



# GENERATING SET GE 35 PSX

The images are for reference



## FEATURES

- Automatic voltage regulation “AVR” with three-phase sensing
- Engine cowling side, can be completely opened, which facilitates all maintenance operations
- The recessed control panel is lockable and houses the sockets and machine
- Central lifting eye
- Ready for connection to automatic transfer unit EAS (AMF + ATS)
- Meets EC directives for noise and safety



water cooled



diesel



three-phase power



electric



super silenced

## POWER RATINGS

* Stand-By three-phase power (LTP)	33 kVA (26.4 kW) / 400 V / 47.6 A
* PRP three-phase power	30 kVA (24 kW) / 400 V / 43.3 A
* PRP single-phase power	11 kVA / 230 V / 47.6 A
* COP power	/
Frequency	50 Hz
Cos φ	0.8

\* Output powers according to ISO 8528-1

## 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 1500 RPM

### 4 STROKE, DIRECT INJECTION, NATURAL ASPIRATED

Model	PERKINS - 1103A-33G
* Stand-By net power	30.4 kWm (41.3 hp)
* PRP net power	27.7 kWm (37.7 hp)
* COP net power	/
Cylinders / Displacement	3/ 3300 cm <sup>3</sup> (3.3 lt.)
Bore / Stroke	105 / 127 (mm)
Compression ratio	19.25 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	752 kPa - 684 kPa
Speed governor type	Mechanical
<b>FUEL CONSUMPTION</b>	
110 % (Stand-by power)	7.9 lt./h
100 % to PRP	7.1 lt./h
75 % to PRP	5.4 lt./h
50 % to PRP	3.9 lt./h
<b>COOLING SYSTEM</b>	Water
Total system cap. - only engine	10.2 lt - 4.,4 lt
Fan air flow	53 m <sup>3</sup> /min.
<b>LUBRICATION SYSTEM</b>	
Total oil system capacity	8.3 lt
Oil capacity in sump	7.8 lt ÷ 6.2 lt.
Oil consumption at full load	< 0.012 lt./h

\* Output powers according to ISO 3046-1

## EXHAUST SYSTEM

Maximum exhaust gas flow	5.8 m <sup>3</sup> /min.
Max. exhaust gas temp.	520 °C
Maximum back pressure	8 kPa (0.08 bar)
External diameter exhaust pipe	/
<b>ELECTRICAL SYSTEM</b>	12 Vdc
Starter motor power	3 kW
Battery charging alternator cap.	65 A
Cold start	- 10°C
With cold start aid	- 25°C
<b>AIR FILTER</b>	Dry
Combustion air flow	2.16 m <sup>3</sup> /min
<b>HEAT REJECTED AT FULL LOAD</b>	
To exhaust system	25 kW - 1423 Btu/min.
To water and oil	18 kW - 1025 Btu/min.
Radiated to room	6.0 kW - 342 Btu/min.
To charge cooler	/

## ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuous power	30 kVA
Stand-by power	33 kVA
Three phase voltage	380-415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30
Voltage regulation acc.	± 1 %
Sustained short circuit current	2.5I <sub>n</sub>
Transient dip (100% load)	10 %
Recovery time	≤ 3 sec.
Efficiency at 100% load	87.1 % (400V - Cos φ 0.8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN55011
Waveform distortion - THD	< 3 %
Telephone interference - THF	/

REACTANCES (20 kVA - 400V)	
Direct axis synchronous - X <sub>d</sub>	243 %
Direct axis transient - X' <sub>d</sub>	19 %
Subdirect axis transient - X'' <sub>d</sub>	8 %
Quadrature axis synchronous - X <sub>q</sub>	135 %
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>	0.01 sec
Subtransient - T'' <sub>d</sub>	0.005 sec
Open circuit - T' <sub>do</sub>	0.125 sec
Armature - T <sub>a</sub>	/
Short-circuit ratio K <sub>cc</sub>	0.58
IP protection degree	IP 23
Cooling air flow	0.115 m <sup>3</sup> /sec.
Coupling   Bearing	Direct SAE 3 - 11.5 ½ - N°1

## GENERAL SPECIFICATIONS

Fuel tank capacity	65 lt.
Running time (75% to PRP)	12 h
Starter battery	12 Vdc - 100Ah
IP protection degree	IP 23

* Measured acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	90 dB(A) (65 dB(A) @ 7m)
* Guaranteed acoustic power L <sub>WA</sub> (pressure L <sub>pA</sub> )	91 dB(A) (66 dB(A) @ 7m)
Performance class (ISO 8528)	G2

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

## CONTROL PANEL

- Controller EP6
- Fuel level gauge
- Siren
- Emergency stop button
- Local-Remote Start switch
- EAS plug
- TCM 35 remote control plug
- Voltmeter switch 0 - RS - ST - TR
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Output sockets: 1x 400V 63A 3P+N+T  
1x 400V 32A 3P+N+T  
1x 230V 32A 2P+T  
2x 230V 16A 2P+T
- Circuit breaker for 230V 16A socket
- Earth terminal (PE)

EP6 CONTROLLER CHARACTERISTICS	
Modalità Operative	OFF - MAN. - AUTO
Display	4-digits display
LEDs	Engine is running AUTO mode
Buttons/controls	Starter key AUTO button N° 5 pulsanti per la programmazione del controller
Measures	Generator voltage Generator current Frequency Engine speed Battery voltage Charger battery voltage Hourmeter
Alarms	Low oil pressure High temperature Belt break Low level fuel Emergency stop button Starting failure Over-under generator voltage Over-under frequency Over-under speed High-low battery voltage Overload generator Internal memory failure
Functions	Remote starting (only to AUTO) Cold start aid Automatic periodic test (only to AUTO) Generator contactor control





# WEIGHT - DIMENSIONS AND ACCESSORIES

GE 35 PSX



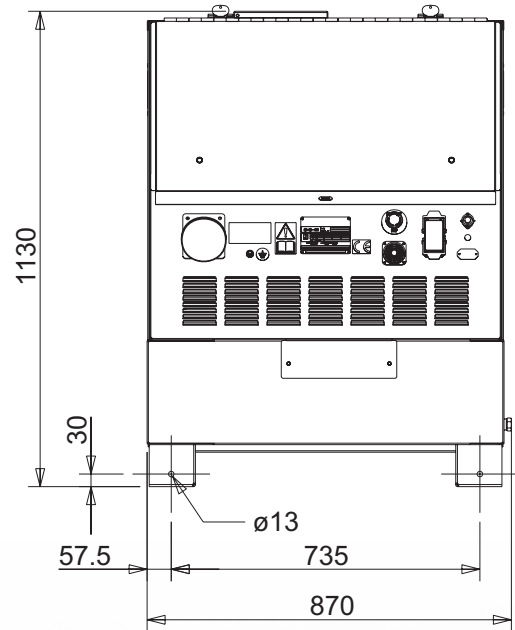
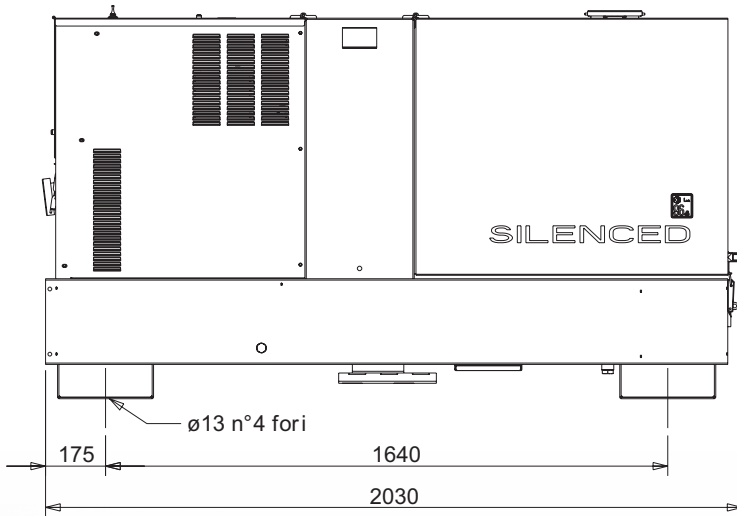
### DRY WEIGHT MACHINE:

- 920 Kg

Generating set pictured may include optional accessories.



### DIMENSIONS DRAW



### OPTIONS ON REQUEST

- Automatic transfer unit EAS 42-809 (60A)
- Remote control TCM35
- Road trailer CTV1/O
- Road trailer CTV1/S
- Locking Fuel Cap
- Earthing kit



### VERSIONS ON REQUEST

- Version with SCHUKO



### FACTORY INSTALLATION OPTIONS

- Radio control
- Isometer
- Spark arrestor
- Gauges - water temperature and oil pressure
- Blow-by oil gases separator filter
- Oil drain pump
- Engine water heater WH
- Cold start aid

## 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.

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

