



## **GENERATING SET GE SX-10000 KTDM**

Le immagini riportate sono indicative



POWER RATINGS	
* Stand-By single-phase power (LTP)	10.5 kVA (9.5 kW) / 230V / 45.6A
* PRP single-phase power	9 kVA (8.1 kW) / 230V / 39.1A
* Stand-By single-phase power (LTT)	10.5 kVA (9.5 kW) / 115V / 91.3A
* PRP single-phase power	9 kVA (8.1 kW) / 115V / 78.2A
* COP single-phase power	/
Frequency	50 Hz
Cos φ	0.9

<sup>\*</sup> Output powers according to ISO 8528-1

### **FEATURES**

- Bunded base suitable to contain any liquids leakage from engine avoiding environmental pollution
- The rounded edges of the canopy designed for rainwater drainage away
- Large doors for better and easy maintenance (air, oil, fuel filters replacement)
- · Central lifting eye
- Low oil pressure automatic engine shut down and hight water temperature
- Circuit breaker and ELCB-GFI (Ground Fault Interruptor)
- Supersilenced
- Control panel with automatic digital control unit (AMF) on request
- · Meets EC directives for noise and safety









DEFINITION

Valid declared powers up to the followings environmental conditions: temperature  $25^{\circ}\text{C}$ , altitude 100 meters above sea level

 $\textbf{LTP power: stand-by power:} \ Maximum \ available \ power for use \ with \ variable \ loads \ for \ a \ yearly \ number \ of \ hours \ limited \ at 500 \ h. \ No \ overload \ is \ admitted.$ 

**PRP power:** continue power with variable loads. Maximum power for use with variable loads for a yearly illimited nubers of hours.

**COP power**: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours.

## ENGINE 3000 RPM

4 STROKE, NATURAL ASPIRATED	
Model	KUBOTA D722
Cylinders / Displacement	11.9 kW (16 hp)
Bore / Stroke	10.3 kW (14 hp)
Compression ratio	/
* Stand-By net power	3 / 719 cm <sup>3</sup>
* PRP net power	67 / 68 (mm)
* COP net power	/
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	3.9 lt./h
100 % to PRP	3.4 lt./h
75 % to PRP	2.6 lt./h
50 % to PRP	1.7 lt./h
COOLING SYSTEM	Water
Total system cap only engine	4.1 lt - /
Fan air flow	/
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	3.8 lt.
Oil consumption at full load	/

<sup>\*</sup> Output powers according to ISO 3046-1

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	/
Maximum back pressure	/
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	12 Vdc
Starter motor power	1 kW
Battery charging alternator cap.	14 A
Cold start	/
With cold start aid	- 15 °C
AIR FILTER	Dry
Combustion air flow	/
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/



### ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS (WITHOUT AVR) SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED (WITH AVR)		
	WITHOUT AVR	WITH AVR
Continuos power	10	kVA
Stand-by power	11	kVA
Three phase voltage	230/1	15 Vac
Frequency	50	Hz
Cos φ		1
Model A.V.R.	/	HVR 11E
Voltage regulation acc.	± 5 %	± 1 %
Sustained short circuit current	≤ 2	.5 ln
Transient dip (100% load)	< 1	5 %
Recovery time		/
Efficiency at 100% load	79.5 % (230V - Cos φ 1)	80 % (230V - Cos φ 1)
Insulation	Clas	ss H
Connection - Terminals	Series	s - N°4
Electromagnetic compatibility (R.F.I. suppr.)	EN5	5011
Waveform distorsion - THD	<5%	<5.5%
Thelephone interference - THF		/

REACTANCES (10 kVA - 230/115V)	
Direct axis synchronuos - Xd	1
Direct axis transient - X'd	1
Subdirect axis transient - X"d	/
Quadrature axis synchronuos - Xq	1
Quadr. axis subtransient - X"q	/
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	/
Subtransient - T"d	/
Open circuit - T'do	/
Armature - Ta	/
Short-circuit ratio Kcc	/
IP protection degree	IP 23
Cooling air flow	0.082 m <sup>3</sup> /sec.
Coupling   Bearing	Direct SAE 5 -7 ½ - N°1

### **GENERAL SPECIFICATIONS**

Fuel tank capacity	38 lt.
Running time (75% to PRP)	14.5 h
Starter battery	12 Vdc -38Ah
IP protection degree	IP 23

* Measured acoustic power LwA (pressure LpA)	93 dB(A) (68 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	93 dB(A) (68 dB(A) @ 7m)
Performance class (ISO 8528)	G2

<sup>\*</sup> Acoustic power according to European Directive 2000/14/CE

### 230V

## MANUAL CONTROL PANELS

### 230/115V (CTE)

- Start and stop engine key
- Low oil pressure warning light with shutdown
- High cooling temperature warning light with shutdown
- Battery charge warning light fault
- Low fuel warning light
- Glow plug light
- Digital multifunction meter : Voltmeter Frequencymeter Total Hoursmeter - Partial Hoursmeter (resettable) - Battery voltage
- Fuel level gauge
- Emergency stop buttom
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Circuit breaker for 230V 16A socket
- Output sockets: 1x230V 32A 2P+T CEE 1x230V 16A 2P+T CEE 1x230V 16A 2P+T Schuko
- · Earth terminal (PE)

- Start and stop engine key
- · Low oil pressure warning light with shutdown
- · High cooling temperature warning light with shutdown
- Battery charge warning light fault
- Low fuel warning light
- Glow plug light
- · Digital multifunction meter: Voltmeter Frequencymeter Total Hoursmeter - Partial Hoursmeter (resettable) - Battery voltage
- · Fuel level gauge
- Emergency stop buttom
- · Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- 230/115V CTE Voltage switch
- · Thermal switches for single sockets protection
- Output sockets: 1x230V 32A 2P+T CEE

1x230V 16A 2P+T CEE 2x115V 32A 2P+T CEE

1x115V 16A 2P+T CEE

· Earth terminal (PE)





## AUTOMATIC CONTROL PANEL

- · Controller InteliNano Plus
- Controller supply switch
- Battery charge warning light fault
- Emergency stop buttom
- TCM 35 remote control plug
- PAC (ATS) plug
- Battery charger
- Circuit breaker ELCB-GFI (Ground Fault Interruptor)
- Circuit breaker for 230V 16A sockets
- Output sockets: 1x 230V 32A 2P+T

1x 230V 16A 2P+T

1x 230V 16A Schuko

• Earth terminal (PE)

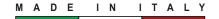
INTELINANO PLUS	CONTROLLER CHARACTERISTICS
Operating mode	• MAN AUTO
Display	Graphic back-light LCD display 128x64 pixels
LEDs	<ul><li>Engine operation</li><li>AUTO operating mode</li><li>Alarm</li></ul>
Buttons	<ul> <li>START button</li> <li>STOP button</li> <li>AUTO button</li> <li>N° 2 buttons for controller programming</li> </ul>
Generator Measures	<ul><li>Voltage: L1-L2</li><li>Current: I1</li><li>Powers: kVA</li><li>Frequency</li></ul>
Engine Measures	<ul> <li>Water temperature (optional)</li> <li>Oil pressure (optional)</li> <li>Fuel level</li> <li>Rpm meter</li> <li>Battery voltage</li> <li>Maintance</li> <li>Hours meter</li> </ul>
Generator Protections	Short circuit     Over-Udervoltage     Over-Uderfrequency     Phase sequence
Engine Protections	Overspeed High water temperature warning Low oil pressure warning Low fuel level warning Under battery voltage Battery charge alternator failure Start failure Stop failure Emergency stop
AMF functins (Automatic control panel only)	Measure mains voltage: L1-L2 / L2-L3 / L3-L1 - N-L1 / N-L2 / N-L3     Measure mains frequency     Three phase detection     Over-Under mains voltage     Over-Under mains frequency     Phase sequence

Features	<ul> <li>Event log and alarms (10 events)</li> <li>Operator interface with icons, no text</li> <li>Remote Start and Stop</li> <li>Pre-heating</li> <li>Fully programmable from the panel or from PC</li> <li>Direct connection to engines with ECU via Can bus J1939</li> <li>Manual operation (MRS) with remote start</li> <li>IP65 protection</li> <li>Operation temperature: -20°C / +70°C</li> </ul>
Communication	<ul><li>Setup USB port</li><li>CAN BUS interface (J1939 only)</li></ul>









# GE SX-10000 KTDM

## **WEIGHT - DIMENSIONS AND ACCESSORIES**



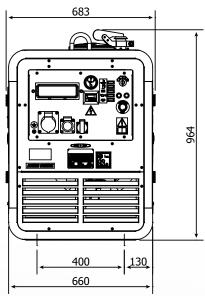
DRY WEIGHT MACHINE:

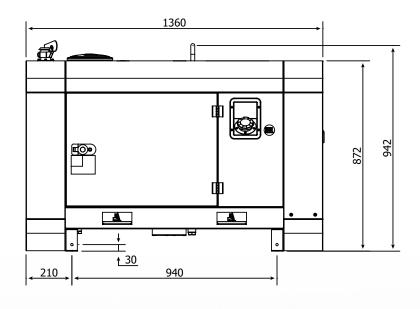
• 305 Kg

Generating set pictured may include optional accessories.



### DIMENSIONS DRAW







### OPTIONS ON REQUEST

- \*Automatic transfer switch unit PAC 17 (25A)
- \*TCM35 Remote control
- Moving trolley CM9
- Site tow CTL 10000
- Road trailer CTV4
- · Locking Fuel Cap
- · Earthing kit
- \* Only with Automatic Control Panel



### **VERSIONS ON REQUEST**

- Digital automatic control panel
- Version 230V/115V (CTE) (Only with Manual Control Panels)



**FACTORY INSTALLATION OPTIONS** 

Isometer

### GENERAL INFORMATION

### **COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS**

2006/42 / EC (Machines Directive)

2014/35 / EU (Low Voltage Directive)

2014/30 / EU (EMC Directive)

2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)

ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets )



ISO 9001:2008 - Cert. 0192

### WARRANTY

All devices are covered by the manufacturer's warranty.

