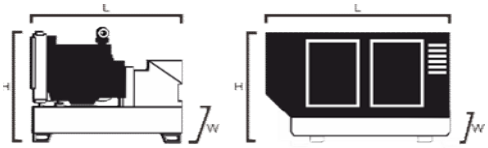
FB113X-LP(Open)&FC113X-LP(Silent)

Engine	Alternator	Powered by
Lister Petter LP443G4	Leroy Somer TAL-A44-E	Lister Petter

Frequency	Phase	Power Factor	Emissions
60Hz/1800rpm	3-Phase	Factor Cos Φ = 0.8	stage II

RATINGS	Prime Power (PRP)		Standby Power (ESP)		Rated Current (Amps)	Fuel Consumption @100% Load
Voltage (V)	kWe	kVA	kWe	kVA	(A)	L/h
380/220	90	113	100	125	170.9	25.60
440/254	**90**	**113**	**100**	**125**	**147.6**	**25.60**
220/127	90	113	100	125	295.2	25.60



KEY FEATURES

-High efficient water cooled diesel engine.
-Single bearing with brushless alternators (Class H, with AVR).
- Radiator with pressure cap and drain point.
-Fully guarded engine-driven fan.
-Fully welded steel skid base with lifting holes and fork lift legs.
-Integral fuel tank with filler cap and gauge (≤650kVA).
-Heavy duty rubber anti-vibration mountings.
-12V or 24V maintenance free starter battery and connecting cables.
-Separate engine-driven battery charging alternator.
-Spin on oil and fuel filters and dry type air filter element.
-Industrial silencer (15dBA reduction) supplied loose.
-Auto start control system with LCD show.
-Battery charger provided.
-Main line 3P circuit breaker.
-Rigorous factory test wiring with IEC standard.
-Operation & Maintenance manual & Wiring diagrams.
-Wide range of optional extra features available.

DIMWNSIONS & WEIGHTS	OPEN	SILENT
Length (L)-mm	2430	2732
Width (W)-mm	1050	1100
Height (H)-mm	1415	1582
Dry Weight-kg:	1156	1533
Standard Fuel Tank Capacity(L)	286	286
(dBA)@7m no load	N/A	≤65

Ratings:

All three phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor.

(1)PRP (Prime Power):

Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

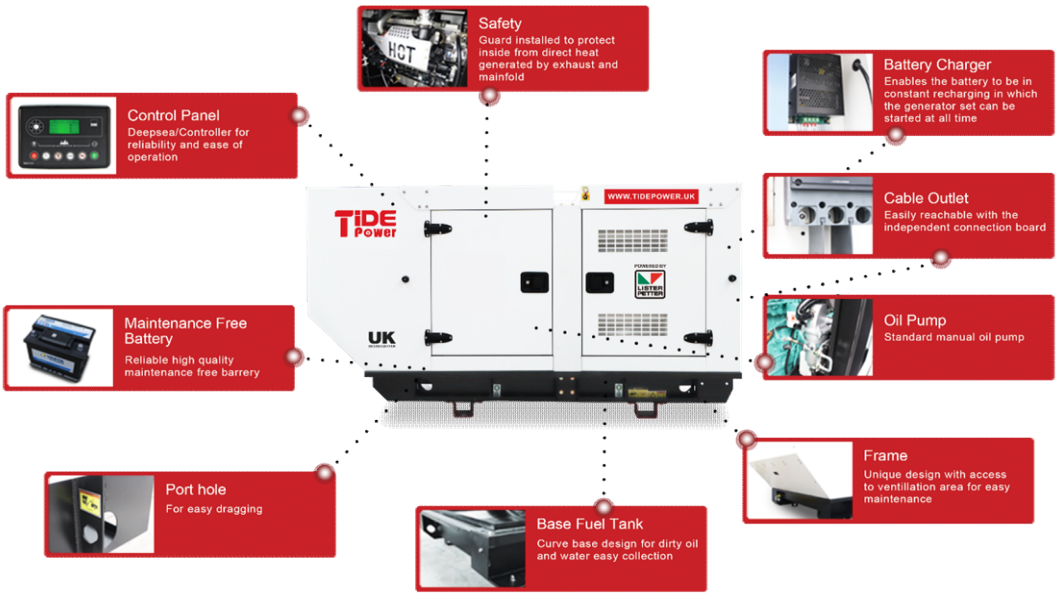
(2)ESP (Standby Power):

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure.

(3)STD:Standard Alternator.

Tide Power reserves the right to change the design or specifications without notice and without any obligation or liability.

FENOVA PLUS SERIES



The soundproof Generating set range offers a very large application target with powers ranging from 5-650KVA at 50 and 60Hz. The new and sturdy design whether it is canopies or containerized enclosure are with maximum noise reduction which make it suitable for all construction sites and home backup power supply, both mobile and stationary . At all time we have kept in our inventory a largerange of accessories to answer any immediate need, for sales or after sales services. Our standard Deepsea control panel with its stand alone cabinet is equipped with a large display screen, emergency button, ignition barrel and circuit breaker.Like every of our finished products, all the parts of the unit are subject to a stringent operating test involving over 30 checks prior to delivery.

ADVANTAGES OF FENOVA PLUS

-Powerful Engine,Large Output Power;
-Stable Performance
-Compact Structure
-Waterproof and Dustproof and weatherproof
-Noise Level 60—80 dBA@7m
-Ambient temperature：-5 °C --50 °C
-Excellent design and craftmanship
-Excellent Cooling System
-Automatic Air—Bleeding
-Easy Operation and Maintenance;

ENGINE	Lister Petter LP443G4			
General Performance	Engine Frequency and Speed	Hz / r/min	60 / 1800	
	Engine Power	kWm	105	116
	Type of fuel injection	Direct		
	Number of cylinders	4 cyl / In-line / 4-stroke		
	Aspiration	Turbocharged and air-to-air intercooled		
	Nominal cylinder bore×Stoke	mm	105/124	
	Total cylinder capacity	Litre	4.3	
	Compression ratio	16:1		
	Speed governor	Electronic		
	Fly wheel housing	SAE 3		
Fuel System	Fuel Consumption at 110% Prime Power	L/h	28.70	
	Fuel Consumption at 100% Prime Power	L/h	25.60	
	Fuel Consumption at 75% Prime Power	L/h	19.50	
	Fuel Consumption at 50% Prime Power	L/h	13.50	
	Fuel Consumption at 25% Prime Power	L/h	7.80	
Exhaust and Intake System	Maximum allowable back-pressure	kPa	≤10	
	Exhaust gas flow	m^3/min	22.3	
	Exhaust gas temperature, continuous	°C	550	
	Exhaust gas temperature, overload	°C	600	
	Exhaust pipe diameter - recommended	mm	80.0	
	Maximum allowable inlet restriction	kPa	≤ 6	
	Combustion air flow	m^3/min	9.4	
Cooling System	Total system with radiator capacity	Litres	31.00	
	Total system without radiator capacity	Litres	12.0	
	Thermostat type	Wax Capsule		
	Cooling package maximum operating temperature	°C	≤104	
	Thermostat opens	°C	82	
	Thermostat fully open	°C	≤ 95	
	Minimum temperature to engine	°C	-25	
	Cooling fan flow rate	m3/s	3	
Lubrication System	Sump capacity including filter	Litres	13.0	
	Oil consumption, 100% (l/hr)	L/hr	0.060	
	Lubricating oil temperature	°C	90-105	
	Maximum oil temperature	°C	108	
Electric System	Electrical System Voltage	V	24	
	Starter motor	24V×4.5kW		
	Battery	Maintenance-free		

ALTERNATOR	60Hz/1800rpm
General Data	Manufacture / Brand
	Leroy-somer
	Model
	TAL-A44-E
	Coupling / No. of Bearings
	Direct / Single Bearing
	Phase / Poles
	3-Phase / 4-Pole
	Power Factor
	Cos Φ = 0.8
	AVR Regulation
	Yes
	Voltage Regulation
	±1 %
	Insulation Class
	H
	Drip Proof
	IP23
	Excitation system
	SHUNT
	Altitude
	≤1000 m

CONTROLLER — Tide Power Easycon Function Summary

Controller Model / DeepSea	DSE4520	DSE6120	DSE7320	DSE8610
Controller Photos				
Standard Supply	○	●	○	○
Viewable Parameters				
Phase Voltage	3	3	3	3
Current	●	●	●	●
Frequency	●	●	●	●
Active Power	●	●	●	●
Reactive Power	●	●	●	●
Apparent Power	●	●	●	●
Power Factor	●	●	●	●
Electric Energy Metering	●	●	●	●
Generator Protection				
Abnormal Voltage	●	●	●	●
Over-current Warning	●	●	●	●
Over current Protection	●	●	●	●
Over Frequency Protection	●	●	●	●
Short Circuit Protection	MCCB / ●	MCCB / ●	MCCB / ●	MCCB / ●
Engine Figure				
Oil Pressure	●	●	●	●
Water Temperature	●	●	●	●
Fuel Meter / Fuel Sensor	●/○	●/○	●/○	●/○
Speed	●	●	●	●
Battery Voltage	●	●	●	●
Elapsed Time	●	●	●	●
Engine Protection				
Low Oil Pressure Warning	●	●	●	●
Low Oil Pressure Protection	●	●	●	●
High Temperature Warning	●	●	●	●
High Temperature Protection	●	●	●	●
Overspeed Warning	●	●	●	●
Overspeed Protection	●	●	●	●
Alternator Charger	●	●	●	●
Functions				
Remote Start	●	●	●	●
AMF (Auto Main Failure)	●	●	●	●
Programmable Intput	●	●	●	●
Programmable Output	●	●	●	●
Expand Module	○	○	○	○
Communication Function	○	○	●/ RS232 / 485	●/ RS232 / 485
Communication Port	USB	USB	●/ RS232 / 485	●/ RS232 / 485
CAN	●	●	●	●
Service Indicate	●	●	●	●
Fault History	●	●	●	●
Gen-Gen Synchronising	×	×	×	●
Gen-Mains Synchronising	×	×	×	●

Remark: ● Standard Supply ○ Available as Optional × Not Available