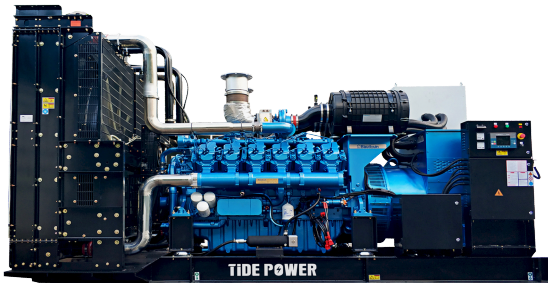


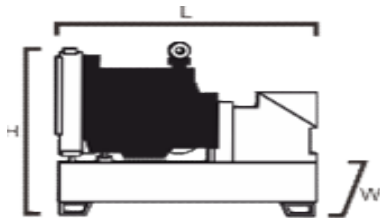
EC500X-B

Engine		Alternator		Powered by	
6M21G460/6		TIDE / FPA35-4042		Baudouin	
Frequency	Phase	Power Factor		Emissions	
60Hz/1800rpm	3-Phase	Cos Φ = 0.8		N/A	
Ratings Voltage (V)	Prime Power (PRP) (kWe)	Standby Power (ESP) (kWe)	Rated Current (A)	Fuel Consumption @100%Load (L/h)	
380/220	400	460	759.7	109.6	

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 ($\leq 650\text{kVA}$).
- 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.



DIMENSIONS & WEIGHTS

	OPEN
Length (L)-mm	3250
Width (W)-mm	1300
Height (H)-mm	2100
Dry Weight-kg:	2100
Standard Fuel Tank Capacity(L)	N/A
(dBA)@7m no load	N/A

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.

ENGINE		Baudouin 6M21G460/6		
General Performance	Engine Frequency and Speed	Hz / r/min	60 / 1800	
	Engine Power	kWm	450	510
	Cylinders / Type	6 Cyl / In line / Diesel 4 stroke		
	Aspiration	Turbocharged and Aftercooled		
	Governor Type	ECU		
	Bore / Stroke	127 / 165		
	Displacement	12.54		
	Compression Ratio	15.2 : 1		
Flywheels and flywheel housing		SAE#1-14"		
Fuel System	Fuel Consumption at 110% Prime Power	L/h	129	
	Fuel Consumption at 100% Prime Power	L/h	109.6	
	Fuel Consumption at 75% Prime Power	L/h	77.8	
	Fuel Consumption at 50% Prime Power	L/h	53.7	
	Fuel Consumption at 25% Prime Power	L/h	30	
Exhaust and Intake System	Air intake restriction clean filter	kPa	3.5	
	Air intake restriction dirty filter	kPa	7	
	Max. exhaust back pressure	kPa	12	
	Intake Air flow	m³/min	35.4	36.6
	Exhaust Gas Flow	m³/min	104.9	119.6
Lubrication System	Oil Pressure at Idle	kPa	130~250	
	Oil Pressure at Rate Speed	kPa	350~550	
	Maximum Oil Temperature	°C	105	
	Total System Capacity (Includes Oil Filter)	L	40	
Cooling System	Coolant Capacity (Engine only)	L	25	
	Standard Thermostat (modulating)Range	°C	76~88	
	Maximum Coolant Temperature at Engine Outlet	°C	110	
	Minimum Coolant Expansion Space	%		
Electric System	Coolant Flow	L/min		
	Electrical System Voltage	V	24	
	Battery	Maintenance-free		
	Max. Allowable Resistance of Cranking Circuit	mΩ	2	
Performance data	Starter power	kW	8.5	
	Mean Piston Speed	m/s	9.9	
	Brake Mean Effective Pressure without Fan	MPa	2.711	
Fan Loss Horse Power		kW	20	
ALTERNATOR		60Hz/1800rpm		
General Data	Manufacture / Brand	TIDE		
	Model	FPA35-4042		
	Coupling / No. of Bearings	Direct / Single Bearing		
	Phase / Poles	3-Phase/4-Pole		
	Power Factor	CosΦ=0.8		
	AVR Regulation	Yes		
	Voltage Regulation	±1%		
	Insulation Class	H		
	Drip Proof	IP23		
	Excitation system	Self-Excited		
	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

●

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Active Power

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Reactive Power

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Apparent Power

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Power Factor

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Electric Energy Metering

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Generator Protection

Abnormal Voltage

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Over-current Warning

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Over current Protection

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Over Frequency Protection

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Short Circuit Protection

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MCCB / ●

MCCB / ●

MCCB / ●

Engine Figure

Oil Pressure

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Water Temperature

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Fuel Meter / Fuel Sensor

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●/○

Speed

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Battery Voltage

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Elapsed Time

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Engine Protection

Low Oil Pressure Warning

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Low Oil Pressure Protection

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High Temperature Warning

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High Temperature Protection

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Overspeed Warning

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Overspeed Protection

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Alternator Charger Detection

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Functions

Remote Start

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AMF (Auto Main Failure)

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Programmable Input

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Programmable Output

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Expand Module

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○

○

Communication Function

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○

●/ RS232 / 485

●/ RS232 /
485 / RJ45

Communication Port

USB

USB

●/ RS232 / 485

●/RS232 / 485

CAN

●

●

●

●

Service Indicator

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Fault History

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Gen-Gen Synchronising

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Fixed-power grid paralleling

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Dual-unit standby redundancy

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×

●

●

Remark:

● Standard Supply

○ Available as Optional

× Not Available

Enclosure / Canopy

(Sound-attenuated & Weather Protective)

"Ensure a quieter life with our sound attenuation system."

Features:

Extremely Rugged & Highly Corrosion Resistant Construction

- Body made from 1.5mm sheet steel components with powder coating
- Built-in fuel tank integrated into the skid-mount base
- Excellent design and craftsmanship
- Compact structure and longer service life
- Residential silencer .
- Black powder coated locks and hinges are tested for corrosion resistance.
- External refueling port

Easy Commissioning and Maintenance

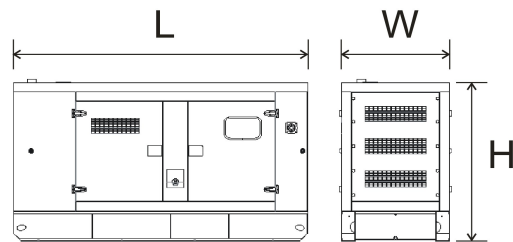
- Separate & Standing control room at end side, easy reachable electrical power connections board.
- Side doors allowing 180° opening rotation .
- Radiator fill access through cover in canopy roof.
- Lube oil drain and radiator drain.
- Manual lube oil pump provided.

Security and Safety

- Earth leakage protection.
- 40-50mm non-inflammable sponge inside.
- Control panel viewing window in a lockable access door.
- Emergency stop button mounted on canopy exterior.
- Fuel fill and battery can only be reached via lockable access doors.
- Exhaust silencing system enclosed
- Efficient management of cooling air to avoid high water temperature, reliable operation under harshest conditions.

Transportability

- Fork lift legs provided and easy to dismantle



Overall Dimensions & Weight & Noise for reference				
Dimensions	Weight	Noise Level	Base Tank @100% Load	
(L x W x H) mm	kg	dB(A) at 7m	Hours	Litres
3710*1650*2170	3610	≤82	N/A	N/A

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 with in 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 used to commercial utility source:
One (1) year or 1000 hours (whichever occurs first) from date of shipment from the factory or registered startup date.