Generator Technical Data Sheet for

shentongroup
power with responsibility

Model: PHG500ScOS

GENERATORS AND UPS

- Intelligent Auto-Start Controller with Generator
- Monitoring and Protection Systems Suitable for Remote Starting or Connection with shentongroup AMF Panel
- Battery Trickle Charger
- Thermostatically controlled Engine Heater
- Long Range Bunded Base Fuel Tank
- Ability to be Customised to Specific Requirements
- Output Circuit Breaker

GENERAL

Shenton Group Generators range from 10 to 2500kVA, and are built to a world-class standard. These remarkably competitive standby generators provide the most cost-effective solution for 'standard package' requirements.

A first-class range of diesel-powered generators for prime and standby power application which feature reliable components from leading manufacturers, these are premium products upon which your company can build its reputation.

Model PHG500ScOS		
Standby Power	kVA	500
	kW	400
Prime Power	kVA	450
	kW	360
Rated Speed	r.p.m	1500
Voltage	V	400/230
Rated Power Factor	Cos Phi	0,8
Data Sheet Number	PHG500ScOS NS Rev 0	

Prime: This rating is for the supply of continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation on the annual hours of operation and 10% overload power can be supplied for one hour in twelve hours.

Standby: This rating is for the supply of continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted. Max rating, is available for one in twelve hours

Note: Standard reference conditions: 25deg C (77deg F) air inlet temperature, 152.4m (500feet) above sea level, 60% relative humidity. All engine performance data based on the above mentioned maximum continuous ratings. Fuel consumption data at full load for diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, class A2.

In line with our policy of continuous development, we reserve the right to change specification without notice.

t. +44 (0)844 888 444 5 e. info@shentongroup.co.uk **www.shentongroup.co.uk**
Shenton House, Walworth Road, Walworth Business Park, Andover, SP10 5LH

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GENERATORS AND UPS

ENGINE		
Rated Output	kWm	393
Manufacturer		Scania
Model		DC13 072A 0213
Engine Type		Diesel 4 Strokes-Cycle
Aspiration Type		Turbo charged & intercooled
Cylinders Arrangement		Straight 6
Bore & Stroke	mm	130x160
Displacement	L	12.7
Cooling System		Water
Compression Ratio		16.3:1
Fuel Consumption 100% PRP	l/h	88
Fuel Consumption 75% PRP	l/h	65
Fuel Consumption 50% PRP	l/h	44
Total Oil Capacity	L	38
Total Coolant Capacity	L	38
Governor	Type	Electronic
Air Filter	Type	Dry Paper Cartridge
Battery Capacity	Ah	2 x 225Ah
Battery Voltage	V	24

Scania need no introduction as a world class industrial engine manufacturer, producing engines that are designed for high efficiency and exceptional reliability in the most demanding situations globally for maximum uptime. Scania engines have a proven track record that can comfortably be relied on.

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GENERATORS AND UPS

mecc alte

ALTERNATOR		
Manufacturer		Mecc Alte
Model		ECO 40-2S/4
Poles		4
Frequency	Hz	50
Insulation Class		H
Efficiency at 75% load class H 400v	%	94,4
Reactance Xd''	%	12.1
Short Circuit Current Capacity	%	>300
Heat Dissipation 400v	W	21356
Radio Interference		EN50081-1, EN50082-1, VDE0875K
Waveform Distortion (THD) at Full Load	%	2.5
Enclosure (according IEC-34-5)		IP 21
Weight of Complete Generator	Kg	1118
Cooling Air Requirement	m3/min	54
Overload	%	1 in 6 hours
Overload per 20 sec	%	300
Exciter System		Auxiliary winding
Voltage Regulator		UVR6
Voltage regulation Performance +/-	%	1
Coupling		Flexible Disk

Mecc Alte has sixty years of experience in the electromechanical field, and is today at its height in the world production of synchronous alternators. Committed daily to research, development and updating activities, Mecc Alte is a testimony to constant improvement in all areas such as technology, organisation and quality. The company has ISO 9001 certification, awarded in 1996 and ISO 14001 since 2010. With 54.000 square meters of factory area, almost 850 employees and a turnover of approximately 130 million euro, Mecc Alte is a well-established company ready to challenge the markets in every product sector.

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GENERATORS AND UPS

APPLICATION DATA

Exhaust System		
Maximum Exhaust Temperature	°C	536
Exhaust Gas Flow	M3/min	54
Maximum Allowed Back Pressure	kPa	N.A.

Air Flows		
Intake Air Flow	m3/h	1670
Cooling Air Flow	m3/s	10
Available Air Restriction	KPa	0.2

Fuel System		
Fuel Oil Spec		DIESEL
Fuel Tank Capacity	L	800
Autonomy @ 75% load	Hrs	12

Dimensions/Weight		
Length	mm	3300
Width	mm	1100
Height	mm	1850
Weight excluding fuel	Kg	3060
Sound Pressure Level @ 7 mtrs	dB(A)	-

Electrical		
Output Circuit Breaker	Type	MCCB
	Model	ABB
Max Load Current at 400V .8 p.f.	Amps	722

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SG7410DS GENERATOR CONTROLLER

The SG7410DS is an Auto Start Control Module. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC. The modules include USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion. The module is compatible with electronic (CAN) and non-electronic (magnetic pick up/alternator sensing) engines and offers an extensive number of flexible inputs, outputs and engine protections so the system can be easily adapted to meet the most demanding industry requirements. The full list of features includes enhanced event and performance monitoring, remote communications and dual mutual standby.

CONTROL PANEL DISPLAY FEATURES	
Engine RPM	Generator Output Current
Engine Oil Pressure	Earth current
Coolant temperature	Output kW
Battery Volts	Load level %
Run Hours/ No of starts	Output kVA
Fuel level	Power factor
Generator output Voltage	Load kVAr
Frequency	kWh/kVAh/kVArh

SG7410DS is a branded Deep Sea Electronics controller, customized to shentongroup's specific requirements. shentongroup has a long history of collaboration with Deep Sea Electronics, and endorse their products with confidence. Our experience has proved this is the market-leading controller having a perfect mix of complex capability and user simplicity.

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