



POWERED BY :



STANDARD SPECIFICATIONS

1. ENGINE

Heavy duty high performance industrial type diesel engine

2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filter
 - Two cartridge type fuel filters
 - Full flow lube oil filter
- All filters have replaceable elements

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for deration factors)

4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level	16 (dB)
Maximum allowable back pressure	8.0 (kPa)

5. CIRCUIT BREAKER TYPE

ABB 3 pole MCCB. (4 pole is optional)

GENERATING SET MODEL (SES30)

Output Ratings	Prime	Standby
400 V, 3 ph, 50 Hz, 1500 rpm	30 kVA	33 kVA
	24 kW	26.4 kW

Applicable Voltages: 220/127 V at 60Hz only

Power Factor : 0.8

ENGINE / TECHNICAL DATA

Engine Make	Avion-Eicher
Engine Model	EE483TCI
Governing Type	Mechanical
Number of Cylinders	4
Rated BHP	52
Bore and Stroke mm	100x105
Displacement / Cubic Capacity ltrs	3.3
Electric System	12 V DC
Compression Ratio	17:01
Injection system	Direct
Cylinder arrangement	Inline
Nature of Aspiration	TCI

Frequency and Engine Speed 50Hz & 1500rpm

	Prime
No. of Valves / Cyl	2
Cooling system	Liquid
Dimensions (L x W x H) mm	1078x775x782
Dry Weight kg	360
Noise Level dB(A) (Without Canopy)	94 @ 1 mtr
FIP Make	Bosch Inline
Lube oil sump capacity (Ltrs.)	11
BSFC @ 100% load (gms/hp-Hr)	158
BSFC @ 75% load (gms/hp-Hr)	159
Lube Oil Consumption (% of Fuel Cons.)	0.1

Dimension (mm) & Weight (Kg)	Length	Width	Height	Weight
OPEN	1570	800	1300	800
SOUNDPROOF	2290	1110	1600	1200

ALTERNATOR DATA

Make	Leroy somer/Stamford
Model	TAL 042C/S0L2P1
No. of bearings	1
Insulation Class	H
Total Harmonic Content	on load <5%
Wires	6
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (n*6)
AVR Model	R120
Overspeed	2250 mn ⁻¹
Voltage Regulation	±1%
Short Circuit Capacity	>300%

AREP & PMG Excitation System Available as optional

CONTROL PANEL

Make	Deep Sea
Model	DSE4510

The DSE4510 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

Metering and Alarm Indications:

- Generator Frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator Current
- Engine Oil Pressure
- Engine Coolant Temperature
- Fuel Level
- Hours Run Counter
- Battery Volts
- Fail to start/stop
- Emergency Stop
- Failed to reach loading voltage/frequency
- Charge fail
- Loss of magnetic pick-up signal-Optional
- Low DC Voltage
- CAN diagnostics and CAN fail/error

RATINGS DEFINITION

Prime Power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (upto 55°C), humidity (upto 99%) and higher altitudes. De-rating may apply.

Some of the specifications are not standard on all genset models.

AVAILABLE OPTIONS AND ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your power needs.

OPTIONS

- A variety control and synchronizing panels
- Additional protection alarms and shutdowns
- Water fuel separator
- Water jacket heater
- Battery charger

ACCESSORIES

- Genuine spare parts
- Load banks
- Auxiliary fuel tanks
- Manual and automatic transfer switches

QUALITY STANDARDS

The equipment meets the following standards:

BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

WARRANTY

All of the generating sets are covered under a warranty policy for a period of 12 months.

Warranty of the equipment is in line with manufacturer's warranty terms and conditions.

STANDARD SPECIFICATIONS

6. FUEL SYSTEM

On Generating sets upto 700kVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at full load. The tank is supplied complete with fill cap breather, fuel speed and return lines to the engine and drain plug.

7. ALTERNATOR

7.1 INSULATION SYSTEM

- Insulation : Class H
- All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.
- Heavy coat of antitracking varnish additional protection against moisture or condensation

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed AVR maintains the voltage regulation at $\pm 0.5\%$. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the full load impedance at zero power factor can be sustained for 10 sec., when AREP or PMG option is fitted.

8. MOUNTING ARRANGEMENT

8.1 BASE FRAME

The complete generating set is mounted as a whole on a heavy duty fabricated steel baseframe.

8.2 COUPLING

The engine and alternator are directly coupled by means of an SAE flange. The engine flywheel is flexibly coupled to the alternator rotor.

8.3 ANTI-VIBRATION MOUNTING PADS

Anti-vibration pads are affixed between the engine / alternator feet and the baseframe thus ensuring complete vibration isolation of the rotating assembly.

8.4 SAFETY GUARDS

The fan and fan drive along with the battery charging alternator are safety guard protected for personnel protection.

9. FACTORY TESTS

- The generating set is load tested before dispatch.
- All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch.

10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

11. DOCUMENTATIONS

Operation and Maintenance manual, circuit wiring diagrams and commissioning/fault finding instruction leaflets are accompanied with the generator.