

DATA SHEET


Ratings @ 0.8 PF		Prime Rating	Stand-by Rating
Voltage* ¹	Frequency* ²	CBG-400	CBG-450S
230/400 V	50 Hz	409 kVA	450 kVA



The above ratings represent the generating set capability guaranteed within ±3% at the reference conditions equivalent to those specified in ISO 8528/1 standard.

Notes

- The applicable voltage range is 380V to 415V for 50Hz applications. For other voltages, please consult factory.
- This generating set is of fixed speed of 1500 rpm.
- CBG-400 is the prime power rating of the generating set is where a variable load and unlimited hour usage are applied with an average load factor of 80% of the prime rating over each 24-hour period. Noting that a 10% overload is permitted for 1 hour in every 12-hour operation.
- CBG-450s is the standby power rating of the generating set is where a variable load limited to an annual usage up to 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted.

Engine Technical Data

Make & Model	CUMMINS - QSZ13-G7
Cylinders & Arrangement	6 cylinders, inline
Bore & Stroke (mm)	130 × 639
Induction system	Turbocharged & Air cooled
Combustion	Direct injection
Cycle	4 stroke
Compression ratio	15.0:1
Cooling System	Air-air charge cooled
Displacement	13 L
Lube oil capacity	78 L
Coolant capacity-Engine Only	62 L
Standard governor (Optional)	Electronic (ECM controlled)
Engine Speed	1500 RPM
Fuel Cons. (L/H) @110% Load	101 L/h @100% load 89 L/h @75% load: 73 L/h
Fuel Cons. (L/H) @50% Load	54 L/h @25% load 29 L/h
Radiator Cooling Air	1480 m ³ /min
Ambient Temperature	55 °C
Exhaust temperature °C (max)	516 °C
exhaust gas flow (m ³ /min) Max.	132 m ³ /min
allowed back pressure (kPa)	5.1 kPa



Certifications

- The complete Generating Set is type-tested according to ISO 8528-8 Standard.
- The control panel is certified by an ISO 17025 accredited laboratory to have IP55 according to IEC 60355



ISO 17025 ACCREDITED LABORATORY



Dimensions

Length	2410 mm	Height	1725mm
Width	1120 mm	Weight	4309 kg

The above performance data are valid as per the following specs:

- Diesel Fuel is according to BS2869 Class A2 or equivalent.
- Lubricating oil is according to Grade SAE 15W-40 API CI4.
- The coolant should be 50% antifreeze and 50% fresh water.

Alternator Technical Data

Make & Model	STAMFORD HCI444F		
Frequency / No. of poles	50 Hz / 4	Winding pitch	Two Thirds 2/3
Ingress protection	IP23	AVR model	SX421
Insulation class	Class H	Overspeed	2250 Rev/Min
Terminals (Optional)	12 leads	Voltage regulation	± 0.5 %
Excitation system	Brushless Self-excited	Coolant air flow	0.486 m ³ /s



DEEP SEA 7320MKII

Controls

- Auto/Start/Stop Control
- Emergency Stop Pushbutton/ Alarm
- Engine Cool Down Timer
- Warm-up Timer
- Load Switching Timer
- Engine Cycle Crank



Indications

- Operating Hours
- 3 Phase Generator Voltage Sensing & Monitoring
- Current Protection & Monitoring
- Power Measurement (kW, kVA, kVA_r, kWh, kVAh, pf)
- Frequency Monitoring (Hz)
- Oil Pressure/Coolant Temperature/Fuel Level Monitoring
- Battery Voltage Monitoring (DC)
- Alarm (Acknowledge)

Warning & Shutdown Alarms

- Generator Over/Under Voltage & Frequency
- Crank Disconnect (Failure to Start)
- Under/Over Speed
- Over Current
- Low oil pressure
- High Water Temperature
- Low Fuel Level
- Low Water Level

Features

- IP 65 (if ordered with gasket)
- Basic Scheduler
- 8-35V DC Supply
- Digital Inputs(4)- Outputs(4 MPU/ 6 CAN)
- Event Log (5 shutdowns)

Note 1: some OPTIONAL features could be standard if CANbus is established within electronic engines.

Note 2: Low coolant level protection is standard feature for Gensets above 200KVA, otherwise it is optional.

Note 3: There is limitation in the number of protections and measurements that can be offered with GMP260MK.

Other types of control Panels & Modules can be offered according to required specifications (DSE 7310/20, 7410/20, 8610, 8810 and Others)

Genset Standard Features

Fabrication:

- The engine/alternator assembly rests on skid with Anti-vibration mounting pads.
- The skid is made up of durable sheet metals and beams exceeding "Vibration & Torsion" Resistance Norms.
- Askid mounted fuel tank is supplied with fuel gauge, filler cap, fuel intel and outlet hoses.
- The control panel enclosure is made up of metal sheet .

Paint:

- The skid and control panel enclosure are painted with heat-treated and power-coated electrostatic corona spraying.
- Paints passed durability tests conforming to international quality standards.
- Impact (EN ISO 6272)
- Salt Spray Resistance (ASTM B117-73)
- Humidity Resistance (ASTM D2247)

Works-Testing:

- All Gensets are tested prior to dispatch.
- Test is automatically generated and checked according to ISO8528
- Test certificate is issued for each Genset

Equipment:

- Water cooled Radiator with belt driven blower fan and full guarding
- Electric starter with solenoid Relay
- Battery Charging Alternator
- Energized to run solenoid
- Replaceable fuel, oil and air filters
- Heavy duty leads acid battery with matching capacity (Amps & CCA)
- One loose supplied industrial exhaust silencer – 16 DB noise reduction level.
- Integral Fuel Tank with 117 L capacity.

Documentation:

- User Manual for Operation, Installation and Maintenance guidance
- Wring Diagram.
- Test Report
- Maintenance Schedule
- Catalogues for Engine, Alternator & AVR



Genset Optional Features

- Manual & Automatic Transfer Switches,
- Synchronizing & Totalizing Panels
- Fuel water separator
- Water jacket heater
- Oil heater
- Fuel heater
- Battery heater
- Anti-condensation Heater
- Air Shut-off Valve
- Oil Sampler
- Pre-lube Oil Pump

