



# 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)
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY



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>                            |                                   |
| 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

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>EXHAUST SYSTEM</b>             |                          |
| 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>          |                          |
| 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>                 |                          |
| 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<br>AUTO mode   |
| Buttons/controls               | Starter key<br>AUTO button<br>N° 5 pulsanti per la programmazione del controller   |
| Measures                       | Generator voltage<br>Generator current<br>Frequency<br>Engine speed<br>Battery voltage<br>Charger battery voltage<br>Hoursmeter  |
| Alarms                         | Low oil pressure<br>High temperature<br>Belt break<br>Low level fuel<br>Emergency stop button<br>Starting failure<br>Over-under generator voltage<br>Over-under frequency<br>Over-under speed<br>High-low battery voltage<br>Overload generator<br>Internal memory failure |
| Functions                      | Remote starting (only to AUTO)<br>Cold start aid<br>Automatic periodic test (only to AUTO)<br>Generator contactor control  |

# WEIGHT - DIMENSIONS AND ACCESSORIES

GE 35 PSX



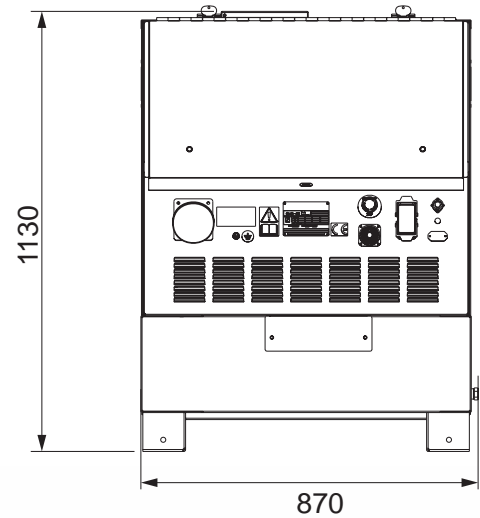
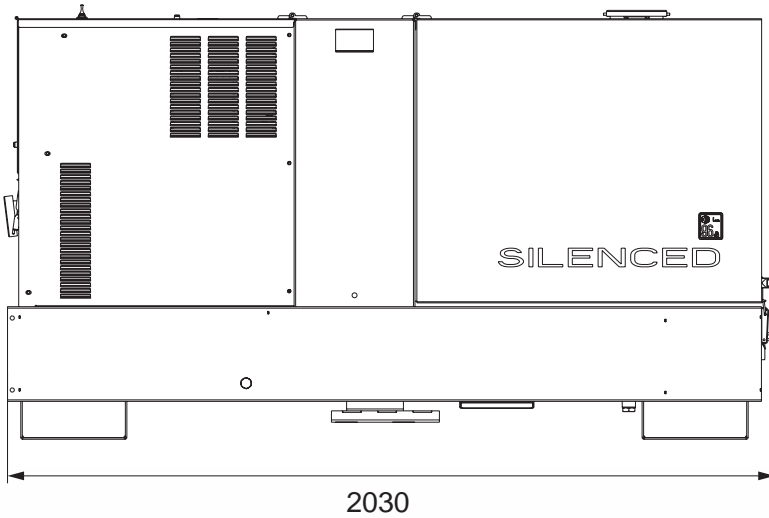
## DRY WEIGHT MACHINE:

- 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 (Machinery Directive)
- 2014/35 / UE (Low Voltage Directive)
- 2014/30 / UE (Electromagnetic Compatibility Directive)
- 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.

Non-contractual document. Specification subject to change without notice.

© MOSA - Viale Europa, 59 - 20047 Cusago (Milano) - Italy - phone +39-0290352.1 - fax + 39-0290390466 E-mail: info@mosa.it Web site: www.mosa.it

