



# GENERATING SET GE SX-9000 KDM

The images are for reference



## FEATURES

- Control panel with digital control unit
- Automatic voltage regulation "AVR"
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor) 30mA
- Bundled base suitable to contain any liquids leakage from engine avoiding environmental pollution
- Central lifting eye
- The rounded edges of the canopy designed for rainwater drainage away
- Canopy with large opening to allow easy maintenance (replacement of air, oil, fuel filters)
- Central lifting eye
- Large fuel tank
- Fuel level sensor
- External plugs for oil and water drainage
- Emergency stop button
- Prepared for remote Start and Stop control
- Prepared for connection to PAC-I switching panel (ATS)
- Low noise level
- Meets EC/UE directives



water cooled



diesel



single-phase



electric start

## POWER RATINGS

* Stand-By single-phase power (LTP)	9.2 kVA (8.3 kW) / 230V / 40A
* Stand-By single-phase power (LTP)	9.2 kVA (8.3 kW) / 115V/80A
* PRP single-phase power	8.3 kVA (7.5 kW) / 230V / 36.1A
* PRP single-phase power	8.3 kVA (7.5 kW) / 115V/72.2 A
Frequency	50 Hz
Cos φ	0.9

\* Powers declared according to ISO 8528

## DEFINITION

Valid declared powers up to the followings environmental conditions: temperature 25°C, altitude 100 meters above sea level)

**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 unlimited numbers 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	KOHLER KDW702
Stand-By net power	10.3 kW (14 hp)
PRP net power	9.3 kW (12.6 hp)
COP net power	/
Cylinders / Displacement	2 / 686 cm <sup>3</sup> (0.686 lt.)
Bore / Stroke	75 / 77,6 (mm)
Compression ratio	22.8 :1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
<b>FUEL CONSUMPTION</b>	
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	1.9 lt./h
<b>COOLING SYSTEM</b>	
Total system cap. - only engine	lt - 1.1 lt
Fan air flow	72 m <sup>3</sup> /min.
<b>LUBRICATION SYSTEM</b>	
Total oil system capacity	/
Oil capacity in sump	1.6 lt
Oil consumption at full load	/

## EXHAUST SYSTEM

Maximum exhaust gas flow	2.2 m <sup>3</sup> /min.
Max. exhaust gas temp.	540 °C
Maximum back pressure	6000 kPa (0.06 bar)
External diameter exhaust pipe	/
<b>ELECTRICAL SYSTEM</b>	
Starter motor power	1.6 kW
Battery charging alternator cap.	40 A
Cold start	- 15 °C
With cold start aid	/
<b>AIR FILTER</b>	
Combustion air flow	1.02 m <sup>3</sup> /min.
<b>HEAT REJECTED AT FULL LOAD</b>	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/



## ALTERNATOR

### SYNCHRONOUS, SINGLE-PHASE, SELF-EXCITED, SELF-REGULATED

Continuous power	10 kVA
Stand-by power	11 kVA
Three phase voltage	220-240 / 110-120 Vac
Frequency	50 Hz
Cos φ	1
Model A.V.R.	HVR 11E
Voltage regulation acc.	± 1 %
Sustained short circuit current	≤ 2.5 I <sub>n</sub>
Transient dip (100% load)	< 15 %
Recovery time	/
Efficiency at 100% load	80 % (230V - Cos φ 1)
Insulation	Class H
Connection - Terminals	Star - N°4
Electromagnetic compatibility (R.F.I. suppr.)	/
Waveform distortion - THD	< 5.5 %
Telephone interference - THF	/

### REACTANCES (10 KVA - 230V)

Direct axis synchronous - X <sub>d</sub>	/
Direct axis transient - X' <sub>d</sub>	/
Subdirect axis transient - X'' <sub>d</sub>	/
Quadrature axis synchronous - X <sub>q</sub>	/
Quadr. axis subtransient - X'' <sub>q</sub>	/
Negative sequence - X <sub>2</sub>	/
Zero sequence - X <sub>0</sub>	/
<b>TIME CONSTANTS</b>	
Transient - T' <sub>d</sub>	/
Subtransient - T'' <sub>d</sub>	/
Open circuit - T' <sub>do</sub>	/
Armature - T <sub>a</sub>	/
Short-circuit ratio K <sub>cc</sub>	/
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 -37Ah / 330A CCA(EN)
IP protection degree	IP 23

* Measured acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	91.8 dB(A) (66.5 dB(A) @ 7m)
* Guaranteed acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	93 dB(A) (68 dB(A) @ 7m)
Performance class	G1

\* Acoustic power in accordance with Directive 2000/14/EC

# CONTROL PANELS

## AUTOMATIC MANUAL CONTROL PANEL

- Controller IntelliNano Plus
- Supply switch
- Engine protection circuit breakers :1x30A - 1 x 16A
- Emergency stop button
- Siren
- TCM 35 remote control plug
- PAC (ATS) plug 16 poles (Automatic control panel only)
- Battery charger (Automatic control panel only)
- Fuses: 1x 2A
- Circuit breaker
- Earth leakage circuit breaker (GFI)
- Output sockets: 1x 230V 32A 2P+T CEE IP 67
- 1x 230V 16A 2P+T CEE IP 67
- 1x 230V 16A 2P+T Schuko
- Circuit breaker for 230V/32A socket
- N.2 Circuit breakers for 230V/16A sockets 230 /16A
- Earth terminal (PE)



INTELINANO PLUS CONTROLLER CHARACTERISTICS	
Operating mode	<ul style="list-style-type: none"> <li>• MAN.- AUTO</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Graphic back-light LCD display 128x64 pixels</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>• Engine operation</li> <li>• AUTO operating mode</li> <li>• Alarm</li> </ul>
Buttons	<ul style="list-style-type: none"> <li>• START button</li> <li>• STOP button</li> <li>• AUTO button</li> <li>• N° 2 buttons for controller programming</li> </ul>
Generator Measures	<ul style="list-style-type: none"> <li>• Voltage : N-L1</li> <li>• Current : I1</li> <li>• Powers : kVA</li> <li>• Frequency</li> </ul>
Engine Measures	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>• Short circuit</li> <li>• Over-Udervoltage</li> <li>• Over-Uderfrequency</li> <li>• Phase sequence</li> </ul>

Engine Protections	<ul style="list-style-type: none"> <li>• Overspeed</li> <li>• High water temperature warning</li> <li>• Low oil pressure warning</li> <li>• Low fuel level warning</li> <li>• Under battery voltage</li> <li>• Battery charge alternator failure</li> <li>• Start failure</li> <li>• Stop failure</li> <li>• Emergency stop</li> </ul>
AMF functins (Automatic control panel only)	<ul style="list-style-type: none"> <li>• Measure mains voltage : N-L1</li> <li>• Measure mains frequency</li> <li>• Three phase detection</li> <li>• Over-Under mains voltage</li> <li>• Over-Under mains frequency</li> <li>• Phase sequence</li> </ul>
Features	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Setup USB port</li> <li>• CAN BUS interface (J1939 only)</li> </ul>

# CONTROL PANELS

## AUTOMATIC MANUAL CONTROL PANEL 230V/115V

- Controller IntelliNano Plus
- Supply switch
- Engine protection circuit breakers :1x30A - 1 x 16A
- Emergency stop button
- Siren
- TCM 35 remote control plug
- Fuses: 2x 2A
- Circuit breaker
- Earth leakage circuit breaker (GFI)
- Output sockets: 1x 230V 32A 2P+T CEE  
1x 230V 16A 2P+T CEE  
2x 115V 32A 2P+T CEE  
1x 115V 16A 2P+T CEE
- Thermal circuit breakers for sockets: 3 x 30A – 2x 16A
- 230V-115V Voltage switch
- Earth terminal (PE)



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LEDs	<ul style="list-style-type: none"> <li>• Engine operation</li> <li>• AUTO operating mode</li> <li>• Alarm</li> </ul>
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Generator Measures	<ul style="list-style-type: none"> <li>• Voltage : N-L1</li> <li>• Current : I1</li> <li>• Powers : kVA</li> <li>• Frequency</li> </ul>
Engine Measures	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>• Short circuit</li> <li>• Over-Udervoltage</li> <li>• Over-Uderfrequency</li> <li>• Phase sequence</li> </ul>

Engine Protections	<ul style="list-style-type: none"> <li>• Overspeed</li> <li>• High water temperature warning</li> <li>• Low oil pressure warning</li> <li>• Low fuel level warning</li> <li>• Under battery voltage</li> <li>• Battery charge alternator failure</li> <li>• Start failure</li> <li>• Stop failure</li> <li>• Emergency stop</li> </ul>
AMF functins (Automatic control panel only)	<ul style="list-style-type: none"> <li>• Measure mains voltage : N-L1</li> <li>• Measure mains frequency</li> <li>• Three phase detection</li> <li>• Over-Under mains voltage</li> <li>• Over-Under mains frequency</li> <li>• Phase sequence</li> </ul>
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Communication	<ul style="list-style-type: none"> <li>• Setup USB port</li> <li>• CAN BUS interface (J1939 only)</li> </ul>



# WEIGHT - DIMENSIONS AND ACCESSORIES

GE SX-9000 KDM

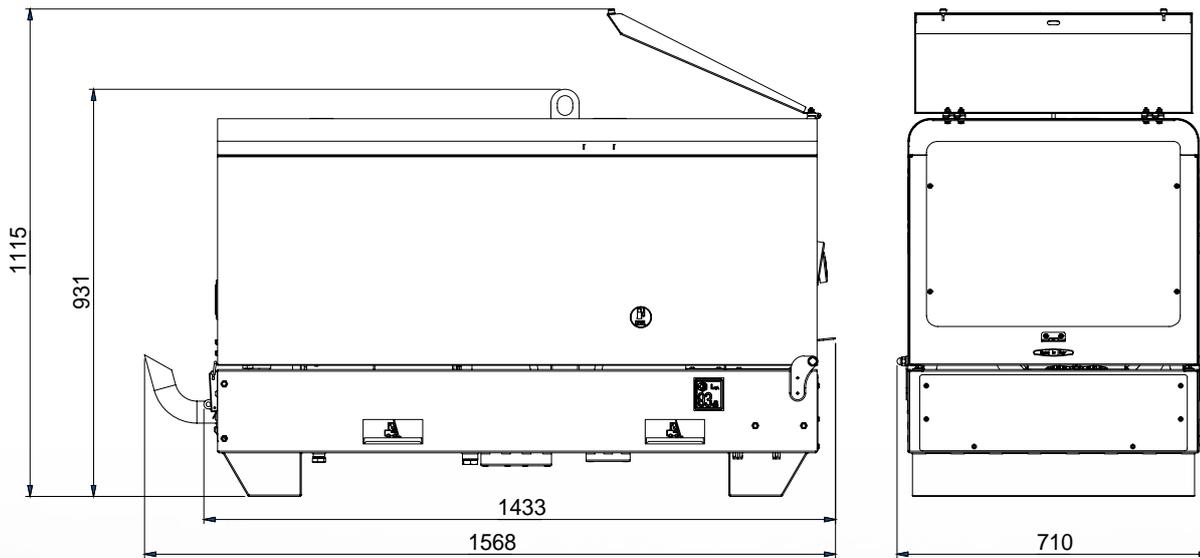


**DRY WEIGHT MACHINE:**  
• 340 Kg

Generating set pictured may include optional accessories.



**DIMENSIONS DRAW (mm)**



### ⊕ OPTIONS ON REQUEST

- Load transfer switch (ATS) PAC 17(40A) single-phase version (Only with 230V automatic control panel)
- Load transfer switch (ATS) PAC I 42 809ATS (60A)
- Remote control TCM35
- Trolley CTM255
- Site tow CTL255
- Road trailer CTV4
- Earthing

### ☀️ VERSIONS ON REQUEST

- Version with automatic panel
- 230V / 115V version (manual version only)

### 🔧 FACTORY INSTALLATION OPTIONS

- Gauges - water temperature and oil pressure
- Engine heater (Only with Automatic control panel)
- Main battery switch
- Isometer
- Radio control

## 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 9001:2015 - Cert. 0192

### WARRANTY

All devices are covered by the manufacturer's warranty.

The company reserves the right to change this specification without notice. For further information please contact the sales department.

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