

**M-S SERIES**

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

**M-S825**

POWER RATING (0.8P.F.)	STANDBY OUTPUT: <b>660KW/825KVA</b>	<b>50HZ/1500RPM/400V</b>
	RATED OUTPUT: <b>600KW/750KVA</b>	

**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 its system checked, proved and then passed for dispatch. A test certificate can be provided upon request.

**DIMENSIONS**

Standard Generator Set				silent type
	L:	Length	mm	5500
Overall dimensions	W:	Width	mm	1900
	H:	Height	mm	2450

**Gen Set standard collection**

1. Brand new Original **SDEC** engine 4stroke, 1500rpm diesel engine .
2. Brand new original **RUNDA** Alternator ,4 pole, synchronic type with self excited system, Brushless, IP23, ClassH
3. ComAp, digital module.
4. Vibration isolators between the engine/ alternator and base frame
5. High quality DC electronic battery charger.
6. DELIXI circuit breaker
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 high pressure fuel inlet pipe, flexible oil pipes and oil draining valve
10. Strong and big radiator with 50 degrees,good in anti-vibration and cooling the genset.
11. Industrial silencer, its covered by heat-resist material
12. The generator set with 8hours 100% load running, chassis fuel tank

13. Open type genset with most firm Fireproof material, polyester powder covers the enclosure that keeps the generator neither fading nor change for years, anti-corrosion.

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

### **DIESEL ENGINE: SDEC 6KTAA25-G32 50HZ/1500RPM**

In-line,4strokes, water-cooled,In-line,4strokes, water-cooled,Direct injection

#### **ENGINE SPECIFICATIONS & TECHNICAL DATA**

Prime/Standby power	KW	685/754
Bore	mm	170
Stroke	mm	185
Displacement	L	25,18
Lubricating oil capacity	L	75
Compression ratio		14.5 : 1
Injection timing		Electronic control
Oil pan capacity	L	45/75
Coolant Capacity for Engine	Liters	55
Aspiration Type		Turbocharged
Combustion		Direct injection
Speed Governor		Electronic
Inlet air flow	m <sup>3</sup> /min	3210
Exhaust gas flow	m <sup>3</sup> /min	8330
Exhaust gas temperature	°C	500
Dry weight	kg	2700
Dimension(LxWxH)	mm	2055x1241x1936

#### **FUEL CONSUMPTION FOR PRIME POWER**

Fuel consumption load 100%	L/H	163
Fuel consumption load 75%	L/H	124
Fuel consumption load 50%	L/H	84
Fuel consumption load 25%	L/H	47

#### **ENGINE STANDARD EQUIPMENT**

- ◆ Turbocharged & aftercooler
- ◆ Structure steel base
- ◆ Crankcase breather
- ◆ Battery charging alternator
- ◆ Lubricating oil cooler
- ◆ Fuel filters, full flow paper element
- ◆ Fuel transfer pump, gear driven, plunger type
- ◆ ELEC 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 SZN404C 50HZ/400V**

Standby Output: **660KW/825KVA**  
 Rated Output: **600KW/750KVA**

#### **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

## ComAp IG200 GENERATOR CONTROL MODULE FROM CZECH REPUBLIC

### DESCRIPTION

- ◆ Comprehensive paralleling gen-set controller
- ◆ Parallel operation for up to 32 gen-sets
- ◆ Direct communication with ECU
- ◆ Remote control and monitoring
- ◆ Flexible, extendable, yet user friendly
- ◆ Available with extension module.

### KEY FECTURES

- ◆ Multiple Island or Single Parallel to Mains applications both in one controller
- ◆ PLC support with PLC editor and monitor
- ◆ Perfect solution for rental applications:
  - Rental timers
  - Geofencing and tracking via WebSupervisor\*
  - Alternative configuration
  - Droop and Emergency droop
- ◆ Load sharing and VAr sharing via CAN
- ◆ Wide communication capabilities including





- Integrated USB for configuration
- Isolated RS485 port on board for MODBUS
- Integrated USB Host for uploading/downloading FW/Configuration with USB key
  
- ◆ High accuracy of voltage and current measurement
- ◆ Cloud-based monitoring and control
- ◆ Active SMS and emails in different languages
  
- ◆ Up to 5 languages in the controller
  
- ◆ Configurable MODBUS
  
- ◆ Support of MODBUS RTU/TCP\* or SNMP\* v1/v2c
  
- ◆ Detailed history with up to 350 events
  
- ◆ Load shedding, dummy load capability
- ◆ Tier 4 Final support
- ◆ Automatic temperature based cooling/heating
- ◆ Comprehensive gen-set protections
- ◆ Multipurpose flexible timers with full calendar
- ◆ True RMS measurement

#### **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.