


**DIESEL GEN-SET TECHNICAL SPECIFICATIONS**

Genset Model	MKW-500FPT
Prime Power(50HZ)	500KVA/400KW
Standby Power(50HZ)	550KVA/440KW
Frequency/Speed	50Hz/1500rpm
Voltage	220V/380V or 230V/400V
Power factor	0.8
Phases	3 phase, 4 wires
Operating mode	The machine has automatic operation and stop mode, emergency stop when needed
Noise level (7m away, open space, at 100% load, with silencer)	≤ 75 dB
Starting system	12/24 VDC DC power source, with battery charger regulator, synchronous battery charger from grid power.
Manufacturer	MAKAWA TECHNOLOGY EQUIPMENT COMPANY LIMITED

- Standby Rating for a standby engine should be sized for a maximum of 70% average load factor and roughly 200 hours per year. Standby power ratings should never be applied except in true emergency outage situations. With standby rated generators there is no overload capability built into the units.

- Prime Power is the maximum power accessible at the variable load for an unlimited number of hours per year in a variable load setting. It is not advisable that the variable load exceed 70% average of the prime power rating during any operational period. If the engine is running at 100% prime power, yearly hours should not exceed 500. Overload situations should be avoided however a 10% overload capability is available for a 1 hour period within a 12 hour cycle of operation.

- Continuous Power is used in applications where supplying power is at a constant 100% load for an unlimited number of hours each year. Continuous power rated units are most widely used in applications where the power grid is unreachable.

**Engine Specifications**

Engine Data	
Manufacturer	FPT POWERTRAIN TECHNOLOGIES
Brand name	FPT
Model	Full name: CURSOR 13TE7W Short name: CR13TE7W or CR13TE7W.S550
Engine speed	1500rpm
-----Standby power (net)	459 kW
----- Prime power (net)	425 kW
Aspiration	Turbocharged , Aftercooled
No. of Cylinders	6
Cylinders arrangement	In line
Thermodynamic Cycle	4 stroke
Bore * Stroke	135*150 mm
Displacement	12.9 liters
Compression Ratio	16.5:1
Governor	Electronic
Fuel Injection System	Direct - Electronic Common Rail
Fuel consumption at 100% load L/H	≤ 110
Engine protection device	The engine is provided with devices for automatic alarm and shutdown. - Low oil pressure; - Engine overspeed; - Coolant temperature too high; - Fuel level protection. - 10% reserve of engine power for speed regulation purposes (under transient

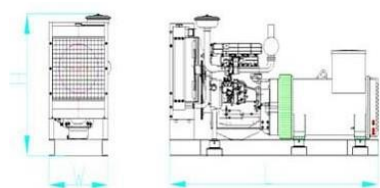
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	conditions and sudden closing loads)
Starting system	Start with 12/24 VDC DC power source
Cooling method	Forced cooling with circulating water
Fuel used	Diesel
Standards	ISO 8528; ISO 3046; BS5514 or BS5000

**Alternator Specifications**

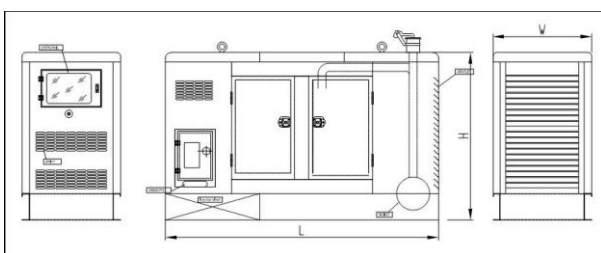
Alternator Manufacturer	Mecc Alte
Brand name	Mecc Alte
Model	ECO40 3S4 C
Prime Power	500KVA
Standby Power	550KVA
Alternator Type	Brushless, self-excited, automatic voltage regulation by AVR
Rated Voltage	220V/380V or 230V/400V
Rated Frequency	50HZ
Rated speed	1500 RPM
Power factor	0.8
Automatic Voltage Regulator (AVR)	Semiconductor type, sensors on all phases, built-in overload protection, transient voltage protection
Phase	3 phase, 4 wires
Insulation class	H
Protection class	IP23
Standards	IEC60034; ISO 8528; VDE 0875

**Open Version**

**Open Version**

Overall size: 3400x1400x2200 mm(L\*W\*H)

Weight: 3.190kg

Fuel tank: ≤ 800 liters

**Soundproof Version**

**Soundproof Version**

Overall size: 4500x1450x2645 mm(L\*W\*H)

Weight: 4.430kg

Fuel tank: ≤ 800 liters

**Controller specifications:**

- Manufacturer/Model: DEEPSEA / DSE7320 MKII
- Standards: BS EN 61000-6-2; BS EN 61000-6-4; BS EN 60950
- Basic functions: The system controls, monitors and measures generator parameters based on microprocessor technology. Using digital technology + microprocessor circuit to control the operation of the generator and record system parameters.
- Operating modes on screen:
  - + Emergency stop;
  - + Start/stop with LED display
  - + Manual operation;
  - + Automatic operation;
  - + Button to display all engine parameters
  - + Check.
- Basic measurement and display parameters:
  - + Voltage (V);
  - + Current consumption (A);
  - + Frequency (Hz);
  - + Running time (hour);
  - + Fuel level (%);
  - + Lubricating oil pressure (bar);
  - + Coolant temperature (°C).
- Protection function:
  - + Overcurrent;
  - + Generator short circuit;

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- + Low fuel level;
- + Low lubricating oil pressure;
- + High coolant temperature;
- + Low coolant level;
- + High/low generator voltage;
- + High/low battery voltage
- + High/low generator frequency;
- + Engine over/under speed;
- + Starting error.

**Sales Promises**

Our Engineering provides a full line of brand new and high quality products. Each and every unit is strictly factory tested before shipment.

Quality Warranty is according to our standard conditions: 12 months.

Service and parts are available from MAKAWA or distributors in your location.

**MACHINE CASE – ACCESSORIES**

- Soundproof shell: assembled domestically by MAKAWA, powder coated, with soundproofing and locking
- Exhaust pipe made of steel covered with heat-resistant, soundproof material.
- Charger, battery charging control from the grid;
- Anti-vibration, shock-absorbing system.
- Output MCCB: Mounted on the generator frame, performs switching and opening tasks, installed synchronously by the generator manufacturer. Input cable is a soft cable (silk cable) connected to the generator output.