EC Series GMS30CS

Generator Set Specification



Super Quiet, Superior Life!





| 3-Phase, 50Hz@1500RPM | | | | |
|-------------------------------|---------|------|------|------|
| | Voltage | kW | kVA | Amps |
| Prime Power | 380 | 24 | 30 | 45.6 |
| | 400 | 24 | 30 | 43.3 |
| | 415 | 24 | 30 | 41.7 |
| | 440 | 24 | 30 | 39.4 |
| | 380 | 26.7 | 33.3 | 50.6 |
| Standby Power | 400 | 26.7 | 33.3 | 48.1 |
| | 415 | 26.7 | 33.3 | 46.4 |
| | 440 | 26.7 | 33.3 | 43.7 |
| Noise Level at 7 meters (dBA) | | | 63.8 | |

Notes:

- 1) Ambient reference conditions: 1,000 mbar, 27 $^{\circ}\mathrm{C}$, 30% relative humidity;
- 2) Standby Power: the maximum power available under varying loads. Only for standby and emergency use. No overload is permissible. Prime Power: the maximum power available under varying loads for continuous operation. A 10% overload is permissible for 1 hour every 12 hours.

| | Features | | Benefits |
|---|---|---|--|
| I | Tightly structure, excellent design and craft | ı | Beautiful appearance |
| 1 | Designed with safety in mind | ı | Low operating cost results in optimal economy |
| 1 | Earth leakage protection | 1 | Ease of installation, operation, and maintenance |
| 1 | Quick fix electrical power connections | 1 | Customization |
| 1 | Extensive option list | 1 | Good quality ensure |
| I | Well enclosured canopies with high protection against | | |
| | water and dust | | |
| | | | |
| | | | |

| Performance Specification and Craftwork | | | | |
|---|---------------------|--|-----|--|
| Performance Specification | | Telephone Interference, Electromagnetism | | |
| Efficiency of Rated Power | 96.3% | TIF | ≤50 | |
| Time needed from start-up to full load (inductive) | 125 seconds | THF | ≤2% | |
| Time needed from start-up to 50% load (inductive) allowed | 8 seconds | Radio interference in compliance with BS800 and VEL LEVELS G and N. | | |
| 1.1 times overload operation time (hour) | 1 | Craftwork • Steel base frame with AV mounting | | |
| 2.0 time overload operation time (minute) | 1 | | | |
| Voltage Regulation, steady state | ≤±1% | standard 8h fuel tank with flexible rubber fuel tube, full level indicator and drainage Overall sprayed powder coating Whole set documents, including Installation Manu Operation Manual, Spare Parts Catalog, Circuit Diagram | | |
| Voltage Regulation, transient state | 20%-15% | | | |
| Voltage Settle Time | ≤5 seconds | | | |
| Voltage Fluctuation Ratio | 0.5% | | | |
| Frequency Regulation, steady state | ±0.5% adjustable | Criterion | | |
| Frequency Regulation, transient state | ±5% | ISO3046, ISO8528, BS4999, BS5514, BS5000PT99、AS1359, IEC34 UTE5100, VDE0530 ISO9001:2000 | | |
| Frequency Settle Time | 5 seconds | | | |
| Frequency Fluctuation Ratio | 0.5% | | | |
| Recovery Time | 0.5 seconds | | | |

| Engine Specification | | Alternator Specification | | |
|----------------------------|------------|--------------------------|---|----------------------------|
| Brand Cummins | | Cummins | Brand | Stamford |
| Model | | 4B3.9G1 | Model | PI144G |
| No. of Cylinders and Cycle | | 4L, 4 Stroke | Rated Output (kVA) | 31.3 |
| Induction System | | NA | Ratedcurrent (A) | 43.3 |
| Compression Ratio | | 16.5: 1 | Exciter | Brushless |
| Displacement (L) | | 3.9 | THF (BS EN60034-1) | <2% |
| Bore x Stroke | (mm) | 102 x 120 | Bearing number | Single |
| Torque | (N.m) | 153 | Windings | 100% Copper |
| Speed | RPM | 1500 | Connection Type | Star Connection |
| Piston speed | (m/s) | 6.0 | Insulation Class | Н |
| Air intake flow | (L/s) | 32.8 | Winding Pitch | 2/3 |
| Exhaust flow | (L/s) | 67.5 | Amortisseur Winding | Full |
| Net weight | (kg) | 308 | A.V.R. Model | SX460 |
| Starting Systen | n | Electronic | Voltage Regulation (no load- full load) | ± 1.0% |
| Engine coolant | flow (L/s) | 2.2 | Underspeed Protection | Standard |
| Base Output po | ower (kW) | 24 | Protection | IP23 |
| Fuel | 110% load | | Phase Sequence | A(U), B(V), C(W) |
| Consumption | 100% load | 6.7 | TIF (NEMA MG 1-22) | <50 |
| (L/h) | 75% load | 5.2 | Excitation System | Self-excited, PMG optional |
| (=/1) | 50% load | 4.0 | AmbientTemp. (°C) | 40 |
| Governor Type | • | Mechanical | Stator Rated Temp. (°C) | 125 |

| Cooling S | System | Fuel System | | |
|---|--------|---|------------------------------|--|
| Max. coolant cycling resistance exterior engine (kPA) | 28 | Fuel injection pump model | BYC A pump with GAC governor | |
| Thermostat adjusting temperature (°C) | 82-95 | Max. fuel input resistance of tranafer pump (mmHg) | 102 | |
| Min. opening pressure of radiator cap (kPA) | 69 | Max. overflow fuel resistance at overflow pipe of injector (mmHg) | 508 | |
| Coolant capacity-engine only (L) | 7.2 | Total fuel overflow amount (L/h) | 30 | |
| Exhaust System | | Lubricating System | | |
| Max. Back Pressure (kPA) | 10.2 | Normal oil pressure range | | |
| Electrical | System | Low idle (kPA) | 207 | |
| Starter (V) | 12/24 | Rated speed (kPA) | 345 | |
| Battery charging system (A) | 63/40 | Max. oil temperature permitted in oil pan (°C) | | |
| | | Lubrication system Min. capacity (L) 10.9 | | |

Control System

PLC-702

DSE-702 key manual start module is a manual engine control module designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown

- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning



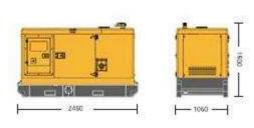
PLC-5220

DSE-5220 control pannel is applied

- I Microprocessor control, with high stability and credibility
- I Mains supply and generator operation monitoring
- I Indicating operation status and fault conditions
- I Multiple protections; multiple parameters display, like pressure, temp.
- I Manual and automatic work mode selectable
- I Real time clock for time and date display, overall runtime display, 99 log entries
- I Overall power output display
- I Integral speed/frequency detecting, telling status of start, rated operation, overspeed
- I Communication with PC via RS485 OR RS232 interface, using MODBUS protocol.



Dimension and Weight



GMS30CS

Length × Width × Height, mm 2450×1050×1500

Weight (kg): 1238

Optional

| Engine | Alternator | Generator Set | Fuel System | Canopy |
|-----------------------|--|---|--|---|
| Coolant heater | Space heater AVR PMG with regulator Anti-damp and anti-corrosion treatment Anti-condensation heater | Tools with the machine | Low fuel level alarmAutomatic fuel feeding system | TrailerContainer |
| Lubricating System | Exhaust System | Cooling System | Control Panel | Voltages |
| Oil with the machine | Protection board from hotness Low frequency silencer | Front heat protection 50°C radiator Coolant (-30°C) | Remote control panel Automatic paralleling | 415/240V400/230V |



Local Distributor

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