MOSA

language

MADE IN ITALY

GENERATING SET
GE 275 FSX

The images are for reference

AVR

FEATURES

- Electronic engine speed regulation
- Two hooks for lifting unit
- Sealed base capable of containing any leaks of liquids present in the engine, avoiding environmental pollution
- External access for filling the radiator
- Oil extraction pump
- Fuel level sensor
- Low radiator liquid level sensor
- Battery disconnect switch
- Emergency button
- Four-pole general circuit breaker
- Electronic differential relay adjustable in current and intervention time
- Brushless alternator of primary brand with electronic voltage regulation "AVR" with three-phase detection with windings protected by marine impregnation
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY

water cooled | diesel | 3~ three-phase | electric

POWER RATINGS	
* Stand-By three-phase power (LTP)	275 kVA (220 kW) / 400 V / 397 A
* PRP three-phase power	250 kVA (200 kW) / 400 V / 361 A
* PRP single-phase power	208 kVA (166.4 kW) / 400V / 300 A
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 TE8P	FPT C87 TE3F **(Stage 3A)**
* Stand-By net power	238,5 kW (324 hp)	256 kW (348 hp)
* PRP net power	216 kW (294 hp)	232 kW (315 hp)
* COP net power	173 kW (235 hp)	185.5 kW (252 hp)
Cylinders / Displacement	6/ 6,7 lit. (6700 cm³)	6/ 8,7 lit. (8700 cm³)
Bore / Stroke	104 / 132 (mm)	117 / 135 (mm)
Compression ratio	17 : 1	16.5 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/	2418 kPa - 2197 kPa
Speed governor type	Electronic	
FUEL CONSUMPTION		
110 % (Stand-by power)	57,2 lit./h	65,5 lit./h
100 % to PRP	51,5 lit./h	61 lit./h
75 % to PRP	38,8 lit./h	55 lit./h
50 % to PRP	24,9 lit./h	35,7 lit./h
COOLING SYSTEM		
Total system cap. - only engine	25,5 lit. - 10,5 lit.	63 lit. - 15 lit.
Fan air flow	203 kg/min.	308.4 m³/min.
LUBRIFICATION SYSTEM		
Total oil system capacity	17,2 lit.	28 lit.
Oil capacity in sump	8 lit. (min) - 12 lit. (max)	12,5 lit. (min) - 23 lit. (max)
Oil consumption at full load	< 0,05 lit./h	< 0,12 lit./h

EXHAUST SYSTEM		
Maximum exhaust gas flow	16,16 kg/mim.	21.41 kg/mim.
Max. exhaust gas temp.	714 °C	488 °C
Maximum back pressure	5 kPa (0,05 bar)	5 kPa (0.05 bar)
External diameter exhaust pipe	/	
ELECTRICAL SYSTEM	24 Vdc	
Starter motor power	3 kW	4,5 kW
Battery charging alternator cap.	90 A	
Cold start	- 10 °C	
With cold start aid	- 25 °C	
AIR FILTER	Dry	
Combustion air flow	12,8 m³/min.	17.07 m³/min.
HEAT REJECTED AT FULL LOAD		
To exhaust system	560 kcal/kWh	650 kcal/kWh
To water and oil	358 kcal/kWh	316 kcal/kWh
Radiated to room	59 kcal/kWh	133 kcal/kWh
To charge cooler	139 kcal/kWh	150 kcal/kWh

* Output powers according to ISO 3046-1

BCS group

ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuos power	250 kVA
Stand-by power	280 kVA
Three phase voltage	380-440 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30
Voltage regulation acc.	± 1 %
Sustained short circuit current	3 In
Transient dip (100% load)	< 10 %
Recovery time	< 0,3 sec
Efficiency at 100% load	92,7 % (400V - Cos φ 0,8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN55011
Waveform distorsion - THD	< 3 %
Thelephone interference - THF	< 2 %

REACTANCES (250 kVA - 400V)	
Direct axis synchronuos - Xd	350 %
Direct axis transient - X'd	18,0 %
Subdirect axis transient - X"d	11,1 %
Quadrature axis synchronuos - Xq	212 %
Quadr. axis subtransient - X"q	/
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	0,115 sec
Subtransient - T"d	0,014 sec
Open circuit - T'do	1,85 sec
Armature - Ta	/
Short-circuit ratio Kcc	0,38
Grado di Protezione IP	IP 23
Cooling air flow	0,608 m^3/sec.
Coupling I Bearing	Direct SAE 3 -11 ½ - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	425 lt.	
Running time (75% to PRP)	11,5 h 23,5 h (850 lt.)	8,5 h (3A) 16,5 h (850 lt. - 3A)
Starter battery	24 Vdc [2x12Vdc-180Ah 1100A CCA(EN)]	

IP protection degree	IP 44
Pressure acoustic	70 dB(A) @ 7m
Performance class (ISO 8528)	G3

Digital Control Panel

INTELILITE4 AMF9 CONTROLLER CHARACTERISTICS	
Operating mode	• OFF - MAN.- AUTO - TEST
Display - Buttons-LEDs	• Backlit display, LCD 132x64 pixels • Buttons / Buttons: START - STOP - RESET ALARMS / FAULT RESET • LEDs: Generator / GCB ON status - Grid status
Generator Measures	• Voltage : L1-L2 / L2-L3 / L3-L1 - N-L1/N-L2/N-L3 • Current : I1 - I2 - I3 • Frequency Hz • Powers : kVA - kW - kVAR (totali e per fase) • Energy : kVAh - kWh - kVARh • Cos φ (medium and per phase)
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	• Event history, 150 stored events • 3 programmable test timers • Programming from panel or from PC • 3 selectable languages (other languages available) • Direct connection to engines with ECU (Stage V, Tier 4 Final) 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	• USB port • RS232- RS485 (optional) • Modbus RTU / TCP (optional) • Internet connection with Ethernet (optional) • Online control and monitoring on web pages (embedded web server) (optional) • GPS / 4G modem (optional) (geographical tracking via WebSupervisor) • Internal PLC support

Manual/Automatic Control Panel without sockets

- Intelilite4 AMF9 controller
- Power switch
- Siren
- Emergency stop button
- Connector for remote control TCM 35
- Circuit breaker
- 16-pole PAC (ATS) connector (control panel only Automatic)
- Battery charger (Automatic control panel only)
- Ground terminal (PE)

Manual control panel with sockets

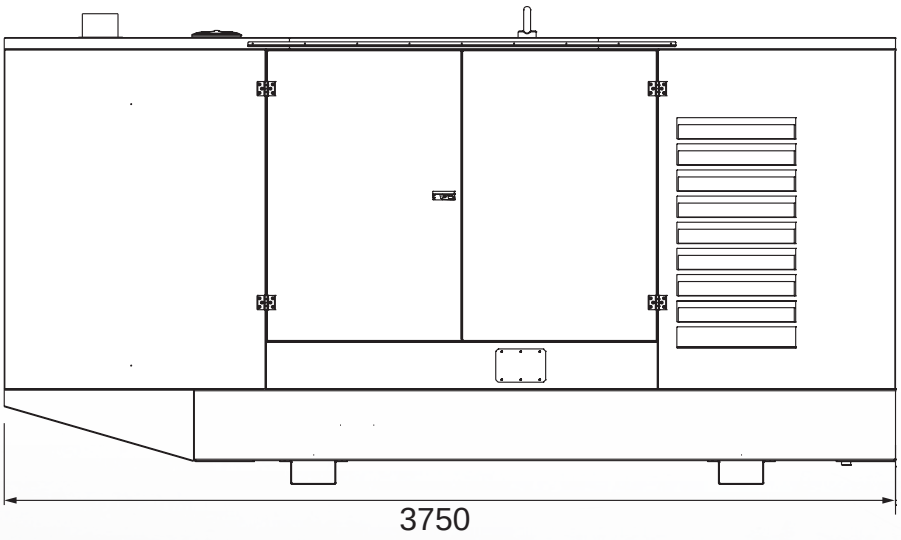
- Intelilite4 AMF9 controller
- Power switch
- Siren
- Emergency stop button
- Connector for TCM 35 remote control
- Circuit breaker
- Electronic differential relay
- Output sockets: 1x 400V 125A 3P+N+T CEE IP67
  1x 400V 63A 3P+N+T CEE IP67
  1x 400V 32A 3P+N+T CEE IP67
  1x 400V 16A 3P+N+T CEE IP67
  1x 230V 16A 2P+T CEE IP67
  1x 230V 16A 2P+T SCHUKO IP54
- Circuit breaker (for 125A socket)
- Magneto-thermal switch (for 63A socket)
- Differential magneto-thermal switch (for 32A socket)
- Differential magneto-thermal switch (for 16A socket)
- Differential magneto-thermal switch (for 16A single-phase sockets)
- Earth terminal (PE)

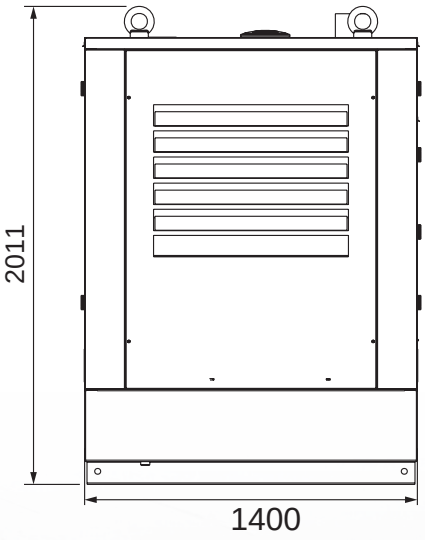
WEIGHT - DIMENSIONS

DRY WEIGHT MACHINE:
- 3100 kg
- 3500 kg (3A)
- 3300 kg (850 lt.)
- 3700 kg (3A - 850 lt.)

Generating set pictured may include optional accessories.

DIMENSIONS DRAW





VERSIONS IN ADDITION TO THE STANDARD FEATURES

	PLUS	HEATER	WINTER	REMOTE	3WAY	850L	TOP	OIL & GAS	ISO
GFI Elettr.	√		√	√	√	√	√	√	
Radio control				√					
3-way valve					√		√	√	
850l tank						√			
Engine water heater		√	√				√		
Isometer									√
Spark arrestor								√	
Reg. V from panel							√		

OPTIONS ON REQUEST

- Internet plug-in module
- GPS/4G modem with antenna
- 15 alarm/state reporting card (configurable)
- Mains/Generation Transfer Switchboard (ATS) PAC-275 M (400A) (Only with Automatic panel)
- Mains/Generation Transfer Switchboard (ATS) PAC I 275-M (400A) (Only with Manual panels)
- TCM35 remote control
- MT75 earthing

AVAILABLE VERSIONS

MANUAL WITHOUT SOCKETS		AUTOMATIC WITHOUT SOCKETS	
CH7N4056 **CH7J7056 (3A)**	STANDARD	**CH7N40F6** **CH7J70F6 (3A)**	STANDARD
CH7N4056R **CH7J7056R (3A)**	PLUS	**CH7N40F6A** **CH7J70F6A (3A)**	HEATER
CH7N4056RW **CH7J7056RW (3A)**	REMOTE	**CH7N40F6AR** **CH7J70F6AR (3A)**	WINTER
CH7N4056HR **CH7J7056HR (3A)**	3WAY	**CH7N40F6AHR** **CH7J70F6AHR (3A)**	HEATER + 3WAY
CH7N4056MR **CH7J7056MR (3A)**	850L	**CH7N40F6MR** **CH7J70F6MR (3A)**	850L
CH7N4056AHRU **CH7J7056AHRU (3A)**	TOP	**CH7N40F6AMR** **CH7J70F6AMR (3A)**	HEATER + 850L
		CH7N40F6AMHR **CH7J70F6AMHR (3A)**	HEATER + 850L + 3WAY
MANUAL WITH SOCKETS			
CH7N40G6R **CH7J70G6R (3A)**	PLUS	**CH7N40G6T** **CH7J70G6T (3A)**	ISO
CH7N40G6AR **CH7J70G6AR (3A)**	WINTER	**CH7N40G6MR** **CH7J70G6MR (3A)**	850L
CH7N40G6RW **CH7J70G6RW (3A)**	REMOTE	**CH7N40G6CHR** **CH7J70G6CHR (3A)**	OIL & GAS
CH7N40G6HR **CH7J70G6HR (3A)**	3WAY	**CH7N40G6AHRU** **CH7J70G6AHRU (3A)**	TOP

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)
ISO 8528-13 :2016 (AC generating sets powered by reciprocating internal combustion engines, Part 13: Safety)

ISO 9001:2008 - Cert. 0192

WARRANTY

All devices are covered by the manufacturer's warranty.