

GENERATING SET GE 65 FSX

The images are for reference



3 PHASE SENSING



Water cooled



diesel



Three-phase power



Electric



Super silenced

OUTPUT POWER RATINGS

* Stand-By three-phase power (LTP)	66 kVA (52.8 kW) / 400V / 95.3 A
* PRP three-phase power	60 kVA (48 kW) / 400V / 86.7 A
* COP single-phase power	/
Frequency	50 Hz
Cos φ	0.8

* Output powers according to ISO 8528-1

ENGINE 1500 RPM

4 STROKE, DIRECT INJECTION, TURBOCHARGED

Model	FPT (IVECO) – R38MSNS01.66A02
* Stand-By net power	63 kW (85,7 hp)
* PRP net power	57 kW (77,5 hp)
* COP net power	/
Cylinders / Displacement	4/ 3760 cm ³ (3.76 lt.)
Bore / Stroke	102 / 115 (mm)
Compression ratio	17.5 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	1280 kPa - ... kPa
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	17,7 lt./h
100 % to PRP	15,3 lt./h
75 % to PRP	9,6 lt./h
50 % to PRP	6,6 lt./h
25 % to PRP	3,7 lt./h
COOLING SYSTEM	
Total system cap. - only engine	10 lt - ... lt.
Fan air flow	156 m ³ /min.
LUBRICATION SYSTEM	
Total oil system capacity	... l
Oil capacity in sump	8 lt ÷ 6 lt.
Oil consumption at full load	< 0.017 l/h

* Output powers according to ISO 8528-1

FEATURES

- Control panel with digital control unit (Manual with sockets / Automatic)
- Electronic voltage regulation "AVR" with three-phase sensing
- Leak-proof base frame capable of containing any engine fluid leaks, preventing environmental pollution
- Central lifting hook
- Side forklift pockets for handling
- Rounded edges to allow rainwater drainage
- Large-capacity steel fuel tank
- Tilting rain cap on exhaust outlet
- Door with viewing window for the control panel
- Epoxy powder-coated surface finish
- External drain plugs for engine oil, coolant, and fluids collected in the base frame
- Large access doors for easy maintenance (replacement of air, oil, and fuel filters)
- Fuel pre-filter and fuel filter with water-in-fuel indicator
- Visual air filter clogging indicator
- Sensors for fuel level, coolant temperature, and engine oil pressure
- Low radiator coolant level sensor with engine shutdown
- Base frame liquid detection sensor with engine shutdown
- Four-pole main circuit breaker
- Battery switch
- Emergency stop button
- Alternator windings protected with marine-grade impregnation

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 nuber of hours.

COP power: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours.

EXHAUST SYSTEM	
Maximum exhaust gas flow	... kg/min
Max. exhaust gas temp.	... °C
Maximum back pressure	10 kPa (0.1 bar)
External diameter exhaust pipe	... mm
ELECTRICAL SYSTEM	
Starter motor power	3,5 kW
Battery charging alternator cap.	54 A
Cold start	-10°C
With cold start aid	- 25 °C
AIR FILTER	
Combustion air flow	≤7,5 m ³ /min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	... kcal/kWh
To water and oil	... kcal/kWh
Radiated to room	... kcal/kWh
To charge cooler	... kcal/kWh
Exhaust emission according to EU Regulation 2016/1628 (STAGE 5)	No

ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS

Continuous power 125/40°C	60 kVA
Stand-by power 163/27°C	65 kVA
Three phase voltage	380 - 415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30
Voltage regulation acc.	± 1,0 %
Sustained short circuit current	3 In
Transient dip (100% load)	10 %
Recovery time	< 0.3 sec
Efficiency at 100% load	89,6 % (400V - Cos φ 0,8)
Insulation	H Class
Connection - Terminals	Star (with N) - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN 55011
Waveform distortion - THD	< 3 %
Telephone interference - THF	< 2 %
REACTANCES (60 kVA - 400V)	60 kVA – 400V
Direct axis synchronous - Xd	260 %
Direct axis transient - X'd	21 %
Subdirect axis transient - X''d	7 %
Quadrature axis synchronous - Xq	148 %
Quadr. axis subtransient - X''q	/
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	0.015 sec
Subtransient - T''d	0.009 sec
Open circuit - T'do	0.195 sec
Armature - Ta	/
Short-circuit ratio Kcc	0.63
Cooling air flow	0.20 m ³ /sec.
Coupling - Bearing	Direct SAE 3 - 11 1/2 - N°1
IP protection degree	IP 23
Weight	267 Kg

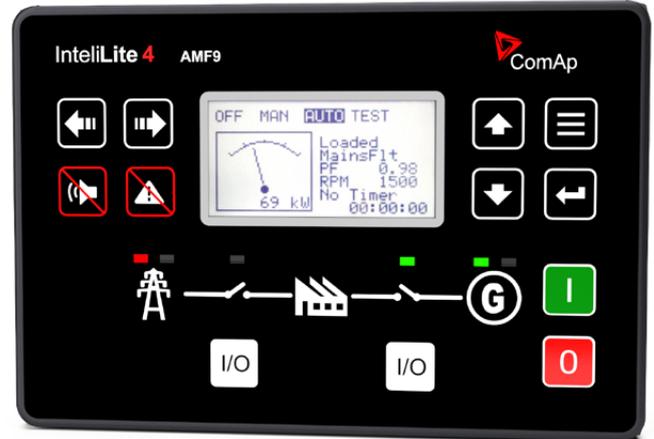
GENERAL SPECIFICATIONS

Fuel tank capacity	100 lt. / 350 lt.
Running time (75% to PRP)	10,4 h / 36,4 h
Starter battery	12 Vdc -80Ah / 670A CCA(EN)
IP protection degree	IP 44
Acoustic pressure at 7 meters	70 dB(A)
Performance class	G2

CONTROL PANELS

DIGITAL CONTROL INTELI4 AMF9

FEATURES CONTROLLER INTILITE4 AMF9	
Operating mode	<ul style="list-style-type: none"> OFF - MAN – AUT - TEST
Display	<ul style="list-style-type: none"> Graphic back-light, LCD display 132x64 pixels
LEDs	<ul style="list-style-type: none"> Generator status
Buttons	<ul style="list-style-type: none"> buttons START – STOP buttons RESET ALLARMI – TACITAZIONE SIRENA GBC – MCB PAGE – ENTER – directional arrows to navigate
Generator Measures	<ul style="list-style-type: none"> Voltage: L1-L2 / L2-L3 / L3-L1 - N-L1 / N-L2 / N-L3 Current: I1 – I2 – I3 Powers: kVA – kW – kVAR Frequency: Hz
Engine Measures	<ul style="list-style-type: none"> Water temperature Oil pressure Fuel level rpm meter Hours meter Battery voltage Maintenance Starts number
Generator Protections	<ul style="list-style-type: none"> Overload, overcurrent, short circuit Over-under voltage, over-under frequency Voltage asymmetry, unbalanced current Phase sequence
Engine Protections	<ul style="list-style-type: none"> Overspeed High water temperature warning Low oil pressure warning Low fuel level warning Over-under battery voltage Battery charge alternator failure Start failure and stop failure Arresto d'emergenza Emergency stop
AMF Functions	<ul style="list-style-type: none"> Voltage, frequency, three phase detection, over and under mains voltage, over and under mains frequency, voltage asymmetry, Phase sequence and dual mutual stand-by application
Features	<ul style="list-style-type: none"> Event log (150 stored events) 3 tests run scheduler Setpoints adjustable via controller buttons or PC 3 selectable languages (other languages available) Direct connection to engines with ECU (Stage V, Tier 4 Final) Remote Start and Stop Configurable inputs and outputs Alternative configurations (50Hz/60Hz) IP65 protection Operation temperature: -20°C –+70°
Communication	<ul style="list-style-type: none"> USB port Module RS232- RS485 (optional) Modbus RTU/ TCP (optional) GSM Modem. Commands, alarm and event via SMS (optional) Internet connection with Ethernet (optional) Modem GPS/4G (optional) SNMP Online control and monitoring over web pages (embedded web server) (Optional)



MANUAL CONTROL PANEL WITH SOCKET

- **Controller IntiLite4 AMF9**
- Supply switch
- Siren
- Emergency stop button
- TCM 35 and PAC-I connection plug
- Circuit breaker
- Earth leakage relay
- Power terminal board
- Output sockets: 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
- Circuit breaker for 400V 63A socket
- Earth leakage with integral over-current circuit breaker for 400V 32A socket
- Earth leakage with integral over-current circuit breaker for 400V 16A socket
- 2 earth leakage with integral over-current circuit breaker for 230V 16A socket
- Earth terminal (PE)

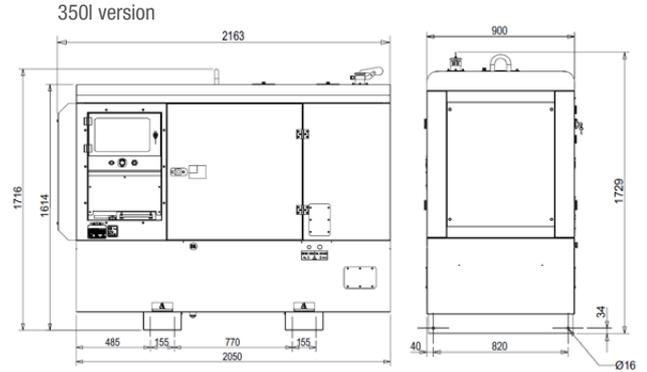
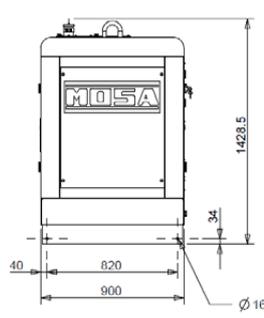
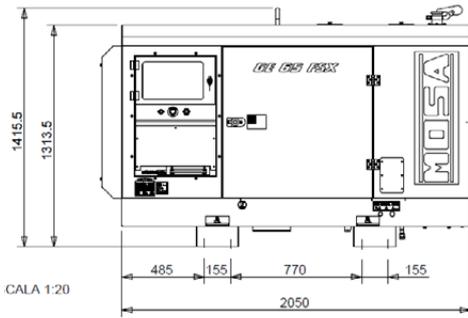
AUTOMATIC CONTROL PANEL

- **Controller IntiLite4 AMF9**
- Supply switch
- Siren
- Emergency stop button
- Terminal board for connection to PAC (ATS)
- Battery charger
- Circuit breaker
- Power terminal board
- Earth terminal (PE)

WEIGHT - DIMENSIONS AND ACCESSORIES

MACHINE DRY WEIGHT: 1190 kg / 1380 kg (350 lt)

DIMENSIONS L x w x h 2165 x 900 x 1420 mm / 165 x 900 x 1730 mm (350 lt)



Generating set pictured may include optional accessories.

OPTIONS ON REQUEST

- Plug-in module with dual port RS232 and RS485
- Internet-Ethernet plug-in module including Web server
- 4G/GPS plug-in modem with antenna
- Remote module for 15 alarms or states
- Load transfer switch (ATS) PAC 70 (100A) (only with automatic control panel)
- Load transfer switch (ATS) PAC-I 70 (100A) (only with Manual control panels)
- Remote control TCM35 (only with Manual control panels)
- Remote control by radio signal RDE (only with Manual control panels)
- Site tow CTL65 (only for 100 liters versions)
- Road trailer CTV1 (only for 100 liters versions)
- Earthing
- Transportation sleigh (only for 100 liters versions)

VERSIONS ON REQUEST AUTOMATIC CONTROL PANEL

CJ5W80F1	GE 65 FSX 400T230M Automatic control panel STD version
CJ5W80F1A	GE 65 FSX 400T230M Automatic control panel Heather version
CJ5W80F1AH	GE 65 FSX 400T230M Automatic control panel 3Way version
CJ5W80F1L	GE 65 FSX 400T230M Automatic control panel Large version
CJ5W80F1AHL	GE 65 FSX 400T230M Automatic control panel Top version

VERSIONS ON REQUEST MANUAL CONTROL PANEL WITH SOCKET

CJ5W80G1R	GE 65 FSX 400T230M Manual control panel with socket STD version
CJ5W80G1HR	GE 65 FSX 400T230M Manual control panel with socket 3Way version
CJ5W80G1LR	GE 65 FSX 400T230M Manual control panel with socket Large version
CJ5W80G1AHR	GE 65 FSX 400T230M Manual control panel with socket Heather version
CJ5W80G1AHLR	GE 65 FSX 400T230M Manual control panel with socket Versione Top version

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)
 Regulation 2016/1628/EU for stationary use only



ISO 9001:2015 - Cert. 0192
WARRANTY

All devices are covered by the manufacturer's warranty.

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

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