



## STANDARD SCOPE

**SUPERNOVA Genset**, Model **SP 1250**, powered by heavy duty Industrial, internal combustion Diesel Engine coupled with A.C. Generator, so as to generate 1250 KVA / 1000 KW , 415 V, 3 Phase, 0.8 pf, 50 Hz at standard reference conditions & further as per following:

### DIESEL ENGINE:

Imported, **PERKINS** 4-stroke, Vee 12 (twelve) Cylinder, Water-Cooled, Turbocharged, Diesel Engine Model **4012-46TAG0A** developing 1497 BHP at 1500 rpm prime-power rating as per ISO-3046, BS-5514 with a provision of 10% overload for 1 hour in any 12 hour running under std. reference conditions. Governing performance in accordance with class-A1 as per ISO-3046, BS-5514 and can be operated upto 1500 M. Altitude and 40 Deg.C. Ambient Air Temperature Without Any Deration.

### The Engine shall be complete with the following:

- Lubrication System
- Fuel System
- Intake & Exhaust System
- Cooling System
- Starting System
- Switches & Sensors
- Engine Control Panel
  - Instruments & Monitors
  - Protections & Annunciations

|                               |                           |
|-------------------------------|---------------------------|
| Genset Model                  | <b>SP 1250</b>            |
| Engine Model                  | 4012-46TAG0A              |
| Type                          | 4 STROKE, 1500 RPM        |
| Cooling                       | Radiator                  |
| No. of Cylinder & Arrangement | 12 NOS. VEE               |
| Aspiration                    | Turbocharged After Cooled |
| Governing                     | Electronic                |
| Bore x Stroke (mm x mm)       | 160 x 190                 |
| Compression Ratio             | 13.6 : 1                  |
| Displacement (Ltr.)           | 45.842                    |
| Starting                      | 24 V DC Electric Starting |
| Battery                       | 4 Nos. x 180 AH           |
| Fuel Tank Capacity            | 990 Ltrs.                 |
| Sump Capacity                 | 177 Ltrs.                 |

### A.C.GENERATOR

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STAMFORD/EQUIVALENT make Industrial A.C.Generator, Brushless, synchronous, self excited, self regulated, Screen Protected Drip Proof, 1250 KVA/1000 KW, 3 phase, 4 wire, 415V, 0.8 p.f., 1500 rpm, 50 Hz, Enclosure - IP23, Class of Insulation 'H', Voltage regulation of (+/-)1%. It shall be Horizontal foot mounted double/single bearing type confirming to BS5000,

IS4722.

**MOUNTING:**

The engine and A.C. Generator described above shall be directly coupled, aligned and mounted on rigid M.S. Fabricated Base Frame.

**CONTROL PANEL**

The Control panel shall be designed fitted with Microprocessor based, State-of-art, latest technology 'D.G. Set -Controller' for complete control of DG Set which comprises of Control, Monitoring & Protection of Engine & Alternator.

The Panel shall be fabricated from processed 16 gauges CRCA Sheet Metal, suitable for outdoor/ indoor application.

The panel shall be powder coated/ painted after the seven tank process of degreasing, de-rusting. The Doors and covers are provided with Neoprene Gasket to ensure dust & vermin proof as per IP 52. The gland plate/s is provided at bottom for termination of input and output Power / control Cable.

**Options :**

AMF panel (Auto Start but without Change-over facility)  
AMF - Auto Start, Auto change-over panel.  
Auto Start, Auto Synchronizing, Auto load sharing panels.  
Acoustic Enclosure  
Technical know-how for room acoustics

**PERIPHERALS:**

- M.S. Fabricated Fuel Storage Day Tank with Level Indicator ( 990 Litres.)
- Heavy Duty Industrial Silencer
- Exhaust Flexible expansion Pipe
- Fuel Pre-filter with Element & Water Separator
- Dry Batteries with Leads.(Qty. 4 Nos., 180 AH)

**DOCUMENTS:**

- D.G.Set Test Certificate
- Engine/A.C. Generator
  - O & M Manuals
  - Parts Catalogue
- Alternator Test Certificate