



STANDARD SCOPE

SUPERNOVA Genset, Model **SP 1500** powered by heavy duty Industrial, internal combustion Diesel Engine coupled with A.C. Generator, so as to generate 1500 KVA/1200 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, Turbo charged Air to Air Intercooled Diesel Engine Model **4012-46TAG2A** developing 1756 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	SP 1500
Engine Model	4012-46TAG2A
Type	4 STROKE, 1500 RPM
Cooling	Radiator Cooled
No. of Cylinder & Arrangement	12 NOS. VEE
Aspiration	Turbocharged Air to Air Inter 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	177.6 Ltrs.

A.C. GENERATOR :

STAMFORD/EQUIVALENT make Industrial A.C. Generator, Brushless, synchronous, self excited, self regulated, Screen Protected Drip Proof, 1500

KVA/1200 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 bearing type conforming to BS5000, IS4722.

MOUNTING :

The engine and A.C. Generator described above shall be flexibly 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