

# THE GENERATOR SALES & SERVICING CO. LTD

WWW.GENERATORSAS.CO.UK

TEL: 01208 832094

INFO@GENERATORSAS.CO.UK

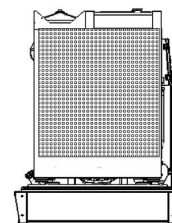
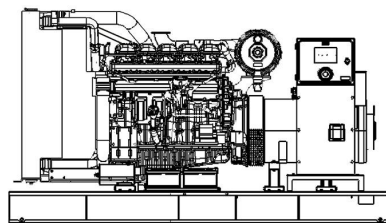
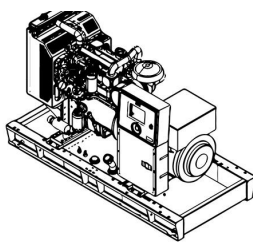


## Output Power

Standby Power (ESP)	kVA	232
	kW	185
Prime Power (PRP)	kVA	206
	kW	165

## Size

	W x L x H (mm)	Weight (kg)	Fuel Tank (lt)	Noise dB(A) @ 1m
Canopied	1200 x 3860 x 1850	2462	330	76



## Continuous Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

## Standby Power

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

## Prime Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hrs.

# 50 Hz Diesel Generator Sets



## Engine

Manufacturer		DOOSAN
Model		P086TI
Cylinder Configuration		INLINE
No of Cylinders		6
Displacement	lt	8,1
Bore	mm	111
Stroke	mm	139
Compression Ratio		16,4:1
Aspiration		TURBOCHARGE-INTERCOOLER
Governor Type		ELECTRONIC
Cooling System		WATER
Coolant Capacity	lt	48,5
Lubrication Oil Capacity	lt	15,5
Electrical System	VDC	24
Speed / Frequency 50 Hz	rpm	1500 rpm / 50 Hz
Engine Gross Power (Standby 50 Hz)	kW	199
Fuel Consumption 110 % 50 Hz	lt/h	48,4
Fuel Consumption 100 % 50 Hz	lt/h	43,1
Fuel Consumption 75 % 50 Hz	lt/h	31,7
Fuel Consumption 50 % 50 Hz	lt/h	21,1
Exhaust Outlet Temperature 50 Hz	°C	580
Exhaust Gas Flow 50 Hz	m3/min	33,9
Combustion Air Flow 50 Hz	m3/min	12,1
Cooling Air Flow 50 Hz	m3/min	250

## Alternator

Manufacturer		MARELLI
Model		MJB250LA4
No of Phases		3
Power Factor		0,8
No of Bearings		SINGLE
No of Poles		4
No of Leads		12
Voltage Regulation (Steady State)		± %0,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]
Insulation Class		H
Degree of Protection		IP 23
Excitation System		AVR (Automatic Voltage Regulator), Brushless
Connection Type		STAR
Total Harmonic Content (No Load)		< %2
Frequency	Hz	50
Voltage Output 50 Hz	VAC	230 / 400
Rated Power (Standby) 400_50 Hz	kVA	240
Efficiency (4/4_400 V_50 Hz)	%	93,2

# STANDARD EQUIPMENT

## ENGINES

We use recognised branded diesel engines with proven technology for our generators. All are compliant with ISO8528, ISO3046, BS5514, DIN 6271 standards. Our engines ensure low fuel consumption and accurate speed settings. Service and maintenance parts readily available through a global network.

## ALTERNATORS

Only leading alternator brands such as Stamford, Marelli, Mecc-Alte are used in our generators, providing high quality productivity and durability. All alternators have passed the necessary test processes and found to be appropriate according to EC 60034-1; CEI EN 60034-1; BS 4999-5000; VDE 0530, NF 51-100,111; OVE M-10, NEMA MG 1.22 standards. Alternators are maintenance free, single bearing, self exciting with electronic Automatic Voltage Regulation.

## CHASSIS/FUEL TANK

Chassis are manufactured from high grade steel, powder coated and feature an integral fuel tank with fuel level gauge. Base frame has integrated lifting lugs for ease of transportation and positioning. Engine vibration is kept to a minimum thanks to the rigid design and the anti-vibration heavy duty rubber mounts. All generators feature a fully bonded base tank.

## COOLING SYSTEM

High quality, water cooled system. Consisting of industrial radiator, expansion tank and cooler fan all thermostatically controlled. Designed to keep operational temperature at optimum performance. Water heater comes as standard providing peak conditions for cold weather starting.



### Standard Sound Attenuated Canopies

- Compatible with 2000/14/EC directives, certified noise emission level
- Lifting and securing points for transport and positioning
- Hidden exhaust inside the canopy
- Emergency stop button located on the canopy
- Improved air suction channel to ensure homogenous cooling inside the enclosure
- Radiator and exhaust outlet designed to vent from top of Canopy.
- Easy access to coolant fill for radiator
- Amplified paint system against corrosion and rust,
- Improved performance in terms of sound insulation,
- Demounted parts that make transportation and maintenance easier,



The DSE7310 is an Auto Start Control Module and the DSE7320 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, remote PC and via SMS text alerts (with external modem).



The DSE7320 will also monitor the mains (utility) supply. The modules include USB, RS232 and RS485 ports as well as 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 and dual mutual standby (DSE7310 only) to reduce engine wear.

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

DSE7320



#### KEY FEATURES

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- CAN engine support
- Integral PLC editor
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- kW & kV Ar protection

- Reverse power (kW & kV Ar) protection
- LED and LCD alarm indication
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Unbalanced load protection
- Independent Earth Fault trip
- True dual mutual standby with load balancing timer (DSE7310 only)
- USB connectivity
- Backed up real time clock
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software
- User selectable RS232 and RS485 communications
- Configurable Gencomm pages
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to help with modem diagnostics
- Idle control for starting & stopping.

- DSENet® expansion compatible
- Heated display option available

#### KEY BENEFITS

- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Multiple date and time scheduler
- Set maintenance periods can be configured to maintain optimum engine performance
- Ethernet communications (via DSE855 module), provides advanced remote monitoring
- Modules can be integrated into building management systems (BMS)
- Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements

THE GENERATOR SALES & SERVICING COMPANY LTD

☎ 01208 832094 ✉ info@generatorsas.co.uk

