

language

# **GENERATING SET** GE 55 PS

The images are for reference

\* PRP three-phase power

\* PRP single-phase power

\* Output powers according to ISO 8528-1

\* COP power

Frequency

 $\text{Cos} \ \phi$ 



POWER RATINGS

50 Hz

0.8

46 kVA (36.8 kW) / 400V / 66.4 A

17 kVA / 230V / 73.9 A

\* Stand-By three-phase power (LTP) 51 kVA (40.8 kW) / 400V / 73.6 A

| FEATU | DEG |
|-------|-----|
| ILAIU |     |

- Automatic voltage regulation "AVR"
- 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
- Silenced
- · Ready for connection to automatic transfer unit EAS (AMF + ATS)
- · Meets EC directives for noise and safety



#### DEFINITION

Valid declared powers up to the followings environmental conditions: temperature  $25^{\circ}$ 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, DIF                                       | RECT INJECTION, TURBOCHARGED      |
|---|-----------------------------------|
| Model   | PERKINS - 1103A-33TG1             |
| Cylinders / Displacement                            | 3/ 3300 cm <sup>3</sup> (3.3 lt.) |
| Bore / Stroke                                       | 105 / 127 (mm)                    |
| Compression ratio                                   | 17.25 : 1                         |
| * Stand-By net power                                | 45.6 kWm (62 hp)                  |
| * PRP net power                                     | 41.3 kWm (56.2 hp )               |
| * COP net power                                     | /                                 |
| BMEP (Brake Mean Effective<br>Pressure : LTP - PRP) | 1128 kPa - 1023 kPa               |
| Speed governor type                                 | Mechanical                        |
| FUEL CONSUMPTION                                    |                                   |
| 110 % (Stand-by power)                              | 219 g/kWh - 12 lt./h              |
| 100 % to PRP  | 217 g/kWh - 10.7 lt./h            |
| 75 % to PRP   | 220 g/kWh - 8.2 lt./h             |
| 50 % to PRP   | 264 g/kWh - 5.7 lt./h             |
| COOLING SYSTEM                                      | Water                             |
| Total system cap only engine                        | 10.2 lt - 4.,4 lt                 |
| Fan air flow  | 53 m <sup>3</sup> /min.           |
| LUBRIFICATION SYSTEM                                |                                   |
| Total oil system capacity                           | 8.3 lt                            |
| Oil capacity in sump                                | 6.2 lt ÷ 7.8 lt                   |
| Oil consumption at full load                        | < 0.016 lt./h                     |
| Output powers according to ISO 3046-1               |                                   |

Output powers according to ISO 3046-1

| EXHAUST SYSTEM                   |                          |
|----------------------------------|--------------------------|
| Maximum exhaust gas flow         | 7.7 m <sup>3</sup> /mim. |
| Max. exhaust gas temp.           | 537 °C                   |
| Maximum back pressure            | 10 kPa (0.10 bar)        |
| External diameter exhaust pipe   | 1                        |
| ELECTRICAL SYSTEM                | 12 Vdc                   |
| Starter motor power              | 3 kW                     |
| Battery charging alternator cap. | 65 A                     |
| Cold start                       | - 10°C                   |
| With cold start aid              | - 25 °C                  |
| AIR FILTER                       | Dry                      |
| Combustion air flow              | 3.1 m <sup>3</sup> /min  |
| HEAT REJECTED AT FULL LOAD       |                          |
| To exhaust system                | 35 kW - 1992 Btu/min.    |
| To water and oil                 | 30 kW - 1707 Btu/min.    |
| Radiated to room                 | 8 kW - 455 Btu/min.      |
| To charge cooler                 | /                        |

Maahantuoja:

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### ALTERNATOR

| SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS |                           |  |
|---|---------------------------|--|
| Continuos power   | 48 kVA                    |  |
| Stand-by power  | 53 kVA                    |  |
| Three phase voltage   | 380-415 Vac               |  |
| Frequency   | 50 Hz                     |  |
| Cos φ   | 0.8                       |  |
| Model A.V.R.  | MARK V                    |  |
| Voltage regulation acc.   | ± 5 %                     |  |
| Sustained short circuit current                                   | 210 A                     |  |
| Transient dip (100% load)   | < 20 %                    |  |
| Recovery time   | < 0.3 sec                 |  |
| Efficiency at 100% load   | 88.7 % (400V - Cos φ 0.8) |  |
| Insulation  | Classe H                  |  |
| Connection - Terminals  | Stella - N°12             |  |
| Electromagnetic compatibility (<br>R.F.I. suppr.)                 | EN55011                   |  |
| Waveform distorsion - THD   | < 2 %                     |  |
| Thelephone interference - THF                                     | < 2 %                     |  |

| REACTANCES (48 kVA - 400V)       |                            |
|----------------------------------|----------------------------|
| Direct axis synchronuos - Xd     | 270 %                      |
| Direct axis transient - X'd      | 22.5 %                     |
| Subdirect axis transient - X"d   | 11.4 %                     |
| Quadrature axis synchronuos - Xq | 150 %                      |
| Quadr. axis subtransient - X"q   | 13.2 %                     |
| Negative sequence - X2           | 12.3 %                     |
| Zero sequence - X0               | 2.6 %                      |
| TIME CONSTANTS                   |                            |
| Transient - T'd                  | 0.055 sec                  |
| Subtransient - T"d               | 0.010sec                   |
| Open circuit - T'do              | 0.57 sec                   |
| Armature - Ta                    | 0.010 sec                  |
| Short-circuit ratio Kcc          | 0.40                       |
| Cooling air flow                 | 0.21 m <sup>3</sup> /sec.  |
| Coupling   Bearing               | Direct SAE 3 -11 1/2 - N°1 |

### **GENERAL SPECIFICATIONS**

| Fuel tank capacity        | 65 lt.        |
|---------------------------|---------------|
| Running time (75% to PRP) | 8 h           |
| Starter battery           | 12 Vdc -100Ah |
| IP protection degree      | IP 23         |

## CONTROL PANEL

- Controller EP6
- Fuel level gauge
- Siren
- Emergency stop buttom
- Local-Remote Start switch
- EAS plug
- TCM 35 remote control plug
- Voltmeter switch 0 RS ST TR
- Four pole circuit breakerELCB-GFI (Ground Fault Interruptor) 30 mA
- Terminal output with bus bar
- Output sockets 1x 230V 16A 2P+T SCHUKO
- Earth leakage with integral over-current circuit breaker for 230V 16A socket 30mA
- Earth terminal (PE)

| * Measured acoustic power LwA<br>(pressure LpA)   | 94 dB(A) (69 dB(A) @ 7m) |
|---|--------------------------|
| * Guaranteed acoustic power LwA<br>(pressure LpA) | 95 dB(A) (70 dB(A) @ 7m) |
| Performance class (ISO 8528)                      | G2                       |

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

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| EP6 C              | 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<br>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>Hight-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   |

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WEIGHT - DIMENSIONS AND ACCESSORIES

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| DRY WEIGHT MACHINE:<br>• 940 Kg   |                     | Generating set pictured may incl   | ude optional accessories. |
|---|---------------------|--|---------------------------|
|   |                     |  |                           |
| <ul> <li>OPTIONS ON REQUEST</li> <li>Automatic transfer unit EAS 76 - 809 (110A)</li> <li>Remote control TCM35</li> <li>Road trailer CTV 1/0</li> <li>Road trailer CTV 1/S</li> <li>Site tow CTL35</li> <li>Earthing kit</li> <li>Locking Fuel Cap</li> </ul> | VERSIONS ON REQUEST | <ul> <li>FACTORY INSTALLATION</li> <li>Engine heater</li> <li>Gauges - water temperature</li> <li>Spark arrestor</li> <li>Cold start aid</li> <li>Isometer</li> <li>Radio control</li> <li>Oil drain pump</li> </ul> |                           |

#### 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

