

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 ³ (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
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	1.9 lt./h
COOLING SYSTEM	
Total system cap. - only engine	lt - 1.1 lt
Fan air flow	72 m ³ /min.
LUBRICATION SYSTEM	
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 ³ /min.
Max. exhaust gas temp.	540 °C
Maximum back pressure	6000 kPa (0.06 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	
Starter motor power	1.6 kW
Battery charging alternator cap.	40 A
Cold start	- 15 °C
With cold start aid	/
AIR FILTER	
Combustion air flow	1.02 m ³ /min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/



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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	$\leq 2.5 I_n$
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_d	/
Direct axis transient - X'_d	/
Subdirect axis transient - X''_d	/
Quadrature axis synchronous - X_q	/
Quadr. axis subtransient - X''_q	/
Negative sequence - X_2	/
Zero sequence - X_0	/
TIME CONSTANTS	
Transient - T'_d	/
Subtransient - T''_d	/
Open circuit - T'_{do}	/
Armature - T_a	/
Short-circuit ratio K_{cc}	/
IP protection degree	IP 23
Cooling air flow	0,082 m ³ /sec
Coupling Bearing	Direct SAE 5 - 7 1/2 - 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_{WA} (pressure L_{pA})	91.8 dB(A) (66.5 dB(A) @ 7m)
* Guaranteed acoustic power L_{WA} (pressure L_{pA})	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	• MAN. - AUTO
Display	• Graphic back-light LCD display 128x64 pixels
LEDs	• Engine operation • AUTO operating mode • Alarm
Buttons	• START button • STOP button • AUTO button • N° 2 buttons for controller programming
Generator Measures	• Voltage : N-L1 • Current : I1 • Powers : kVA • Frequency
Engine Measures	• Water temperature (optional) • Oil pressure (optional) • Fuel level • Rpm meter • Battery voltage • Maintance • Hours meter
Generator Protections	• Short circuit • Over-Undervoltage • Over-Underfrequency • 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 : N-L1 • Measure mains frequency • Three phase detection • Over-Under mains voltage • Over-Under mains frequency • Phase sequence
Features	• Event log and alarms (10 events) • Operator interface with icons, no text • Remote Start and Stop • Pre-heating • Fully programmable from the panel or from PC • Direct connection to engines with ECU via Can bus J1939 • Manual operation (MRS) with remote start • IP65 protection • Operation temperature: -20°C / +70°C
Communication	• Setup USB port • CAN BUS interface (J1939 only)

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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WEIGHT - DIMENSIONS AND ACCESSORIES

GE SX-9000 KDM



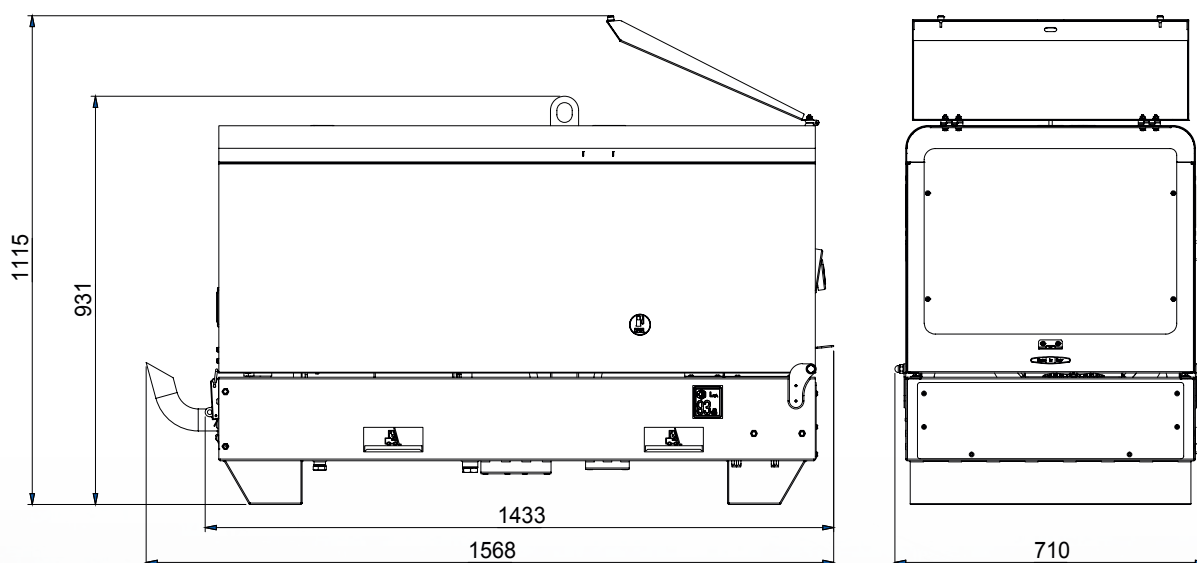
DRY WEIGHT MACHINE:

- 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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