

M-SY SERIES

 DIESEL GENERATOR SET POWERED BY **SDEC** ENGINE AND **SZN** ALTERNATOR

M-S625

POWER RATING (0.8P.F.)	STANDBY OUTPUT:	500KW/625KVA	50HZ/1500RPM/400V
	RATED OUTPUT:	450KW/563KVA	

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 power in accordance with ISO 8528.

Conditions:

Engine ratings are based on SAE J1349 standard conditions and also apply at ISO3046/1, DIN6271 & BS5514 Standard conditions.

Fuel rates: Based on ASTM D975, BS2869 and on fuel oil of 35°API (16°C or 60°F) gravity having a LHV of 42,780 KJ/Kg (18,390 Btu/lb.) when used at 29°C(85°F) and weighing 838.9 g/liter (7.001lbs./U.S. gal.).

Factory Test

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

DIMENSIONS

Standard Generator Set				Soundproof type	Open type
	L:	Length	mm	4500	3580
Overall dimensions	W:	Width	mm	1900	1450
	H:	Height	mm	2500	2250

Gen Set standard collection

- 1.Brand new SDEC engine SC27G755D2 , 4stroke, inline, direct, injection, 1500rpm diesel engine
- 2.Brand new RUNDA Alternator SZN354E, 4 pole, synchronic type with self excited system, Brushless, IP23, ClassH
- 3.Standard generator set with integral fuel tank with 10hours 100% load running
- 4.DEEP SEA digital controller, control module: DSE6120
- 5.High quality DC battery charger. LED light installed inside of genset
- 6.DELIXI circuit breaker with 4pole
- 7.Battery, battery tray and cable.
- 8.Rubber absorber for engine, radiator, alternator and control panel.
- 9.Adopting the high pressure fuel pipe for inlet and return.
- 10.Strong and big radiator with 50 degrees to be perfect for the genset cooling
- 11.Industrial silencer, its covered by heat-resist material
- 12.Cold-rolled iron sheet instead of hot rolled one for canopy, perfect in harness, toughness and extensibility.
- 13.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 generator neither fading nor change for years, anti-corrosion.

DIESEL ENGINE: SDEC SC27G755D2 50HZ/1500RPM

V-type,4 strokes,Direct injection, water-cooled Turbo charged air-to-air intercooled

ENGINE SPECIFICATIONS & TECHNICAL DATA

Engine power prime/standby power	KVA	632/694
Bore	mm	135
Stroke	mm	155
Displacement	L	26,6
Compression ratio		16:01
Injection pump		Yijie in-line "P" type
Governor		ELEC
Oil pan capacity	L	65high, 55low
Water capacity	L	48
Water pump Capacity	L	740
Thermostat	°C	77-90
Cooling air flow	m ³ /s	16
Water flow	L	740
Air flow	m ³ /min	36
Exhaust gas flow	m ³ /min	91,8
Exhaust gas temp.	°C	600 °C
Exhaust system	kPa max.	6
Intake system		3 kPa initial, 6 kPa final
Charging generator		28V×55A
Voltage regulator		24V
Starting motor		24V×11kW
Battery Voltage		24V
Battery Capacity		200 AH
Dimension	mm	1930×1686×1872

FUEL CONSUMPTION

Fuel consumption load 100%	L/H	126
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ENGINE STANDARD EQUIPMENT

- ◆ Turbo charged 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
- ◆ Electric type governor
- ◆ Lubricating oil filter, full flow paper element
- ◆ Lubricating oil pump, gear driven
- ◆ Exhaust dry manifold
- ◆ 50°C ambient radiator
- ◆ Blower fan, fan drive
- ◆ 24V DC electric starting motor

ALTERNATOR SZN354E 50HZ/400V

Standby Output:	500KW/625KVA
Rated Output:	450KW/563KVA

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	$\pm 1.0 \%$
Stator Winding	Double Layer Concentric
Winding Pitch	Two Thirds
Winding Leads	12
Connecting Type	3 Phase and 4 Wires, "Y" type connecting
Altitude	$\leq 1000\text{m}$
Exciter Type	Brushless, self-exciting
Telephone Influence Factor (TIF)	< 50
THF	$< 2\%$
Voltage Regulation, Steady State	$\leq \pm 1\%$
Alternator Efficiencies	92,30%

GENERATING SET DATA

Voltage Regulation	$\geq \pm 5\%$
Voltage Regulation, Stead State	$\leq \pm 1\%$
Sudden Voltage Warp (100% Sudden Reduce)	$\leq +25\%$
Sudden Voltage Warp (Sudden Increase)	$\leq -20\%$
Voltage Stable Time (100% Sudden Reduce)	$\leq 6\text{S}$
Voltage Stable Time (Sudden Increase)	$\leq 6\text{S}$
Frequency Regulation, Stead State	$\leq 5\%$
Frequency Waving	$\leq 1\%$
Sudden Frequency Warp (100% Sudden Reduce)	$\leq +12\%$
Sudden Frequency Warp (Sudden Increase)	$\leq -10\%$
Frequency Recovery Time(100% Sudden Reduce)	$\leq 5\text{S}$
Frequency Recovery Time (Sudden Increase)	$\leq 5\text{S}$

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, outputs and 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 configured 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
- 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.



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.