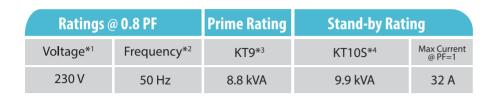
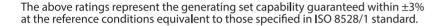


Gensets
Small Range

Kubota









#### **Notes**

- 1. The applicable voltage range is 230V for 50Hz applications. For other voltages, please consult factory.
- 2. This generating set is of fixed speed of 1500 rpm.
- 3. KT9 is the prime power rating of the generating set is where a variable load and unlimited hour usage are applied with an average load factor of 80% of the prime rating over each 24-hour period. Noting that a 10% overload is permitted for 1 hour in every 12-hour operation.
- 4. KT10S is the standby power rating of the generating set is where a variable load limited to an annual usage up to 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted.

### **Certifications**



- The complete Generating Set is type-tested according to ISO 8528-8 Standard.



-The control panel is certified by an ISO 17025 accredited laboratory to have IP55 according to IEC 60355



### **Engine Technical Data**

Make & Model	KUBOTA D1105-E2-BG			
Cylinders & Arrangement	3; vertical in-line			
Bore & Stroke (mm)	78 x 78.4			
Induction system	Naturally aspirated			
Combustion	Indirect injection			
Cycle	4 stroke			
Compression ratio	24			
Cooling System	Water cooled			
Displacement	1.123 liters			
Lube oil capacity	5.1 liters Max			
Coolant capacity	5.1 liters			
Standard governor (Optional)	Mechanical +/-5% (Electronic)			
Engine Speed	1500 rpm			
Fuel Consumption (L/H) @ 100% Load	2.45 @ 50% Load 1.23			
Fuel Consumption (L/H) @ 75% Load	1.84 @ 25% Load 0.62			
Radiator Cooling Air Flow (m3/s)	0.35			
Emissions regulations	For non-regulated territories			
Exhaust temperature oC (max)	500			
Max exhaust gas flow (m3/min)	2.24			
Max. allowed back pressure (kPa)	7.1			

- The above performance data are valid as per the following specs:
- Diesel Fuel is according to BS2869 Class A2 or equivalent.
- Lubricating oil is according to Grade SAE 15W-40 API CI4.
- The coolant should be 50% antifreeze and 50% fresh water.

### **Dimensions**

Length	1400 mm
Width	610 mm
Height	1020 mm
Weight	285 Kg

# Alternator Technical Data LSA LINZ

Make & Model	TAL040C	E1X13ME/4	
Frequency / No. of poles	50Hz / 4P	Winding pitch	2/3
Ingress protection	IP23	AVR model	R120-HVR 11
Insulation class	Н	Overspeed	2250 R.P.M.
Terminals (Optional)	6 (12)	Voltage regulation	±1%
Excitation system	SHUNT	Coolant air flow	0.06 m <sup>3</sup> /s



## KT9 - KT10S (50 Hz) - Single Phase



Gensets **Small Range** 

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# **Control Panel Specifications**

DSE 6020MKII panel is an automatic set panel of microprocessor-based capable of interfacing with electronic engine through the can-bus J1939. It is fully configurable by front fascia buttons and PC software as well. If Mains voltage is to be monitored, DSE6020MKII can be offered.

Circuit Breaker Schneider or ABB, 3 Pole MCCB (4 Pole available as Optional)





## **Construction**

Sheet Fabrication	CNC shearing & bending		
Paint type	Heat-treated powder-coated		
Paint application	Electrostatic corona spraying		
Durability tests	• IMPACT [EN ISO 6272]		
	• Salt spray resistance [ASTM B117-73]		
	Humidity Resistance [ASTM D2247]		
Compliance	Panel is compliant with [ISO8528-8]		
	Clearance & Creepage [IEC60355-1]		
	• Leakage current & Dielectric strength [IEC60355-1]		
	• Protection against electric shock [IEC600 364-4-41]		
Degree of protection	IP55		
	Crimping force up to 20KN		
Wire crimping	Accuracy of 0.01mm		
	• Each crimping is checked by Komax CFA+		
Wire coding	Wires are coded by wire color and cross-section		
	• Wires are coded by printed numbers		
	• Wires are coded by printed function of the wire		

Protection (standard)	(OPTIONAL Note 1,3)	Control (standard)	(OPTIONAL Note 1)	Instrumentation (standard)	(OPTIONAL Note 1,3)
Over /Under AC voltage	High oi <b>l</b> temperature	Remote start input	Battery Changer: 5A, 10A, UL	Gen Frequency: Hz	Lube oil temperature
Over /Under frequency	High exhaust temperature	Emergency Stop button	Fuel pump control	Gen Current: 1 phase A	Exhaust temperature
Delayed Over current	Low fuel pressure	Common Alarm volt-free contact	Extension:	Power: KW, KVA, KVAR & PF	Engine Inlet air (Boost) pressure
Short-circuit	Low coolant pressure	Event log (50 events)	Ethernet —Modbus TCP	Energy: KWhr, KVAhr, KVARhr	Charging ammeter
Over KW	Low fuel level	Weekly Exerciser	RS485- Modbus RTU	Lube Oil pressure	Fuel pressure
High Engine Temperature	Low oil level	Audible Alarm	Webnet — GPS tracker	Engine coolant temperature	Coolant pressure
Low oil pressure	High winding temperature	Standard CANbus J1939	Water in Fuel Detection.	Battery DC Voltage	Fuel level
Maintenance Alarm	High bearing temperature	Preheat control		DC Alternator Voltage	Lube oil level
High/Low Battery voltage	Low boost pressure			Engine Speed	Winding temperature 3xRTD
Low coolant level Note 2	Fusible link fire protection			Operating hours	Bearing temperature RTD

Low coolant temperature

Note 1: some OPTIONAL features could be standard if CANbus is established within electronic engines.

Note 2: Low coolant level protection is standard feature for Gensets above 200KVA, otherwise it is optional.

Note 3: There is limitation in the number of protections and measurements that can be offered with GMP260MK.

 $Other\ types\ of\ control\ Panels\ \&\ Modules\ can\ be\ offered\ according\ to\ required\ specifications\ (DSE\ 7310/20,\ 7410/20,\ 8810\ and\ Others).$ 



### KT9 - KT10S (50 Hz) - Single Phase



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## **Genset Standard Features**

#### **Assembly:**

Gensets are assembled at Rich Motor Company in compliance with ISO 8528-8 standard.

- The engine/alternator assembly rests on skid with Anti-vibration mounting pads.
- The skid is made up of durable sheet metals and beams exceeding "Vibration & Torsion" Resistance Norms.
- A skid mounted fuel tank is supplied with fuel gauge, filler cap, fuel inlet and outlet hoses.
- The control panel enclosure is made up of metal sheet.



- -The skid and control panel enclosure are painted with heat-treated and power-coated electrostati corona spraying.
- Paints passed durability tests conforming to international quality standards.
- Impact (EN ISO 6272)
- Salt Spray Resistance (ASTM B117-73)
- Humidity Resistance (ASTM D2247)

### **Works-Testing:**

- All Gensets are tested prior to dispatch.
- Test is automatically generated and checked according to ISO8528
- Test certificate is issued for each Genset

#### **Equipment:**

- Water cooled Radiator with belt driven blower fan and full guarding
- Electric starter with solenoid Relay
- Battery Charging Alternator
- Energized to run solenoid
- Replaceable fuel, oil and air filters
- Heavy duty leads acid battery with matching capacity (Amps & CCA)
- One loose supplied industrial exhaust silencer 16 DB noise reduction level.
- Integral Fuel Tank with 67 L capacity.

#### **Documentation:**

- User Manual for Operation, Installation and Maintenance guidance
- Wring Diagram.
- Test Report
- Maintenance Schedule
- Catalogues for Engine, Alternator & AVR



## **Genset Optional Features**

- Manual & Automatic Transfer Switches,
- Synchronizing & Totalizing Panels
- Fuel water separator
- Water jacket heater
- Oil heater
- Fuel heater
- Battery heater
- Anti-condensation Heater
- Air Shut-off Valve
- Oil Sampler
- Pre-lube Oil Pump

