alternator
- ◆ Belt and fan guard
- ◆ Oil drain
- ◆ Fuel control solenoid
- ◆ Dry type air-cleaner
- ◆ Fabricated steel skid base
- ◆ Powder-coated finish
- ◆ Vibration isolator mounts
- ◆ Digital auto-start controls with safety shut-down and fault indication
- ◆ Battery hold down rack and cables
- ◆ 12-wire re-connectable brushless Mecc Alte alternator
- ◆ Operator handbook
- ◆ Fuel lift pump
- ◆ Based mounted radiator cowling

Optional Items*

- ◆ Weather protective enclosure
- ◆ Full sound attenuated enclosure
- ◆ Aluminium enclosures
- ◆ Complete AC/DC instrumentation
- ◆ Variety of fuel tanks including UL142
- ◆ Main-line circuit breaker
- ◆ Industrial muffler
- ◆ Auto-battery charger
- ◆ Newage alternator
- ◆ Electronic governor

Benefits of choosing a Lister Petter Generator Set

The Lister Petter GS series of generator sets are designed and assembled in our own facility. Drawing from several decades of generator set assembly experience our customers receive generators that are fully tested before shipment, built to all codes and standards, and provide stable, clean electrical power with a very steady voltage and frequency output. Lister Petter engines are extensively used in generator sets, with tens of thousands of installations, for a proven track record in power generation demonstrating high reliability, longer maintenance intervals and a lower cost of ownership. For after-market support our customers can rely on a comprehensive network of product service centers, with single source product support and full parts availability. A wide range of options are available.

Generator Models GS26DE-LM & GS26DE-LN Specification

Power Ratings

| Model number | Voltage range | Ph | pf | Hz | Standby Power | | | Prime Power | | |
|--------------|---------------|----|-----|----|---------------|------|------|-------------|------|------|
| | | | | | kW | kVA | Amps | kW | kVA | Amps |
| GS32DE-LM | 120/240 | 1 | 1.0 | 60 | 22.5 | 22.5 | 93.8 | 22.5 | 22.5 | 93.8 |
| | 120/208 | 3 | 0.8 | 60 | 26.4 | 33 | 73.4 | 26.4 | 33 | 73.4 |
| | 120/240 | 3 | 0.8 | 60 | 28.8 | 36 | 69.4 | 28.8 | 36 | 69.4 |
| | 277/480 | 3 | 0.8 | 60 | 28.8 | 36 | 39.7 | 28.8 | 36 | 34.7 |
| GS32DE-LN | 120/240 | 1 | 1.0 | 60 | 21.5 | 21.5 | 89.6 | 21.5 | 21.5 | 89.6 |
| | 120/208 | 3 | 0.8 | 60 | 26 | 32.5 | 90.3 | 26 | 32.5 | 72.3 |
| | 120/240 | 3 | 0.8 | 60 | 28 | 35 | 67.4 | 28 | 35 | 67.4 |
| | 277/480 | 3 | 0.8 | 60 | 28 | 35 | 33.7 | 28 | 35 | 33.7 |

Application Air, Exhaust and Cooling Requirements US (Metric) @ 60Hz

| Cooling data and requirements | Standby Rating | Prime Power Rating |
|---|----------------|--------------------|
| Total coolant including radiator US gal (liters) | 2.4 (9.0) | 2.4 (9.0) |
| Coolant flow rate US gal/min (Liters/min) | 26.6 (121) | 26.6 (121) |
| Heat rejection to coolant Btu/min (kW) | 2133 (37.5) | 1962 (34.5) |
| Heat rejection to surroundings Btu/min (kW) | 339 (6.0) | 321 (5.5) |
| Application Air-Flow Requirements | | |
| Maximum air-restriction inH ₂ O (mmH ₂ O) | 25.0 (635) | 25.0 (635) |
| Radiator cooling-air cfm (m ³ min) | 4278 (121.2) | 4278 (121.2) |
| Combustion-air cfm (m ³ min) | 93 (2.6) | 93 (2.6) |
| MeccAlte alternator cooling-air cfm (m ³ min) | 512 (14.5) | 512 (14.5) |
| Newage alternator cooling-air cfm (m ³ min) | 458 (13.0) | 458 (13.0) |
| Exhaust Gas Data | | |
| Exhaust gas flow cfm (m ³ min) | 280 (7.9) | 258 (7.3) |
| Maximum back pressure inH ₂ O (mmH ₂ O) | 27.2 (690) | 27.2 (690) |
| Exhaust temperature °F (°C) | 986 (528) | 896 (480) |

Fuel, Lube Oil and Ratings Data @ 60Hz

| Recommended oil change @ ambient temp. | Up to 95°F (35°) | Above 95°F (35°) |
|--|---|--|
| Hours interval between oil changes | 250 | 250 |
| Fuel consumption US gal/Hr (Liters/Hr) | Standby Rating | Prime Power Rating |
| 100% | 1.9 (12.7) | 1.6 (10.3) |
| 75% | 1.1 (7.4) | 1.1 (7.4) |
| 50% | 0.8 (5.2) | 0.8 (5.2) |
| De-rating factors | Altitude | Temperature |
| Ratings are calculated at normal temperatures and pressures, with an ambient less than 77°F and altitude less than 325ft above sea level | 4% for every 1000ft (300m) above 325ft (150m) | 2.5% for every 9°F (5°C) above 77°F (25°C) |
| Humidity derate up to a maximum of 10% depending on the ambient temperature | | |

* Noise Data dB(A) @ 7 meters (8 position average)

| | | | |
|----------------------|------|----------|------------------|
| Configuration of set | Open | Enclosed | Sound attenuated |
| Noise rating: dB(A) | 77.7 | 75.5 | 70 |

* With critical muffler option

Engine and Alternator Specifications

Engine

| Basic Engine Data | | Valve Train | |
|---------------------------------|-----------------|------------------------------|------------------------------|
| Manufacturer | Lister Petter | Lifter type | Mechanical |
| Delta model naturally-aspirated | DWS4 404 | Emissions | |
| Cylinders | 4 | EPA Certified | Tier II |
| Displacement Cu.in (Liters) | 203 (3.33) | Engine Governor | |
| Bore inches (mm) | 3.7 (94.0) | Standard mechanical system | Hz no load to full load 5.0% |
| Stroke inches (mm) | 4.7 (120.0) | Optional electronic system | Hz no load to full load 0.5% |
| Compressions ratio | 22.0:1 | Steady regulation mechanical | ±0.8% |
| Number of main bearings | 5 | Steady regulation electronic | ±0.25% |
| Connection rods | 4 | Cooling System | |
| Piston material | Aluminium alloy | Type of system | Pressurized |
| Cylinder head material | Cast iron | Water pump | Sealed |
| Oil capacity gals (liters) | 2.6 (1.0) | Type of fan | Pusher |
| Engine Electrical System | | Fuel System | |
| Glow plugs | Yes 12V | Fuel | #1 or #2 Diesel Fuel |
| Battery charge alternator | 60 amp | Fuel injection pump | Dephi |
| Starter motor | 12V | Fuel pump type | Rotary |
| Recommended lead acid battery | 800 CCA | Combustion | In-direct |
| Ground polarity | Negative | Firing order | 1-3-4-2 |

Alternator

| Basic Alternator Data | | Excitation System | |
|----------------------------------|------------------|-----------------------------|----------------------|
| Type | 4 - pole | Coupling arrangement | Close |
| Rotor insulation | Class "H" | Load capacity (standby) | 110% |
| Stator insulation | Class "H" | Load capacity (prime) | 100% |
| Total harmonic factor | Less than 2% | Excitation System | |
| Telephone influence factor (TIF) | Less than 50 | Brushless | AVR |
| Alternator cooling | Self ventilating | Volts change 100% load step | Under 3%(¼ sec) |
| Bearings | Single | Voltage regulation | 2% all loads to 100% |
| | | Temperature rise | 125°C |

Alternator Features

◆ The alternators are dipped in varnish and have epoxy-coated windings.

◆ The alternators are designed to meet the temperature rise standards of class "H" insulation. The windings have a 2/3 pitch in order to reduce the harmonic content of voltage.

◆ Mecc Alte motor starting is 3 times running kVA and Newage regulated is 2 times running kVA.

◆ Four pole, revolving field alternator, close-coupled to the engine by means of generator flange bolting directly to flywheel housing. Drive is by flexible disc.

◆ All Lister Petter gensets are fully factory tested, a test sheet is available for each set. A performance test is made by increasing load steps up to 110% of continuous rating.

◆ The alternator complies with VDE0530, BS4999 or 5000 and is CSA approved. The alternator is self ventilated drip-proof construction. The standard of enclosure protection is IP21 or IP23.

Note: The information in this data sheet is of a general nature and does not form part of any contract and/or warranty. We have made efforts to ensure that the information is accurate but reserve the right to amend the specification and information without notice or any obligation or liability. The set illustrated is not necessarily the standard build.

Delta GS Series Control Panel Options



‘DA’ Standard Auto Start Panel

Standard ‘DA’ Control Panel: This control comes complete as a manual or auto start control with hour meter in a vibration isolated cabinet. When in “Auto” position a simple switch closure of any kind will signal the set to start. Controls provide safety shutdown protection, with LED indication for low oil pressure, high temperature, over/under speed and over crank fault after three attempts to start. Low battery voltage will have a warning. It comes standard with two configurable input/outputs.



‘DB’ Auto Start Panel with LCD

Standard ‘DB’ Control Panel: This control comes complete as a manual or auto start control in a vibration isolated cabinet. When in “Auto” position a simple switch closure of any kind will signal the set to start. The controls provide safety shutdown protection for low oil pressure, high temperature, over/under speed and a over crank fault after three failed attempts to start. Using a push button you can easily scroll through the LCD showing the generator sets A/C voltage, amperage and hertz. The engine will be monitored for oil pressure, temperature, D/C battery volts, and engine hours run. It comes standard with five fully configurable inputs and three configurable outputs for either warnings or shutdowns.

(Consult Lister Petter for additional control options including remote monitoring and communications)

Delta GS Series Dimensions and Weights

| Dimension | Unpacked dimensions | | | | | | Shipping dimensions | | | | | | Weights (with packing options) | | | | | | |
|------------|---------------------|------|----------|-------|------------|-------|---------------------|-------|----------|-------|------------|-------|--------------------------------|------|---------|----------|-------|------------|-------|
| | Open | | Enclosed | | Attenuated | | Open | | Enclosed | | Attenuated | | Packing lbs (kg) | Open | | Enclosed | | Attenuated | |
| | ins | cm | ins | cm | ins | cm | ins | cm | ins | cm | ins | cm | None | 1685 | (764.3) | 1890 | (857) | 1965 | (891) |
| “H” height | 48 | 122 | 50.3 | 127.8 | 50.3 | 127.8 | 55 | 139.7 | 53.8 | 136.7 | 53.8 | 136.7 | Pallet Only | 1750 | (793) | 1955 | (886) | 2035 | (923) |
| “W” width | 32 | 81.3 | 32 | 81.3 | 32 | 81.3 | 37 | 94 | 37 | 94 | 37 | 94 | Open Crate | 1825 | (827) | 2030 | (920) | 2110 | (957) |
| “L” length | 68.5 | 174 | 68.5 | 174 | 90.4 | 229.6 | 75 | 190.5 | 75 | 190.5 | 101 | 256.5 | Closed Crate | 1860 | (843) | 2065 | (936) | 2145 | (972) |

