

Diesel Powered Generating Sets Power By China SDEC Engine

MTP-SC22.5S 16KW

1500 RPM 400V 3P 4W/50Hz/0.8F



Standard Genset Features

Single Source Responsibility

Design, manufacture and testing of engine, alternator, control system and complete generating set are all produced by our company

Single bearing alternator, class H/H
Standard voltage 400v volts 50 Hz
Exciter/Voltage reg – Torque Match as standard
Standard Deepsea DSE6120 Auto start with AMF
Steel base frame with A/V mounting.

Engine, Alternator, Chassis & Control Box
3 pole or 4 pole Delixi Circuit Breaker
40° C Degree Radiator

Packing under shrunk plastic film

Operation & Maintenance manual

Standard set of labels

Battery Charger 24V, 5A or 10A

Floating Battery Charger 24V, 5A or 10A

Seaworthy Plastic film packaging

Maintenance-free battery

Generator Performance

Voltage Regulation

Maintains voltage output to within $\pm 1.0\%$.
At any power factor between 0.8 and 1.0
At any variations from No load to Full load.
At any variations from Cold to Hot.
At speed droop variations up to 4.5%.

Frequency Regulation

Isochronous under varying loads from no load to 100% full load when electronic governor is fitted

Random Frequency Variation

Will not exceed $\pm 0.25\%$ of its mean value for constant loads - no load to full load.

Waveform

Total harmonic distortion open circuit voltage waveform in the order of 1.8%. Three-phase balanced load in the order of 5.0%.

Telephone Influence Factor (TIF)

TIF better than 50.
THF to BS 4999 Part 40 better than 2%.

Alternator Temperature Rise

Class H insulation.

Radio Interference

In compliance with BS 800 and VDE levels G and N.

Generator Set Options

Fuel options

Fuel Tank / 10hr operation

Exhaust Options

Exhaust Silencer – Industrial In-Line
Exhaust Bellows
Exhaust Silencer – Residential , In-Line
Installation Kit – Industrial Silencer
Installation Kit – Residential Silencer

Voltage Connections

208/120V 220/127V 240/138V

380/220V 440/254V 480/277V

Miscellaneous Options

3 pole or 4 pole Circuit Breaker
Optional Set mounted starting batteries
Coolant water Heater 24V
Battery Charger 24V, 5A or 10A
Automatic Transfer Switches
Packing – Export Box

Engine Specification

Type

SDEC water cooled Diesel engine, four cycle, turbocharged and low temperature aftercooled

Construction

Two valves per cylinder, forged steel crankshaft and connecting rods, cast iron block.

Starting

12/24 volt negative earth. Battery charging alternator 35 amp on engine. Cranking current 1800 amps at 0° C.

Fuel System

12/24 volt fail safe actuator. Spin-on paper element fuel filters with fuel pump injection system with integral electronic governor. Dual flexible fuel lines and connectors. Standard fuel water separator.

Filters

Air cleaner with dry element.

Spin-on full flow lube oil filter.

Cooling

40° C ambient temperature standard
Stone guard. Drain Tap

Alternator Specification

Type

Brushless single bearing, revolving field, pole, drip proof, screen protected. Class H Insulation, IP23 Protection Fully interconnected damper winding. AC exciter and rotating rectifier unit. Epoxy coated stator winding. Rotor and exciter impregnated with tropical

grade insulating oil and acid resisting polyester resin. Dynamically balanced rotor

BS 5625 grade 2.5.

Sealed for life bearings.

Layer wound mechanically wedged rotor.

Exciter

Triple dipped in moisture, oil and acid resisting polyester varnish and coated with anti-tracking varnish.

Output windings with 2/3 pitch for improved harmonics and paralleling ability.

Close coupled engine/alternator for perfect alignment.

Quality Standards

To BS4999/5000 pt 99,
VDE 0530, UTE5100,
NEMA MG1-22, CEMA,
IEC 34, CSA A22.2,
AS1359, BS 5514,
ISO 3046 and ISO 8528
ISO9001:2000, ISO14000,
CE Compliance



Engine Performance Date@1500RPM	
Output Power	Fuel Consumption
%	L/h
Standby Power	
110	5, 13
Prime Power	
100	4, 68
75	3, 6
50	2, 6

Specifications may change without notice

Specification

Model	MTP-SC68.8S	Alternator Manufacture	Mecc alte
Standby Power	22.5kVA/18kW	Alternator Model	ECP28 M4C
Prime Power	20kVA/16kW	Standby Power	22.5kVA/18kW
Engine Manufacture	SDEC	Prime Power	20kVA/16kW
Engine Model	4Z2.7-G11	Windings	100% copper
Number of Cylinders	4	Regulator type	DSR
Air intake way	Turbocharged charged	Number of wires	12
Bore×stroke	90mm X 105mm	Alternator Insulation	H
Compression Ratio	18:1	Protection Class	IP23
Displacement	2.7L	Winding pitch	'2/3
Engine Standby Output	22KW (50Hz)	Maximum Overspeed	2250
Engine Prime Output	24KW	Altitude	0-1000
Speed	1500 rpm	Code voltage reference	T0405S3
Lubrication Capacity	10 liter	Execution	Brushless

In accordance with ISO 8528, 3046, BS5514

PRIME POWER

Prime Power is available continuously during the period of power outage in a variable load application. Variable load should not exceed a 70% average of the prime power rating during any 24 hour period.

A 10% overload capability is available for a period of 1 hour within a 12 hour period of operation.

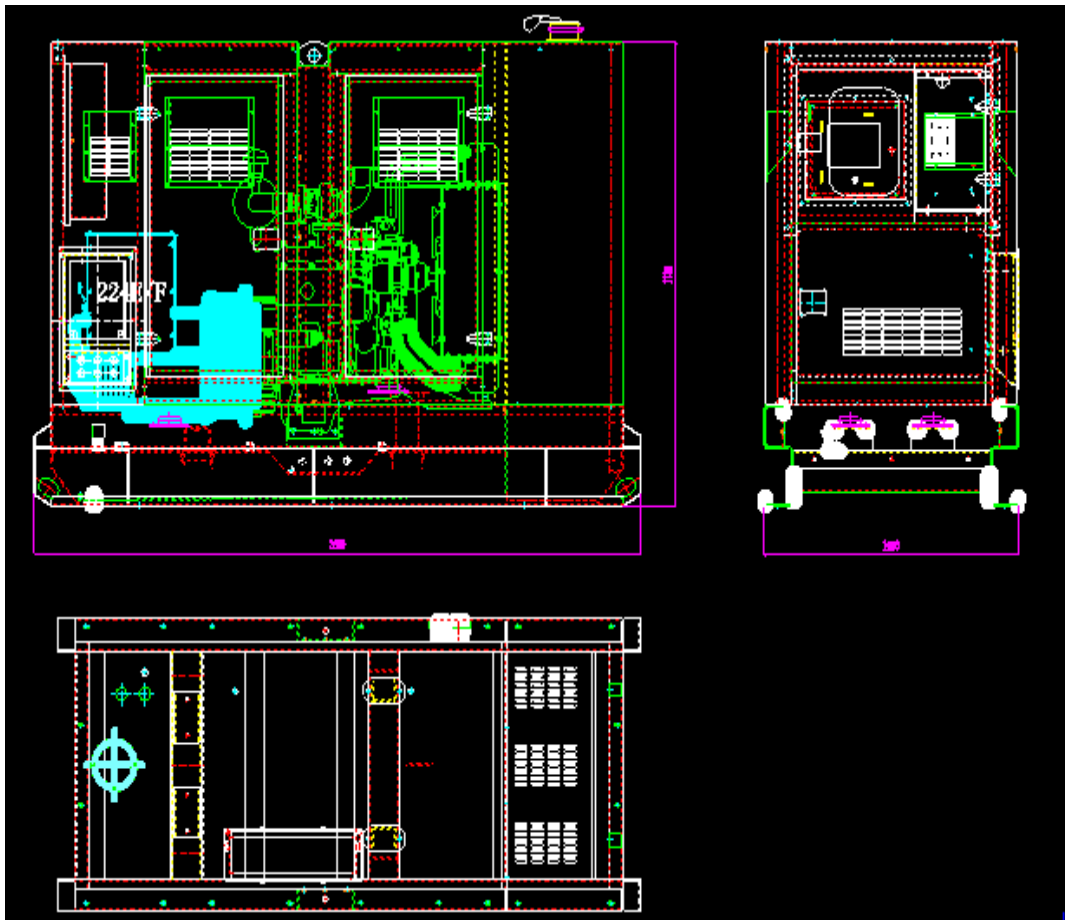
STANDBY POWER

The Standby Power is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Ganopy diagram

Dimension:

2200*900*1250mm



Robust Corrosion Resistant Construction

- △ Black finish stainless steel lock and hinges
- △ body made from steel components treated with polyester powder coating

Excellent Access for Maintenance

- △ radiator fill access plate
- △ lube oil and cooling water drains pipes to exterior of the enclosure

Security and Safety

- △ control panel viewing window in a lockable access door
- △ emergency stop push button (red) mounted on enclosure interior
- △ cooling fan and battery charging alternator fully guarded
- △ exhaust silencing system totally enclosed for operator safety

- Δ adding cooling water from top of canopy
- Δ LED light will be lighting automatically when open the door

- Δ Control panel and cable design in different directions, all the connection wiring in control panel are more neater and firmer.

Note:

Rating Definitions (Operation at Altitude ≤1000m, Ambient temperature ≤ 40°C)Continuous Power. These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power.

Control Panel – UK DEEPSEA6120

Control Panel –UK DEEPSEA6120

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

- a) Instruments:V, A (3 phase), Hz, kW, kVAR, kWh.
- b) Controls:Push buttons and LEDs for simple control.
- c) Control module:Standard collocation is DSE6120 Auto start with AMF.

KEY FEATURES:

- Δ Back-lit text LCD display
- Δ Front panel editing
- Δ LED and LCD alarm indication
- Δ Power Save mode
- Δ CAN and Magnetic Pick-up/Alt. versions available (specify on ordering)
- Δ PC and front panel configuration
- Δ 6 Digital inputs, 3 Analogue inputs
- Δ 6 Outputs (4 configurable on Magnetic Pick-up/Alt., 6 configurable on CAN version)
- Δ Configurable timers and alarms
- Δ Alternative configuration
- Δ Event Log (10)
- Δ Remote Start input
- Δ 3 Phase generator monitoring
- Δ Current Monitoring and protection
- Δ 3 Phase Mains (Utility) monitoring (DSE6120 only)
- Δ Test button (DSE6120 only)
- Δ Battery voltage monitoring
- Δ Engine pre-heat, Hours counter
- Δ Comprehensive shutdown or warning on fault condition

KEY BENEFITS:

- Δ Automatically transfers between generator and generator power (DSE6120 only)
- Δ Hours counter provides accurate information for monitoring and maintenance periods
- Δ User-friendly set-up and button layout
- Δ Multiple engine parameters are monitored simultaneously
- Δ Module can be configured to suit individual applications
- Δ Compatible with a wide range of CAN engines
- Δ Tier 4 engine support
- Δ IP65 rating (with optional gasket) offers increased resistance to water ingress
- Δ Licence-free PC software



We reserve the right to modify the characteristics of its product at any time in order to incorporate the latest technological developments. The information contained in this document may therefore be changed without notice. For more technical data

See your distributor for more information.

