



# GENERATING SET GE SX-18000 KDT

The images are for reference



## FEATURES

- Control panel with digital control unit
- Automatic voltage regulation "AVR"
- Four pole circuit breaker
- High sensitivity 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)
- Automatic version for emergency intervention in the event of a power failure
- Low noise level
- Meets EC/UE directives



water cooled



diesel



three-phase



electric start

## POWER RATINGS

* Stand-By three-phase power (LTP)	18 kVA (14.4 kW) / 400V/26A
* PRP three-phase power	16.5 kVA (13.2 kW) / 400V/23.8A
* PRP single-phase power	9 kVA/kW / 230V/39.1A
Frequency	50 Hz
Cos φ	0.8

\* 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 <sup>3</sup> (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
<b>FUEL CONSUMPTION</b>	
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
<b>COOLING SYSTEM</b>	
Total system cap. - only engine	/
Fan air flow	93 m <sup>3</sup> /min.
<b>LUBRICATION SYSTEM</b>	
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 <sup>3</sup> /min.
Max. exhaust gas temp.	540 °C
Maximum back pressure	8000 kPa (0.08 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	1.6 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, THREE-PHASE, SELF-EXCITED, SELF-REGULATED	
Continuous power	18 kVA
Stand-by power	19.5 kVA
Three phase voltage	380 ÷ 415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	AVR960D
Voltage regulation acc.	± 1.5 %
Sustained short circuit current	≤ 3 I <sub>n</sub>
Transient dip (100% load)	< 15 %
Recovery time	/
Efficiency at 100% load	/
Insulation	Class H
Connection - Terminals	Star - N°6
Electromagnetic compatibility (R.F.I. suppr.)	/
Waveform distortion - THD	< 5 %
Telephone interference - THF	/

REACTANCES (18 KVA - 400V)	
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>	/
TIME CONSTANTS	
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	/
Coupling   Bearing	Direct SAE 5 - 7 1/2 - N°1

## GENERAL SPECIFICATIONS

Fuel tank capacity	38 lt.
Running time (75% to PRP)	10.5 h
Starter battery	12 Vdc -50Ah / 420A CCA(EN)
IP protection degree	IP 23

* Measured acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	93 dB(A) (68 dB(A) @ 7m)
* Guaranteed acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	94 dB(A) (69 dB(A) @ 7m)
Performance class	G1

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



## AUTOMATIC CONTROL PANEL

- Controller IntelliNano Plus
- Engine protection circuit breakers :1x30A - 1x16A
- Emergency stop button
- Siren
- Emergency stop button
- TCM 35 remote control plug
- PAC (ATS) plug 16 poles (Automatic control panel only)
- Battery charger (Automatic control panel only)
- Fuses
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Circuit breaker for 230V 16A sockets
- 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 : L1-L2</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>• Maintenance</li> <li>• Hours meter</li> </ul>

Generator Protections	<ul style="list-style-type: none"> <li>• Short circuit</li> <li>• Over-Udvoltage</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 : L1-L2 / L2-L3 / L3-L1 - N-L1 / N-L2 / N-L3</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>

## SOCKET COMBINATIONS AVAILABLE

	VERSION	
	400V/230V	400V/230V with SCHUKO
1x 400V 32A 3P+N+T CEE IP67	•	•
1x 230V 16A 2P+T CEE IP67	•	
1x 230V 16A 2P+T Schuko	•	
2x 230V 16A 2P+T Schuko		•



# WEIGHT - DIMENSIONS AND ACCESSORIES

GE SX-18000 KDT



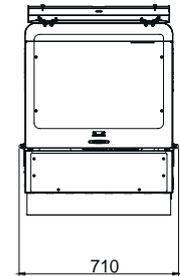
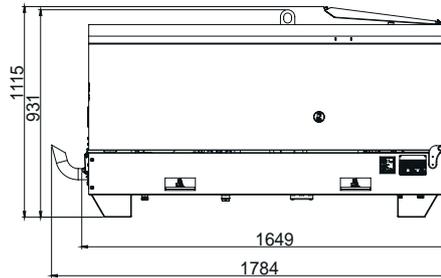
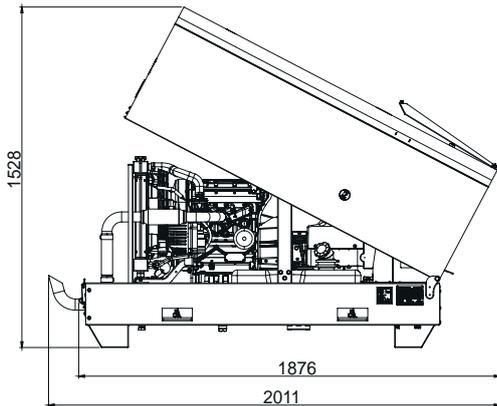
### DRY WEIGHT MACHINE:

- 370 Kg

Generating set pictured may include optional accessories.



### DIMENSIONS DRAW (mm)



### OPTIONS ON REQUEST

- Load transfer switch (ATS) PAC 28 (40A) (Only with automatic control panel)
- Load transfer switch (ATS) PAC I 42 809ATS (60A)
- 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
DGVU	• ELCB-GFI (for socket 400V 32A) or ELCB-GFI type B
	• Isometer
	• 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.

© MOSA - Viale Europa, 59 - 20090 Cusago (Milano) - Italy - phone +39-0290352.1 - fax + 39-0290390466 E-mail: info@mosa.it Web site: www.mosa.it

