



GENERATING SET GE SX-16000 KDM

The images are for reference



FEATURES

- Digital control unit
- Alternator with electronic voltage regulation "AVR"
- General magnetothermic switch
- High sensitivity differential switch 30mA
- Sealed base capable of containing any leaks of liquids present in the engine, avoiding environmental pollution
- Central lifting hook
- Rounded edges to allow rainwater to drain
- Canopy with wide opening to allow easy maintenance (replacement of air, oil and fuel filters)
- Large capacity tank
- Fuel level sensor
- External plugs for oil and water drainage
- Emergency button
- Prepared for remote Start and Stop control
- Prepared for connection to PAC-I switchboard (ATS)
- Automatic version for emergency intervention in the event of a power failure. (Switchboard excluded)
- Low noise level
- Compliant with EC / EU Directives



water cooled



diesel



single-phase



electric start

POWER RATINGS

* Stand-By single-phase power (LTP)	16 kVA (14.4 kW) / 230V/69.6A
* PRP single-phase power	14.5 kVA (13 kW) /230V/63A
* Stand-By single-phase power (LTP)	16 kVA (14.4 kW) / 115V/139.2A
* PRP single-phase power	14.5 kVA (13 kW) /115V/126A
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 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	KOHLER KDW1003
Stand-By net power	17.15 kW (23.3 hp)
PRP net power	15.6 kW (21.2 hp)
COP net power	/
Cylinders / Displacement	3 / 1028 cm ³ (1,028 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)	5.4 lt./h
100 % to PRP	4.9 lt./h
75 % to PRP	3.7 lt./h
50 % to PRP	2.7 lt./h
COOLING SYSTEM	
Total system cap. - only engine	/
Fan air flow	93 m ³ /min.
LUBRICATION SYSTEM	
Total oil system capacity	2.6 lt.
Oil capacity in sump	2.5 lt
Oil consumption at full load	/

EXHAUST SYSTEM

Maximum exhaust gas flow	3.2 m ³ /min.
Max. exhaust gas temp.	540 °C
Maximum back pressure	8000 kPa (0.08 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	1.6 m ³ /min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/

ALTERNATOR

SYNCHRONOUS, SINGLE-PHASE, SELF-EXCITED, SELF-REGULATED	
Continuous power	15 kVA
Stand-by power	16.5 kVA
Three phase voltage	220 ÷ 240 Vac
Frequency	50 Hz
Cos φ	0.9
Model A.V.R.	AVR960D
Voltage regulation acc.	± 2 %
Sustained short circuit current	≤ 4 In
Transient dip (100% load)	< 15 %
Recovery time	/
Efficiency at 100% load	83.5 % (230V - Cos φ1)
Insulation	Class H
Connection - Terminals	Serie - N°4
Electromagnetic compatibility (R.F.I. suppr.)	/
Waveform distortion - THD	< 6 %
Telephone interference - THF	/

REACTANCES (15 KVA - 230V)	
Direct axis synchronous - Xd	/
Direct axis transient - X'd	/
Subdirect axis transient - X''d	/
Quadrature axis synchronous - Xq	/
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	/
Coupling Bearing	Direct SAE 5 - 6 1/2 - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	38 lt.
Running time (75% to PRP)	10.3 h
Starter battery	12 Vdc -50Ah / 420A CCA(EN)
IP protection degree	IP 23

* Measured acoustic power LwA (pressure LpA)	93.6 dB(A) (68.6 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	95 dB(A) (70 dB(A) @ 7m)
Performance class	G1

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

AUTOMATIC CONTROL PANEL 230V

- IntelliNano Plus controller
- Thermal cut-offs for motor protection: 1x30A - 1 x 16A
- Emergency stop button
- Siren
- TCM 35 remote control connector
- 16-pin PAC connector (ATS)
- Charger
- Fuses: 2x 2A
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Magnetothermic switch for 230V 32A sockets
- Magnetothermic switch for 230V 16A sockets
- Output sockets: 1x 230V 63A 2P + T CEE IP 67
1x 230V 32A 2P + T CEE IP 67
1x 230V 16A 2P + T CEE IP 67
1x 230V 16A 2P + T Schuko
- Earth terminal (PE)

CONTROL PANEL 230V/115V

- IntelliNano Plus controller
- Thermal cut-offs for motor protection: 1x30A - 1 x 16A
- Emergency stop button
- Siren
- TCM 35 remote control connector
- Fuses: 2x 2A
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Output sockets: 1x 230V 32A 2P + T CEE
2x 230V 16A 2P + T CEE
2x 115V 32A 2P + T CEE
3x 115V 16A 2P + T CEE
- Thermal cut-offs for socket protection: 3 x 30A - 5 x16A
- Earth terminal (PE)



CONTROL PANEL

CONTROL PANEL 230V

- IntelliNano Plus controller
- Thermal cut-offs for motor protection: 1x30A - 1 x 16A
- Emergency button
- Siren
- TCM 35 remote control connector
- 2x2A fuses
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Magnetothermic switch for 230V 32A sockets
- Magnetothermic switch for 230V 16A sockets
- CEE output sockets: 1x 230V 63A 2P + T CEE IP 67
 1x 230V 32A 2P + T CEE IP 67
 2x 230V 16A 2P + T CEE IP 67
- SCHUKO output sockets: 1x 230V 63A 2P + T CEE IP 67
 1x 230V 32A 2P + T CEE IP 67
 2x 230V 16A 2P + T SCHUKO
- Earth terminal (PE)



INTELINANO PLUS CONTROLLER CHARACTERISTICS	
Operating mode	<ul style="list-style-type: none"> • MAN. - AUTO
Display	<ul style="list-style-type: none"> • Graphic back-light LCD display 128x64 pixels
LEDs	<ul style="list-style-type: none"> • Engine operation • AUTO operating mode • Alarm
Buttons	<ul style="list-style-type: none"> • START button • STOP button • AUTO button • N° 2 buttons for controller programming
Generator Measures	<ul style="list-style-type: none"> • Voltage : L1-L2 • Current : I1 • Powers : kVA • Frequency
Engine Measures	<ul style="list-style-type: none"> • Water temperature (optional) • Oil pressure (optional) • Fuel level • Rpm meter • Battery voltage • Maintance • Hours meter
Generator Protections	<ul style="list-style-type: none"> • Short circuit • Over-Undervoltage • Over-Underfrequency • Phase sequence

Engine Protections	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Setup USB port • CAN BUS interface (J1939 only)



WEIGHT - DIMENSIONS AND ACCESSORIES

GE SX-16000 KDM



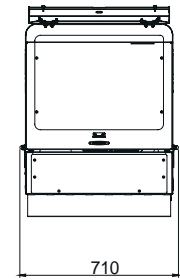
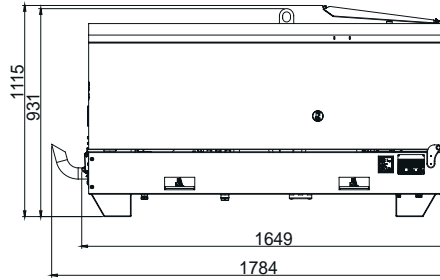
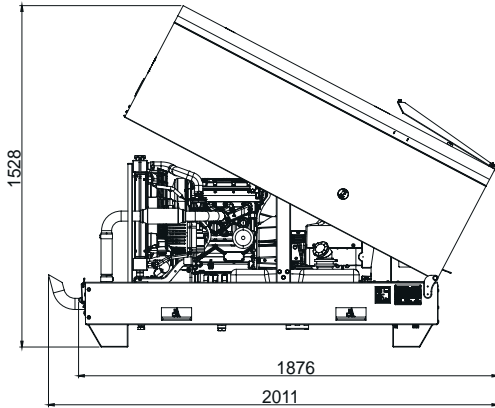
DRY WEIGHT MACHINE:

- 388 Kg

Generating set pictured may include optional accessories.



DIMENSIONS DRAW (mm)



OPTIONS ON REQUEST

- Load transfer switch (ATS) PAC 28 - Single-Phase (70A) (Only with automatic control panel)
- Load transfer switch (ATS) PAC I-28 809ATS - Single-Phase(70A)
- Remote control TCM35
- Site tow CTL255
- Road trailer CTV4
- Earthing



AVAILABLE VERSIONS

REMOTE	• Radio control
HEATER	• Heater WH (Only with automatic control panel)
PLUS	• Gauges - water temperature and oil pressure
	• Main battery switch
TOP	• Gauges - water temperature and oil pressure
	• Main battery switch
	• 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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