

## 15 KVA DG set specifications

The DG set for server room, 15 KVA, auto start silent type, CPCB approved shall confirm to following specification & requirements :-

- **Engine**

The engine should be water-cooled, four stroke, self-start, multi cylinder and capable of developing suitable BHP at 1500 rpm for 15 KVA alternator. It should confirm to ISO 8528 and ISO 3046 /BS:5514 standards.

The engine shall be provided with battery charging alternator, fuel filter, lube oil filter, fuel tank, air cleaner, residential silencer, exhaust piping, electronic/mechanical governor, control panel & engine instruments panel, safety sensors and indicators, standard protections, 12 V battery (with leads) and all the standard accessories with first fill of lube oil and coolant.

- **Alternator**

The alternator should be synchronous, brushless single bearing self excited & regulated, suitable for continuous operation at 1500 rpm and capable of delivering 15 KVA at 415V, 0.8 p.f.(Lag), 50 Hz , 3 phase output confirming to IS: 4722/BS 5000 standard. The alternator should have IP-23 protection & class 'H' insulation and provided with standard protections.

- **AMF panel**

AMF panel (PLC based) should be fabricated from minimum 16 guage CRCA sheet, powder coated finish with engine start & stop commands, control relays, internal wiring control & power contactors, timer, set of indicators showing load on DG/mains /fault & battery charger, ammeter voltmeter & their selector switches, frequency meter, all other standard accessories and also including control cable & bypass changeover switch of 63 Amp. 4 poles complete in all respect suitable for 15 KVA DG set to ensure automatic start/stop of the Genset in the case of AC mains failure & its restoration respectively. All the accessories should be of reputed makes.

- **Acoustic Enclosure**

Acoustic enclosure should be fabricated from 2 mm thick CRCA sheet, powder coated finish & filled with suitable insulation and should comply with IS 8183 & CPCB norms.

- **Fuel Tank**

Fuel tank of minimum 100 ltr. Capacity fabricated from minimum 14G sheet should be having inlet/ outlet connection, drain value, fuel level guage & required piping etc.

- Engine and alternator to be coupled on a common channel iron fabricated base frame with anti-vibration pads.
- Fabrication of suitable foundation of DG set
- Installation & commissioning complete in all respect, arranging testing and demonstration and to supply all accessories required for installation and commissioning include catalogues and operation & maintenance manual.
- Onsite warranty (incl. spares) for 3 years
- The installation & commissioning of DG set shall also include the work of earthing (GI plate – 4 nos.) as per ISI specifications, providing & laying GI earth strip (25\* 3mm) between DG set & earthing, P&L 25 sq.mtr. 4 core PVC insulated Al. conductor armoured cable from DG set to server room (average length required shall be approx. 30 mtr. which may vary as per site conditions).
- Copies of relevant certificates of compliance to IS/ISO standards & CPCB norms should be enclosed.