INDUSTRIAL DIESEL GENERATOR SET POWERED BY SDEC ENGINE & SZN ALTERNATOR

M-S550

POWER RATING (0.8P.F.)

STANDBY OUTPUT: **440KW/550KVA**

RATED OUTPUT: **400KW/500KVA**

50HZ/1500RPM/400/230V

CONDITIONS & DEFINITIONS

Stand-by:Code: S

Applicable for supplying emergency power at varying load in the event of normal utility power interruption.
Fuel stop power in accordance with ISO15550, ISO3046/1, JISB8002, DIN6271 and BS5514.

Prime:Code:CP

Applicable for supplying power with varying load instead of the utility for an unlimited time. Prime powe in accordance with ISO 8528.

Conditions:

Engine rating are based on SAE J1349 standard conditions are also apply at ISO3046/1, DIN6271 & BS5514 Standard conditions.
Fuel rates:Base on ASTM D975, BS2869 and on fuel oil of 35°API (16℃ or 60°F) gravity having a LHV of 42,780 Kj/Kg (18,390 Btu/lb.) when used at 29℃(85°F) and weighing 838.9 g/liter (7.001lbs./U.S. gal.).

Factory Test

Each generating sets must be got through 1 hour load test for running 0%, 50%, 75%, 100% and 110% load before dispatch, All protective devices, control functions are simulated and its system checked, proved and then passed for dispatch. A test certificate can be provided upon request.

DIMENSIONS

Standard Generator Set				Soundproof type
Overall dimensions	L:	Length	mm	4500
	W:	Width	mm	1700
	H:	Height	mm	2390

Gen Set standard collection

1.Brand new heavy duty Original SDEC engine, 4 stroke-cycle, 12V stype cylinders vertical in-line, water cooling and electric start, Turbocharged and air-to-air intercooled

2. Brand new Original SZN Alternator, 4 pole, synchronic type with self excited system, Brushless, IP23, Class H

3. DEEP SEA DSE6120 digital module

4. Vibration isolators between the engine/ alternator and base frame, genset installed with LED light inside

5. High quality DC electronic battery charger.

6. DELIXI circuit breaker with 4 pole

7. One of the top brands good quality Battery, battery tray and cable.

8. Rubber absorber for engine, radiator,alternator and control panel.

9. Adopting the flexible high pressure fuel inlet pipe

10. Strong and big radiator with 50 , good in anti-vibration and cooling the genset.

11. Fuel level indicators on the tope of the fuel tank

12. Industrial silencer, its covered by heat-resist material

13. The generator set with 10hours 100% load running, skid type baseframe with integral fuel tank

14. Silent type generator, the iron base frame with fork holes and welded chassis, powder for the painting of iron plate is polyester that keeps the genenerator neither fading nor change for years, anti-corrosion.

15. English operation/maintenance manuals, test report and wiring diagram

DIESEL ENGINE: SDEC SC25G690D2 50HZ/1500RPM

4 stroke-cycle, 12V stype cylinders vertical in-line, Turbocharged and air-to-air intercooled

ENGINE SPECIFICATIONS & TECHNICAL DATA

Standby Power		505KW/631KVA
Prime Power		459KW/575KVA
Type		4-Cycle; In-line; 12-Cylinder Diesel
Aspiration		Turbocharged and air-to-air intercooled
Bore x Stroke	mm	135x 150
Displacement	L	25,8
Compression ratio		16:01
Exhaust System		
Exhaust Gas Flow	8m3/min	2×45.8
Exhaust Gas Temperature	℃	650 °C
Max allowed restrictions Exhaust syst		6
Air Intake System		
Max Intake Air Restriction-Clean filter	kPa	3
Max Intake Air Restriction-Dirty Element	kPa	6
Lubrication System		
Oil Pan Capacity（High-Low）	L	65-55
Maximum Oil Temperature	℃	121
Lub. Method		Fully forced pressure feed type
Cooling System		
Coolant Capacity - Engine Only	L	48
Standard Thermostat (Modulating) Ra	℃	77-90
MaxTop Tank Temperature-prime pov	℃	104
Electric System		
Charging generator		28V×55A
Starting motor		24V×11kW
Battery Voltage/capacity		24V/200A
Thermal		
Water flow	L	740
Heat Rejection to Coolant	2kcal/sec	46,2
Intake Air Flow	m3/min	2×18.8

FUEL CONSUMPTION

Fuel consumption load 100%	g/Kw.h	199
Fuel consumption load 100%	L/H	111

ENGINE STANDARD EQUIPMENT

- ◆ Turbocharged and air-to-air intercooled
- ◆ Structure steel base
- ◆ Crankcase breather
- ◆ Battery charging alternator
- ◆ Lubricating oil cooler
- ◆ Fuel filters, full flow paper element
- ◆ Fuel transfer pump, gear driven, plunger type
- ◆ Electronic type governor
- ◆ Lubricating oil filter, full flow paper element
- ◆ Lubricating oil pump, gear driven
- ◆ Exhaust dry manifold
- ◆ 50℃ ambient radiator
- ◆ Blower fan, fan drive
- ◆ 24V DC electric starting motor

ALTERNATOR: SZN354D 50HZ/400V/3PHASE

Standby Output: **440KW/550KVA**

Rated Output: **400KW/500KVA**

Standards

Meet the requirements of BS EN 60034 and the relevant section of other international standards such as BS5000,VDE0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359. Other standards and certifications can be considered on request.

Technical data	
Insulation System	H
Protection Grade	IP23
Rated Power Factor	0,8
Voltage Regulation	± 1.0 %
Stator Winding	Double Layer Concentric
Winding Pitch	Two Thirds
Winding Leads	12
Connecting Type	3 Phase and 4 Wires, “Y” type connecting
Altitude	≤1000m
Exciter Type	Brushless, self-exciting
Telephone Influence Factor (TIF)	＜50
THF	＜2%
Voltage Regulation, Steady State	≤±1%
Alternator Efficiencies	92,30%

GENERATING SET DATA	
Voltage Regulation	≥±5%
Voltage Regulation, Stead State	≤±1%
Sudden Voltage Warp (100% Sudden Reduce)	≤+25%
Sudden Voltage Warp (Sudden Increase)	≤-20%
Voltage Stable Time (100% Sudden Reduce)	≤6S
Voltage Stable Time (Sudden Increase)	≤6S
Frequency Regulation, Stead State	≤5%
Frequency Waving	≤1%
Sudden Frequency Warp (100% Sudden Reduce)	≤+12%
Sudden Frequency Warp (Sudden Increase)	≤-10%
Frequency Recovery Time(100% Sudden Reduce)	≤5S
Frequency Recovery Time (Sudden Increase)	≤5S

DEEP SEA DSE DSE6120MKII GENERATOR CONTROL MODULE FROM UK

FETURES

The DSE6120 MKIII is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

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 and remote PC.

The DSE6120 MKIII will also monitor the mains (utility) supply. The modules include USB connection and dedicated DSENet® terminals for system expansion.

Both modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputsand extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality.

The modules can be easily configued using the DSE Configuration Suite PC software. Selected front panel editing is also available.

KEY FEATURES

- 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and screen images.
- DSENet® expansion compatibility
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB communications
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- 3-phase mains (utility) sensing and protection
- Automatic load transfer control
- Generator current and power monitoring (kW, kvar, kVA, pf)
- Mains (utility) current and power monitoring (kW, kvar, kVA, pf)
- kW overload alarm
- Over current protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN
- 6 configurable DC output
- 4 configurable analogue/digital inputs
- Support for 0 V to 10 V & 4 mA to 20 mA sensors
- 8 configurable digital input
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Manual and automatic fuel pump control
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel level alarms
- 3 configurable maintenance alarm
- Compatible with a wide range of CAN engines, including Tier 4 engine support
- Uses DSE Configuration Suite PC Software for simplified configuration
- Licence-free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress
- Configurable CAN ead & transmitted information
- 1 alternative configuration.

DSE6120 MKIII

GENSET'S WARRANTY

For prime using models are warranted in accordance with our warranty terms for a period of 1000 hours from date of commissioning or 12 months from date of despatch whichever date occurs the sooner.

For standby using models are warranted in accordance with our warranty terms for a period of 500 hours from date of commissioning or 24 months from date of despatch whichever date occurs the sooner.