Diesel Generator Set Specifications Sheet- 125 kVA

Generator Specifications:	
Genset Manufacturer	~~Bharat Power~~
Genset Rating	Prime Power
Genset Output (KVA / KW)	125/ 100
Genset Model	~~BPWLDI125~~
Engine rating or Max. Power at rated RPM, in KW (BHP)	114 (155)
Engine Model	~~4CYLTAG26~~
Engine Type	~~TCAC~~
No. of Cylinders / Cylinder arrangement	4 / Inline
Displacement (L)	4.87
Bore & Stroke (mm)	108 X 133
Compression ratio	16.8
Rated RPM	1500
Governor: Type /Class of Governing	Mechanical/G2
Over speed trip (rpm)	1650
Air cleaner type / Qty	Dry / 01
Exhaust system	
Maximum allowable back pressure, kPa	4.5

Engine Electrical system:	
Charging alternator Voltage / Current (DC)	12V / 35Amps
Starter Motor rated voltage (DC)	12
Battery Voltage (DC) / Capacity (AH)	12V,88 AH

Fuel System:	
Recommended Fuel	HSD
Fuel tank capacity (Ltr)	350
Fuel consumption - LPH at % load	
100%	28.6
75%	21.2
50%	15.3
25%	8.3

Lubricating Oil system :	
Lube oil sump capacity	10
Oil change period (Hrs)	500
Oil consumption (% of sfc)	≤ 0.2
Oil filter quantity (Nos) /type	01 / spin on type
Recommended Oil Grade	15W40 Greaves Maxtherm API CI4
Oil Cooler	Water cooled

Cooling System :	
Cooling system is designed for max ambient temp, Deg. C at rated load	50
Radiator System capacity, including engine, (L)	25 Ltr
Water pump type	Centrifugal, Gear Driven

Alternator Specification:	
Voltage	380-440V
Frequency	50Hz
Current @ 0.8PF (Amps)	173.9
Type	4 Pole , Rotating field
Exciter Type	Brushless (Permanent magnet optional)
Leads: Quantity , type	6, fixed. 12, re connectable (Optional)
Voltage regulator	Solid State
Insulation	Class H ,
Temperature rise	125 Deg. C (Class H)
Bearing: Quantity , type	1,Sealed
Coupling	Flexible disc Closed Coupled
Voltage regulation : No load to full load	2 Phase sensing,±1%
One step load acceptance	100% of rating
Unbalance load capability	25% of rated current

Standard scope of supply:

Engine with direct injection, water cooled engine, 4 cylinder, in-line, 4 stroke, rated at 1500 RPM, conforming to **ISO 3046 / BS 5514** has the following specifications:
- Mechanical FIP
- Mechanical governor / Electronic Governor (Optional)
- Turbocharger, exhaust manifold, stainless steel exhaust flexible connection
- Radiator Cooled with after cooled
- Plate type lube oil cooler
-Filter-fuel, lube oil
- Dry type replaceable paper element air cleaner
- Flywheel housing and flywheel to suit single bearing alternator
- Starting motor – Electric, battery charging alternator
- First fill lube oil and coolant

Alternator: ~~Meccalte / (Optional- Stamford/ Crompton Greaves /equivalent)~~
-brushless alternator
- Self-excited, self-regulated
- Class 'H' insulation limited to temperature rise of class H
- Salient pole revolving field
- Single bearing
- Automatic voltage regulator

Acoustic enclosure – Engine alternator assembly mounted on AVM with Silencer and S.S exhaust bellow suitably optimized to meet stringent sound emission standards as laid down by MOEF / CPCB
- Base rail with draw-out type fuel tank is provided with a drain plug, air Vent inlet and outlet connections, level indicator, manhole etc.
- Sub-base fuel tank with 11 hours capacity at 75% load.
- 12 V dry, batteries with connecting leads and terminals
-90% gloss RAL9003 white pure polyester powder coated, base in black colour.

Control panel: RAL 9003 White Powder coated control panel manufactured with CRCA sheet , Control Panel is having following features:
-Water and lube oil drain outlets located on the outer surface- Leading to ease of maintenance and cleanliness.
- MCCB of suitable rating with **overload and short circuit** protection
- Controller which displays **voltage, current, KW, PF, Frequency, KWh**.
- Indicating lamps for "**Load On**" and "**Set Running**"
- **Current transformers** of suitable ratings
- **Copper cable** of suitable capacity with incoming and Outgoing terminations
- Control fuses duly wired and ferruled

Power cables: Uninyvin ***copper*** conductor cables between Alternator & Control panel inside the canopy.

Literature:
Operation Manual
General maintenance & installation Guideline
Foundation Drawing
Parts manual