MOSA

language

MADE IN ITALY

GENERATING SET
GE 225 FXC

The images are for reference

FEATURES

- Automatic voltage regulation "AVR"
- Large doors for better and easy maintenance (air, oil, fuel filters replacement)
- Control panel with digital control unit available with automatic or manual version
- Bunded base suitable to contain any liquids leakage from engine avoiding
- environmental pollution
- Single point lifting eye
- Meets EC directives for noise and safety

water cooled | diesel | three-pase power | ekectric starter

POWER RATINGS	
* Stand-By three-phase power (LTP)	220 kVA (176 kW) / 400V / 317.5A
* PRP three-phase power	200 kVA (160 kW) / 400V / 288.7A
* PRP single-phase power	165 kVA (132 kW) / 400V / 238.2A
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, TURBOCHARGED		
Model	FPT N67 TM7	FTP N67 TE3F (Stage3A)
* Stand-By net power	194 kW (264 hp)	195 kW (265 hp)
* PRP net power	176.5 kW (240 hp)	175 kW (238 hp)
* COP net power	141.5 kW (192.5 hp)	140 kW (190 hp)
Cylinders / Displacement	6/ 6700 cm^3 (6.7 lit.)	
Bore / Stroke	104 / 132 (mm)	
Compression ratio	17.5 : 1	
BMEP (Brake Mean Effective Pressure : LTP - PRP)	2332 kPa - 2116 kPa	2328 kPa - 2089 kPa
Speed governor type	Mechanic	Electronic
FUEL CONSUMPTION		
110 % (Stand-by power)	49 lit./h	49 lit./h
100 % to PRP	42.1 lit./h	45,5 lit./h
75 % to PRP	37.3 lit./h	41,9 lit./h
50 % to PRP	24 lit./h	29,9 lit./h
COOLING SYSTEM		
Total system cap. - only engine	25.5 lit. - 10.5 lit.	
Fan air flow	228 m^3/min.	
LUBRIFICATION SYSTEM		
Total oil system capacity	17 lit.	
Oil capacity in sump	8 lit. (min) - 12 lit. (max)	8 lit. (min) - 15 lit. (max)
Oil consumption at full load	< 0.05 lit./h	

* Output powers according to ISO 3046-1

EXHAUST SYSTEM		
Maximum exhaust gas flow	13.16 kg/mim.	14,73 kg/mim.
Max. exhaust gas temp.	600 °C	580 °C
Maximum back pressure	5 kPa (0.05 bar)	6 kPa (0.06 bar)
External diameter exhaust pipe	/	
ELECTRICAL SYSTEM	12 Vdc	
Starter motor power	3 kW	
Battery charging alternator cap.	90 A	
Cold start	- 10 °C	
With cold start aid	- 25 °C	
AIR FILTER	Dry	
Combustion air flow	9.76 m^3/min.	11.03 m^3/min.
HEAT REJECTED AT FULL LOAD		
To exhaust system	598 kcal/kWh	/
To water and oil	443 kcal/kWh	/
Radiated to room	107 kcal/kWh	/
To charge cooler	98 kcal/kWh	/

BCS group

ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuos power	200 kVA
Stand-by power	220 kVA
Three phase voltage	380 - 415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	MARK VX (11000013)
Voltage regulation acc.	± 0.5 %
Sustained short circuit current	3In
Transient dip (100% load)	< 20 %
Recovery time	< 0.3 sec
Efficiency at 100% load	92 % (400V - Cos φ 0.8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN 55011
Waveform distorsion - THD	< 2 %
Thelephone interference - THF	< 2 %

REACTANCES (200 kVA - 400V)	
Direct axis synchronuos - Xd	349 %
Direct axis transient - X'd	23.4 %
Subdirect axis transient - X"d	15.7 %
Quadrature axis synchronuos - Xq	144 %
Quadr. axis subtransient - X"q	17.2 %
Negative sequence - X2	16.5 %
Zero sequence - X0	6.6 %
TIME CONSTANTS	
Transient - T'd	0.103 sec
Subtransient - T"d	0.008 sec
Open circuit - T'do	1.072 sec
Armature - Ta	0.012 sec
Short-circuit ratio Kcc	0.34
Grado di Protezione IP	IP 23
Cooling air flow	1.7 m^3/sec.
Coupling I Bearing	Direct SAE 3 -11 ½ - N°1

GENERAL SPECIFICATIONS

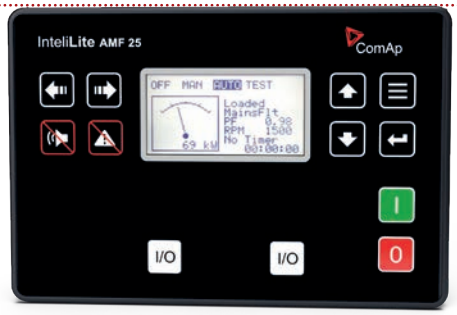
Fuel tank capacity	230 lt.	
Running time (75% to PRP)	6 h	5.5 h
Starter battery	12 Vdc -100Ah / 800A CCA(EN)	
IP protection degree	IP 44	

* Measured acoustic power LwA (pressure LpA)	95 dB(A) (70 dB(A) @ 7m)
* Guaranteed acoustic power LwA (pressure LpA)	97 dB(A) (72 dB(A) @ 7m)
Performance class (ISO 8528)	G3

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

Control Panel

- Controller IntiLite AMF25
- Controller supply switch
- Siren
- Emergency stop buttom
- TCM 35 remote control plug
- Four pole circuit breaker
- PAC (ATS) plug - Automatic control panel only
- Battery charger - Automatic control panel only
- Earth terminal (PE)



AMF25 CONTROLLER CHARACTERISTICS	
Operating mode	• OFF - MAN.- AUTO - TEST
Display	• Graphic back-light LCD display 128x64 pixels
LEDs	• Gen-set voltage OK • Gen-set failure • GCB ON (only for Automatic transfer unit) • Mains voltage OK (only for Automatic transfer unit) • Mains failure (only for Automatic transfer unit) • MCB ON (only for Automatic transfer unit)
Buttons	• START button • STOP button • FAULT RESET button • RESET HORN button • MODE selection button • Pulsante chiusura/apertura GCB button • Pulsante chiusura/apertura MCB button • N° 4 buttons for controller programming
Generator Measures	• Voltage : L1-L2 / L2-L3 / L3-L1 - N-L1/N-L2/N-L3 • Current : I1 - I2 - I3 • Powers : kVA - kW - kVAR (totali e per fase) • Energy : kVAh - kWh - kVARh • Cos φ (medium and per phase) • Frequency
Engine Measures	• Water temperature • Oil pressure • Fuel level • Rpm meter • Battery voltage • Maintance • Hours meter • Starts number
Generator Protections	• Overload • Overcurrent • Short circuit • Over-Udervoltage • Over-Uderfrequency • Voltage asymmetry • Unbalanced current • Phase sequence
Engine Protections	• Overspeed • High water temperature warning • Low oil pressure warning • Low fuel level warning • Over-Uder battery voltage • Battery charge alternator failure • Start failure • Stop failure • Emergency stop • Low water level shudown (option)

AMF functins (Automatic control panel only)	• 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 • Voltage asymmetry • Phase sequence • Dual mutual stand-by application
Features	• Historical events • 3 programmable test timers • Panel or PC programming • 3 selectable languages • Direct connection to engines with ECU via Can Bus J1939 • External start and stop • Programmable inputs and outputs • Alternative configurations (50 / 60Hz) • IP 65 protection • Operating temperature: -20 ° C - + 70 ° C
Communication	• RTU Modbus (optional board with RS232 & RS485 outputs is needed) • TCP/IP Modbus (optional Ethernet board with RJ45 output is needed) • SNMP Modbus (optional Ethernet board with RJ45 output is needed) • Internet (optional Ethernet board optional is needed) • GSM/GPRS (integrated Modem board optional is needed) for Gen-set remote control via SMS or internet • GPS / 4G modem (optional) (geographical tracking via WebSupervisor

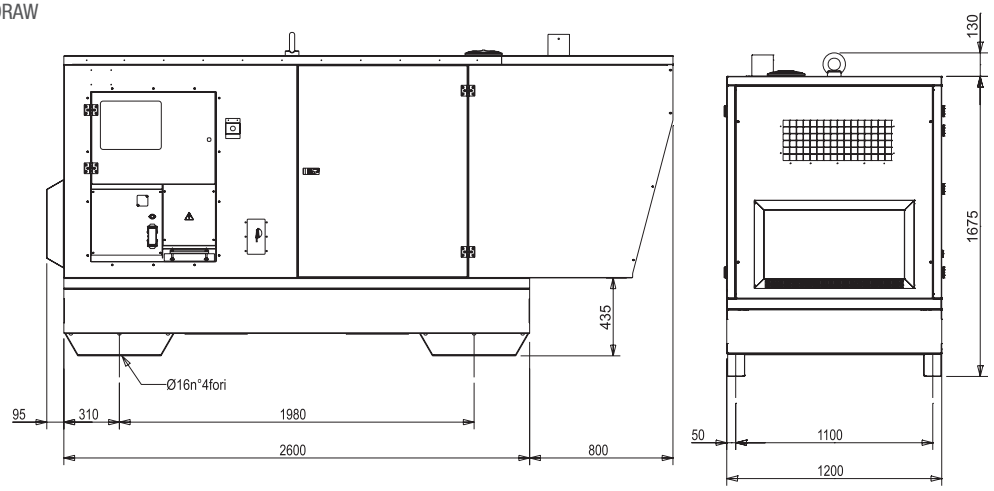
CONTROL PANEL VERSION WITH OUTPUT SOCKETS	
SOCKETS Each socket is protect by own automatic switch. Circuit breaker for 125A and 63A sockets. GFI and circuit breaker 30mA for 32A and 16A socket.	1x 125A 400V 3P-N-T IP IP67 1x 63A 400V 3P-N-T IP67 1x 32A 400V 3P-N-T IP67 1x 16A 400V 3P-N-T IP67 1x 230V 2P-T IP67 1x 230V 2P-T Schuko IP54

WEIGHT - DIMENSIONS AND ACCESSORIES

DRY WEIGHT MACHINE:
- 2210 kg

Generating set pictured may include optional accessories.

DIMENSIONS DRAW



OPTIONS ON REQUEST

- Automatic transfer switch unit (ATS) PAC 275 M (400A)
- Remote control TCM35
- Earthing kit

VERSIONS ON REQUEST

- Version with manual control panel 6 output sockets EC and SCHUKO (see Control board with output sockets section)
- Manual digital control panel (without sockets)
- Parallel switch board

FACTORY INSTALLATION OPTIONS

- Electronic leakage relay
- Isometer
- Volt adjustable from control panel
- Radio control
- Fuel tank 120 lt.
- Fuel tank 350 lt.
- Fuel tank 840 lt.
- Spark arrestor
- Automatic fuel transfer system
- Engine water heater WH
- 3-way valve fuel system with quick connection for external fuel tank supply
- Main battery switch
- Plug-in module with double RS232 and RS485 port
- GSM modem with antenna
- GPS / 4G modem with antenna
- Internet / Ethernet plug-in module with Web Server
- Input / Output extension module (No. 16 tot.)

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.

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