

POWERED BY ISUZU DIESEL GENERATOR SET

Prime Model: ETIG30

120V/240V 1P2W

RPM1500 50Hz

Rating Range

Standby: kW 24

kVA 30

Prime: kW 22

kVA 27.5



STANDARD FEATURES AND CHARACTERISTICS

QUALITY STANDARDS

All generators comply with international design and quality standards, such as ISO8528 (GB/T2820-97), ISO3046, BS.EN60034, Bs5000, IEC34-1, Gb755, VDE0530, CSA22-2, AS1359, as well as the requirements of ISO 9001 and ISO14001.

CE certificate for diesel engine and alternator.

Diesel engine and alternator OEM authorization certificate and their quality assurance.

Other standards and certifications can be considered on request.

ASSEMBLY

The engine and alternator are close coupled by means of an SAE flange . A full torsional analysis has been carried out to guarantee no harmful vibration will occur.

Anti-vibration pads are affixed between engine alternator feet and the base frame. Thus ensuring complete vibration isolation of the rotating assemblies and enabling the machine to be placed on an uneven surface without any detrimental effects.

For durability and corrosion resistance, all iron and steel surfaces of canopy fabrications have been treated for coating by grit blast cleaning. Then covered by special three layers painting which provides an excellent corrosion resistant surface.

CONTROL SYSTEM AND PROTECTION

Controllers are available for all applications. It contains Deep Sea, Delf, Comap or other famous brands. According to their different functions, the control systems can be specified into key start controller model, automatic start control model and PCRC three remote control systems. See controller features inside.

WARRANTY

ETONE POWER Company provides one-source responsibility for the generator set and accessories. Each **ETONE POWER** generating set has been got through 2 hours Load test for running 0%,25%,50%,75%,100% and 110% load, all protective devices and control function are simulated and checked before despatch.

Engine and Alternator are guaranteed for a period of 12months from the date of commissioning or 18 months from shipping, whichever occurs first.

Convenience for operation and maintenance, backed by ISUZU service network.

Prime power(P)

These ratings are applicable for supplying continuous electrical power(at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% over-load power for 1 hour in 12 hours.

Standby power(S)

Standby power is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500h of operation per year.



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• Engine Model

4JB1

ENGINE SPECIFICATIONS

	<u>- </u>
Manufacturer	ISUZU
Туре	Water-cooled, In-line,
	Vertical 4-cycle, Direction injection
Continuous power(kW)	24
Standby power(kW)	26
Aspiration	Natural
Bore Stroke(mm)	93 102
Displacement(L)	2.771
Piston speed(m/s)	5.1
Compression ratio	18.2
Speed stability bandwidth	≤ 0.8%
Steady governing rate	≤ 5%
Exhaust temperature ($^{\circ}$ C)	500
Exhaust back pressure(KPa)	15
Lub. Temperature/capacity(°C	² /L) 120/5.5
BMEP(KPa)	750
Heat injection to cooling(kW/n	min) 21.6
Cooling system volume(L)	4.5
Cooling air flow(m³/min)	96
Combustion air flow(m³/min)	2.08
Exhaust gas flow(m³/min)	5.24
Rating fuel consumption(L/h)	5.6

Alternator

LUBRICATION SYSTEM

Alternator model	LSA42.2 M7	PT144F
Manufacturer	LEROY SOMER	STAMFORD
Frequency and Speed	50Hz/1500rpm	50Hz/1500rpm
Voltage (V)	230/400	230/400
Prime capacity(kVA)	27	27.5
Prime power(kW)	21.6	22
Power efficiency(%)	88.9	86.3
Input power(kW)	24.3	25.5
Voltage regulation	0.5%	1.0%
Rated power factor	0.8	0.8
Stator winding	2/3(N° 6)	2/3
Maximum overspeed	2250min ⁻¹	2250min ⁻¹
Sustained short circuit	300%(3IN):10S	134Amps
Cooling Air(m³/S)	0.15	0.09

Alternators meet the requirement of BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSAC22.2-100, As1359, and other standards and certifications can be considered on request.

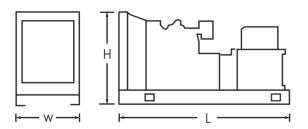
The 2/3 pitch design avoids excessive neutral currents. With the 2/3 pitch and carefully selected pole and tooth designs, ensures very low waveform distortion. Brushless alternator with brushless pilot exciter for excellent load response.

The insulation system is class H, easy parallelling with mains or other generators, standard 2/3 pitch stator windings avoid excessive neutral currents.

Dimensions and Weights

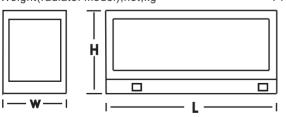
OPEN STYLE

Overall Size, L W H, mm 1760 730 1170 Weight(radiator model), net, kg 560



SOUNDPROOF STYLE

Overall Size, L W H, mm 2050 860 1160 Weight(radiator model),net,kg 710



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

TBD: To Be Determined





Control Panel Technical Specifications

Control Panel- SMARTGEN 6110/6120

The base mounted control panel in a vibration isolated sheet steel enclosure. The control panel is equipped as follows:

- a)Instruments:Analogue Volmeter, Hours Run Meter. Water pressure Meter.
- b) Controls: Emergency Stop Pushbutton, Volmeter Phase Selector Switch.
- c) Control module: Standard collocation is smartgen Auto start with AMF.



Main Features:

ΔAutomatic mains failure

ΔEngine control, Generator protection

ΔBuilt in alarms and warnings

ΔRemote Start operation available

ΔFuel pump control

ΔMains simulation

ΔBlock heater control

ΔField adjustable parameters

ΔFree MS-Windows Remote monitoring

ΔLED displays

ΔConfigurable analogue inputs

ΔI/O expansion capability

Protection Circuits

WARNING

Battery charge failure

Low battery voltage

SHUT DOWNS

Fail to start

Emergency stop

Low oil pressure

High engine temperature

Over /Under speed

Under/over generator frequency

Failed to reach loading voltage

Electrical trip

Generator over current



Instruments

ENGINE

Engine speed

Oil pressure

Coolant temperature

Run time

Battery volts

TOR

Voltage (L-N)

Current (L1-L2-L3)

Frequency

Mains

Voltage (L-L, L-N)