



# KG250W / KG250WS

Diesel Generating Set	t Output Ratings		
Model	Prime Rating at 0.8 pf (lag)	Standby Rating at 0.8 pf (lag)	Phase / Volts / Hz
KG250W (OPEN)	250 kVA	275 kVA	2 Bhass / 200 V / 50 Un
KG250WS (SAE)	200 kW	220 kW	3 Phase / 380 V / 50 Hz

• SAE – Sound Attenuated Enclosure

• Ratings are according to ISO 8528; refer to ratings definition on page 2.



Note: Above picture shown for illustration purpose only, actual product may be different.

### Features

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- Extremely reliable.
- Lower operating cost.
- Easy maintenance higher uptime.
- Sound attenuating enclosure (canopy) is fully integrated and designed for all weather conditions (weather proof).
- Best in class Sound attenuation 70 dB(A) at 7 meters as per ISO 8528
- State of the art generating set control system with high degree of accuracy and reliability.
- Ideally suitable for critical industries like Construction, Manufacturing, Textile, Telecom, Services etc.
- Superior design standards that minimize power deration even at high ambient temperatures.
- Efficient and prompt after sales service available.
- Winner of the frost & Sullivan Voice of Customer Award in the"Best Bang for Buck" category in the Indian Generating sets Market.



Power, Performance, Peace of Mind.

### **Ratings Definition:**



#### Standby Ratings:

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528-3)

#### Prime Rating:

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercial purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

#### Continuous Rating:

These ratings are applicable for supplying power continuously to a constant load upto the full output rating for unlimited hours. No sustained overload capability is available for this rating.

GENERATING SET S	PECIFICATIONS	CO	NTROL SYSTEM
Model - Open Type	KG250W		SEE on antimote
Model - SAE Type	KG250WS		
Frequency (Hz)	50		
Power Factor	0.8		
Phase	Three phase	Controller Make	Deepsea
Line Voltage (Volts)	380	Controller Model	DSE 6120 MKII
Phase Voltage (Volts)	220		Generator Voltage
	Open – 310		Generator Amps Generator Frequency
Fuel Tank Capacity (Liters)	SAE – 310	Digital display	Mains Voltage Battery Voltage
Fuel consumption at 100% load (lit/hr) +5% tolerance	55.12	instrumentation	Engine hours Run Oil Pressure Gauge
Fuel consumption at 75% load (lit/hr) +5% tolerance	42.22		Engine Temperature Gauge
Sound level at 7 m for Silent Generating set dB(A)	70		Fail to Stop Low Oil pressure
Overall dimensions (cms)	Open - 356x152x200		High Engine Temperature Under/Over-speed
	SAE – 438x167x256		Under/Over voltage
Weight (kgs)	Open Type – 2320	Shutdowns/Safeties	Emergency Stop Failed to reach loading voltage
	SAE Type – 4460		Failed to reach loading frequency
		Charge Fail Over Current	



Low DC Voltage warning

Low coolant level

Available

Automatic Starting &

AMF facility

# **Engine Technical Data**



### **Enriching Lives**

Physical Data	
Engine Make	Kirloskar
Engine Model	6SL8800TA
Number of cylinders	6
Configuration	Inline
Туре	Four stroke
Bore x Stroke (mm)	118 x 135
Displacement (Ltr)	8.86
Cooling	Water cooled
Aspiration	Turbocharged Aftercooled
Compression Ratio	17.5 : 1
Starting Arrangement	24V Electric

Air System		
Air Filter Type	Dry type replaceable element	
Air Volume required for Ventilation (m <sup>3</sup> /hr)	20447	
Combustion air flow (m³/hr)	1140	
Total Air Flow required for ventilation (m <sup>3</sup> /hr)	21383	
Total Fresh air required (m³/hr)	TBA	

Fuel System		
Type of fuel filter	Two stage spin on type	
Governor Type	Electronic	
Class of Governing	ISO 8528-5, Class G2	
Fuel pump type	Inline	
Fuel pump make	Motorpal	
Recommended Fuel	Class A2, High speed diesel	
Fuel consumption at 100% load (lit/hr) +5% tolerance	55.12	
Fuel consumption at 75%42.22load (lit/hr) +5% tolerance42.22		
Fuel consumption readings are based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2)		

Lubrication System		
Type of lube oil filter	Full flow spin on type	
Oil to be used	SAE 15W40 API:CI4	
Oil pump type	Through G-rotor gear pump	
Lub oil sump capacity (lit)	24	
Lube oil consumption	0.3% of fuel consumption	

Cooling System		
Cooling system capacity (lit)	43	
Water pump type	Centrifugal	
Radiator fan load (hp)	12	

Electrical System		
Starting Arrangement	24V Electric	
Starter	24V Electric	
Starter Battery Rating	2 x 180AH	
Battery charging alternator	Engine mounted 24V battery charger	
Battery charger amps	45	





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# **Alternator Technical Data**

Physical Data		
Manufacturer	Stamford	
Model	HCI444C1	
Number of bearings	1	
Insulation class	Н	
Winding pitch	2/3	
Wires	12	
Ingress Protection Rating	IP 23	
AVR Model	AS440	

Operating	Data
Over speed (RPM)	2250
Excitation	Self excited
Efficiency (%)	92.5
THD at full linear balanced load AC waveform	<u>&lt;</u> 5%
Voltage Regulation (%)	± 1.0
Reactance per unit (Xd)	3.15
Reactance per unit (X'd)	0.20
Reactance per unit (X"d)	0.14

# Sound Attenuating Enclosure (Canopy)

Sound Level	70 dB(A) at 7 meter as per ISO 8528
Construction	<ul> <li>Fully Integrated, metal construction for ALL WEATHER USE (weather proof).</li> <li>Black zinc die cast, Aluminium hinges or Stainless steel hinges tested to withstand corrosive environment conditions.</li> <li>Fuel filling spout with lock.</li> <li>Emergency stop button on canopy exterior.</li> <li>Provision of glass window for viewing control panel</li> <li>Provision for lifting canopy</li> </ul>
Maintenance	Easy access through lockable doors for operation/maintenance and repair works (including access for radiator service)
Protection Standard	IP 23 Standard

# **General Data**

Documents	A full set of Illustrated	
	spare parts catalogue	
	Operation &	
	Maintenance manual	
	Circuit Diagrams	
Quality	ISO 8528, ISO 3046, IS	
Quality Standards	100002, BS5514, DIN 6271,	
	ISO 9001, ISO 14001	



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