

## TECHNICAL SPECIFICATIONS FOR 7.5 & 10 KVA SOUND ATTENUATED D.G. SET

### A) DIESEL ENGINE :

**Cummins** make Diesel engine, rated at 1500 RPM and conform to ISO 8528 specifications. The Engines are radiator cooled, four stroke, and multi cylinder, conforming to BS 5514/ISO 3046.

| Sl. No. | DG Set Rating | Engine Model | Engine H.P. | Aspiration |
|---------|---------------|--------------|-------------|------------|
| 1.      | 7.5 KVA       | X1.3TAAG1    | 23          | TA         |
| 2.      | 10 KVA        | X1.3TAAG1    | 23          | TA         |

- Electrical starter motor 12 V DC.
- Battery charging alternator.
- Mechanical governor
- Spin –on Fuel filter
- Spin-on Full flow lube oil filter
- Residential Silencer
- Air cleaner (paper element type)
- Recovery bottle
- Safeties for LLOP/HWT
- Flywheel & Flywheel Housing
- First Fill of lube oil and coolant

### B) ALTERNATOR :

Synchronous Alternator of **7.5/10 KVA** Stamford make, suitable for continuous operation at 1500 RPM, **230/415 Volts**, 0.8 pf(lag) suitable for 50 HZ, **1/3 phase**, 2/4 wire system conforming to BS 5000/IS 4722. The Alternator is brush less type, screen protected, revolving field, self excited, self regulated through an AVR. The Alternator has the following features:

- $\pm 1.0$  % voltage regulation (max) in static conditions
- IP: 23 Enclosure
- Permissible overload 10% for one hour in 12 hrs. operation.

### C) CONTROL PANEL :

The genset control panel is manufactured by Power Systems with 14/16 gauges CRCA sheet and powder coated for a weather-proof, long last finish. Control panel consist of followings parts:

- Standard Engine Instrumentation
- PSO 500 control panel which measures:
  - 1) Individual phase current (Amps)
  - 2) Phase voltage(V)
  - 3) Generator output frequency (Hz)
  - 4) Engine water temperature (Deg.C)
  - 5) Lube oil pressure (kpa)
  - 6) Working hours
- MCB of suitable rating
- Push button(Starter)
- LED indications for main functions
- Current transformers
- Instrument fuses duly wired and ferruled.

### MOUNTING ARRANGEMENT:

Engine and Alternator are mounted on a common MS fabricated base frame with AVM pads.

**D) FUEL TANK:** Fuel Tank of 56 Ltrs and same shall be integrated in the base of Genset complete with drain valve, air vent and outlet connection.

**E) BATTERY:** One No. **CUMMINS PULSE** make battery of suitable capacity with its leads.

**F) ACOUSTIC ENCLOSURE:** CPCB APPROVED.