

Diesel Generating BSG Set LGLL-22 50Hz

General Features

- **Engine** YSD490D YTO Made in CHINA
- **Alternator** WHI184ES LONGEN STANDFORD
- **Controller** AMF20 COMAP CEZCH

Prime power

16kW/20kVA

Standby power

17.6kW/22kVA



- Electric speed control
- 12V starting batteries, maintenance-free type, connecting cables
- Equipped with CHINT MCCB; ABB in Option
- Equipped with industrial silencer and flexible exhaust hose
- Radiator 40°C max, fans are driven by belt with safety guard
- Base fuel tank: 120L

- 12V charge dynamo
- Equipped with 8-hours operation base tank
- Design comply to ISO8528/GB2820
- Absorber (anti instant braking)
- User manual, Packing list

General Ratings

| Voltage | Power | | | | Frequency (Hz) | Phase | P.F (COSφ) | Prime Current (A) |
|----------|-------------|----------------|-------------|----------------|-------------------|-------|---------------|----------------------|
| | Prime kw | Standby kva | Prime kw | Standby kva | | | | |
| 415/240V | 16 | 20 | 18 | 22 | 50 | 3 | 0.8 | 27.8 |
| 400/230V | 16 | 20 | 18 | 22 | 50 | 3 | 0.8 | 28.9 |
| 380/220V | 16 | 20 | 18 | 22 | 50 | 3 | 0.8 | 30.4 |

Prime power

This rating is for the supply of continuous electrical power at variable load. A 10% overload capability is available for a period of 1 hour within each 12-hour period of operation.

Standby power

This rating is for the supply of continuous electrical power at variable load in the event of utility power failure. No overload is permitted.

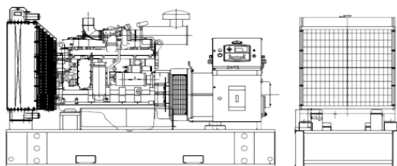
Rated voltage

Available with customers requirements.

Dimension And Weight

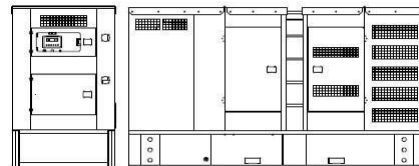
Open frame

Size(L×W×H): 1200×700×1100(mm) N.W.: 380 (kgs)



Silent with Canopy

Size(L×W×H): 1800×850×1150(mm) N.W.: 830 (kgs)



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Engine Specifications

| | | |
|----|---------------------------------------|------------------------|
| 1 | Engine model | YSD490D (YTO/ISUZU) |
| 2 | Engine manufacturer | YTO |
| 3 | Number of cylinders | 4 |
| 4 | Cylinder arrangement | Vertical in line |
| 5 | Cycle | 4 stroke |
| 6 | Aspiration | Naturally |
| 7 | Bore×Stroke(mm×mm) | 90x 100 |
| 8 | Displacement (Liter) | 2.54 |
| 9 | Compression Ratio | 18:1 |
| 10 | Prime power/speed (kW/RPM) | 21/1500RPM |
| 11 | Standby power/speed (kW/RPM) | 23.1/1500RPM |
| 12 | Speed governor | Mechanical |
| 13 | Cooling system | Water-cooled |
| 14 | Coolant capacity (engine only) (L) | 10.7 |
| 15 | Steady speed droop (%) | ≤3% |
| 16 | Total lubrication system capacity (L) | 7.6 |
| 17 | Oil consumption (% of fuel) | 0.75 |
| 18 | Fuel consumption at 100% load (L/H) | 6.36 |
| 19 | Fuel consumption at 75% load (L/H) | 5.64 |
| 20 | Fuel consumption at 50% load (L/H) | 4.71 |
| 21 | Starter motor | DC 12V/12.KW |
| 22 | Dynamo | AC 12V/30A |

Alternator Specifications

Compliance with GB755,BS5000,VDE0530,NEMAMG1-22,IED34-1,CSA22.2 and AS1359


| | | |
|----|--------------------------|---|
| 1 | Alternator model | WHI184ES |
| 2 | Alternator manufacturer | LONGEN |
| 3 | Exciter type | Single bearing, Brushless, Self-excited |
| 4 | Rated output prime power | 20kVA |
| 5 | Rated speed | 1500 RPM |
| 6 | Rated frequency | 50 Hz |
| 7 | Phase | 3 |
| 8 | Rated voltage | 400V |
| 9 | Power factor | 0.8 |
| 10 | Voltage adjust range | ≥5% |
| 11 | Voltage regulation NL-FL | ≤±1% |
| 12 | Insulation grade | H |
| 13 | Protection grade | IP23 |

Alternator option

Mecc Alte, Stamford, LEROYSOMER

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Control System

| | | |
|---|---|---|
| Deepsea (UK) | Model | AMF20 |
| Protection | Parameter | PHOTO |
| <ul style="list-style-type: none"> • Low oil pressure • High water temp • Over speed • over crank • Over load • Over/low volt • Over/low frequency • Battery charge failure | <ul style="list-style-type: none"> • Volt • current • power • speed • frequency • oil pressure • oil temp • power factor • running time • water temp • battery voltage |  |

Main Electrical Performance Data

| Voltage | | | | Frequency | | | | |
|------------------------|-------------|--------------|-------------------------------|------------------------|-------------------------------|--------------|-------------|--|
| Stable Regulation rate | Fluctuation | Recover time | Instantaneous Regulating rate | Stable regulation rate | Instantaneous regulating rate | Recover time | Fluctuation | |
| +/-2.5% | 0.5% | 1.5s | +20%/-15% | +5% | +/-10% | 5S | 0.5% | |

Option

Generator Set

- Trailer generator set
- ABB MCCB circuit breaker
- 50°C Radiator

Fuel system

- 12 hours base fuel tank
- 24 hours base fuel tank
- Dual wall base fueltank
- External fuel tank

Exhaust system

- Residential exhaust silencer

Alternator

- PMG excitation
- Anti Condensation Heater

For cold area

- Water heater
- Oil heater
- Rapid water preheater (diesel burner)

Auto system

- Remote Control panel
- ATS control cabinet
- Paralleling System

External ATS



Water Heater



Oil Heater



Paralleling System

