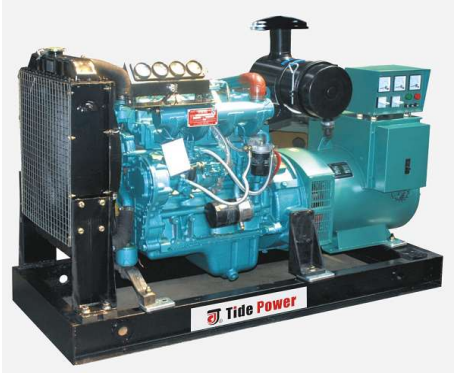
Model:

50Hz FB94-YT(open)/FC94-YT(silent)

60Hz FB98X-YT(open)/FC98X-YT(silent)

Powered by YTO



Generator Specification

—50Hz

Powers	PRP (1)			ESP (2)		Prime
Voltage (V)	KW	KVA		KW	KVA	Amps
380/220	75	94		83	104	142,8
400/230	75	94		83	104	135,7
415/240	75	94		83	104	130,8

—60Hz

Powers	PRP (1)			ESP (2)		Prime
Voltage (V)	KW	KVA		KW	KVA	Amps
380/220	78	98		86	107	148,9
400/230	78	98		86	107	141,5
415/240	78	98		86	107	136,3

Engine Data			
Engine brand		YTO	
Engine model		LR4M3L-D	
Speed control type		Electronic	
Starter motor voltage		24V	
Engine speed (RPM)		1500	1800
Fuel Consumption (L/H)	standby power	22,02	22,80
	100% prime power	18,35	19,00
	75% prime power	14,68	15,20
	50% prime power	11,01	11,40

Alternator Specification

Manufacture Brand	LEROY SOMER	STAMFORD	mecc alte	
Model	FPA22-7510(50HZ)/FPA22-689(60HZ)			
Series	LSA	TAL	STD(3)	S	STD(3)	STD(3)
Option	○	○	○	○	○	●

Alternator Data		
Frequency / Speed	50Hz / 1500rpm	60Hz / 1800rpm
Coupling / No. of Bearin	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	Self-Excited	
Altitude	≤1000	
Overspeed	2250	

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.

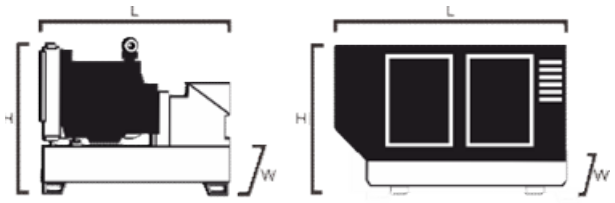
(1)PRP (Prime Power):

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

(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.



Standard reference Conditions

Note: Standard reference condition 25˚ C[77˚ F] air inlet temp, 1000m(328ft) A.S.L 30%
relative humidity. Fuel consumption data with diesel fuel with specific gravity of 0.85 and

Dimension and Weight@50HZ/60HZ		
Dimension	Open	Silent
Length (L)	2050	3127
Width (W)	810	1150
Height (H)	1400	1530
Net Weight	1020	1550
Fuel Tank (L)	180	280
Noise(dB) at 7m no load	N/A	74(50HZ)/75(60HZ)
Super Slient	Recommended	

■ Engine Specification: LR4M3L-D

Basic technical data	
No. of cylinders	4
Cylinder arrangement	In-line
Cycle	4 stroke
Induction system	Turbocharged with aftercooler
Compression ratio	17:1
Bore	110mm
Stroke	125mm
Cooling medium	Liquid
Displacement	4.75 L
Approximate engine weight	430±20kg

Cooling system	
Coolant capacity-engine	6L
Maximum Top Tank Temperature	99℃
Thermostat operating range	76~95 ° C
Coolant intake size	Φ45mm
Coolant outlet size	Φ45mm

Fuel system	
Injection system	Direct Injection
Governor type	Electronic
Fuel oil type	0# or 10#
Fuel injection pump	PM pump

Test Conditions	
Air temperature	25 ° C
Barometric pressure	100kPa
Relative humidity	30%
Air inlet Restriction at maximum power (no	≤ 5kPa
Exhaust back pressure (nomina	≤ 6 kPa

Lubrication system	
Lubricating oil type	L-ECD 15W/40
Lubricating oil capacity	14 litres
— Idle speed(Minimum)	98kPa
— Governed speed(Maximum)	294-490kPa
Maximum oil temperature	121 ℃
Lubricating oil temperature maximum to be	115° C
Maximum engine operating angles Front up,front down/right side or left	20° /15°

Electrical system	
Alternator	4volts with integral regulatc
Starter motor	24V
Recommended Battery Capacity	165A

Energy balance	50Hz	60Hz
Energy in fuel	11259btu/mir	11259btu/mir
Gross heat to power	4208btu/min	4208btu/min
Energy to coolant and oil	3152btu/min	3152btu/min
Energy to exhaust	3635btu/min	3635btu/min
Heart to radiation	264tu/min	264tu/min

■ Standard configuration

Engine	Alternator	Canopy	Electrical cabinet
Radiator Standard starting motor（12V or 24V） Oil sensor Water temperature sensor Standard engine charger Standard oil drainage pump Standard air filter, oil filter, f Water/fuel separator Oil drainage pump	AVR Single bearing IP23	Low carbon steel plate Surface powder coating Flame retardant and sound attenuated foam Top lifting Stainless steel screws for canopy external	Mains floating charge Breaker（rated current≤1250A） Maintenance free battery Control panel IP42
Base	**Standard voltage**	**Exhaust system**	**Others**
Rubber anti-vibration mount	380/220V 400/230V 415/240V 440/254V 220/133V 208/127V （ Single phase 230V、220V）	Open type- Industrial silencer + accessories Canopy type- Residential silencer	Engine/Alternator operation manual Generator set operational manual Generator set electrical wiring di Generator set testing report

■ Optional configuration

Engine	Alternator	Base
Air inlet heater Oil heater Jacket water heater Heavy duty air filter Oil automatic refilling system Enlarge radiator (suitable for high temperature) Anti corrosive radiator Heat exchanger instead of radiator Remote radiator	Winding temperature sensor PMG Space heater Anti corrosive winding IP44 Air inlet filter	Extra capacity base fuel tank Bunded base fuel tank Diesel fuel level sensor Automatic fuel refilling system Three ways valve Spring vibration absorber Marine paint for skid base
Electrical system	**Exhaust system**	**Canopy**
Synchronizing controller 4 poles switch Battery switch Nickel-cadmium battery/extra capacity battery IP44 protection Control panel Motorized switch Switch with shunt line diagram IP44 control cabinet	Open type set with Residential silencer Two poles silencer	Surface paint or marine paint Stainless steel, Galvanized Canopy Super silent design canopy Additional top lift Stainless steel locks and hinges Anti sand and dust filter for air Electrical louvre

■ Tide Power Easycon Function Summary

Controller Model / ComAp	EC 2.0 / Nano Plus	EC 3.0 / AMF20	EC 4.0 / AMF25	EC 5.0 / IG-NT
Controller Photos				
Standard Supply	×	●	○	○
Viewable Parameters				
Phase Voltage	×	3	3	3
Current	Instrumentation	●	●	●
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	●	●	●	●
Runing hours	●	●	●	●
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)	●	●	●	●
Service Indicate	×	×	●	●
Fault History	●	●	●	●
Gen-Gen Synchronising	×	×	×	●
Gen-Mains Synchronising	×	×	×	●

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

■ Automatic Transfer Switch

A.T.S - 4 Poles

Tide Power offers not only a changeover switch but also an integrated mains detection and switch system for your 24 Hour Power Protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of a mains automatic re-transfer once it come back.

System Advantages

- Automatically transfer and re-transfer load from main power to gen-power without operator intervention.operation (Both automatic and manual).
- ATS Controller (AMF function), seamless integration with AMF25
- Available from 32 - 4000A, better protection for 4 pole switch.
- Available in standard, bypass isolation and service-entrance configurations.
- Configurable in open, closed and programmed transition operating modes.
- Designed to interface seamlessly with TIDE POWER generators and switchgear.
- Drip proof IP42 enclosure.
- Easy installation: wall-mounted & floor standing
- Comes fully loaded with the technology to do the job.

ATS cabinet size (mm)	500*400*200(1)	650*500*300(1)	1000*600*600	1600*1000*800
Rated current (A)	40~100	40-250	400-630	2000-3200

(1)The actual dimension of the ATS will depend on the brand used

Warranty

Tide Power distributor, dealer, or authorized representative performs startup within 6 months of the date of shipment from the factory, warranty coverage will begin on the startup date (Register the startup date to Tide within 6 month is essential and can be enforced). This warranty does not apply to malfunctions caused by damages, unreasonable use, misuse, repair or service by unauthorized persons, or normal wear and tear.

Warranty Coverage

Generators for commercial use :

12 months or 1000 operating hours (for engine label with Prime power) 18 months or 200 hours for labels with standby rated gensets.