

GENERATING SET GE 55 FSX



FEATURES

- Fuel pre-filter with indicator of the presence of water in the fuel
- Fuel and engine oil filter
- Anti-tipping side pockets for handling with forklifts
- Central lifting hook
- Rounded edges to allow rainwater to flow
- Sealed base capable of containing any leaks of liquids present in the engine, avoiding environmental pollution
- Large capacity steel tank
- Large access doors to allow easy maintenance (replacing air, oil, fuel filters)
- Door with viewing porthole for the control panel
- External plugs for draining oil and water
- 3-way valve for transferring fuel from an external tank with quick filling connections housed in a special niche (OPTIONAL)
- Swinging rain cover at the exhaust gas outlet
- Surface painting based on epoxy powder
- Low level of noise emissions
- Fuel level sensor
- Battery disconnect switch
- Basement leak detection sensor
- Emergency button
- Control panel version: MANUAL | AUTOMATIC | MANUAL WITH SOCKETS
- General four-pole thermomagnetic switch
- Electronic differential relay adjustable in current and trip time (OPTIONAL) as standard with the electrical distribution panel
- Brushless alternator with three-phase sensing "AVR" electronic voltage regulation
- Alternator windings protected with marine impregnation
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY

POWER RATINGS

* Stand-By three-phase power (LTP)	55 kVA(44 kW) /400V / 79,4A
* PRP three-phase power	50 kVA(40 kW) /400V / 72,2A
* COP single-phase power	40 kVA(32 kW) /400V / 57,7A
Frequency	50 Hz
Cos φ	0.8

* Output powers according to ISO 8528-1

GENERAL SPECIFICATIONS

Fuel tank capacity	100 lt
Running time (75% to PRP)	10.8 h
Starter battery	12 Vdc -80Ah / 670A CCA(EN)
IP protection degree	IP 44
Measured acoustic power Lwa (pressure LpA)	94 dB(A) (69 dB(A) @ 7m)
Performance class (ISO 8528)	G2
Max. ambient temperature	40 °C



water cooled



diesel



three-phase power



electric



super silenced

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 unlimited numbers 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 (IVECO) – N45 AM2.S500
* Stand-By net power	50,7 kW (69 hp)
* PRP net power	45 kW (61,2 hp)
* COP net power	36 kW (49 hp)
Cylinders / Displacement	4/ 4500 cm ³ (4.5 lt.)
Bore / Stroke	104 / 132 (mm)
Compression ratio	17.5 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	924 kPa
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	14,8 lt./h
100 % to PRP	11,5 lt./h
75 % to PRP	9,2 lt./h
50 % to PRP	6,2 lt./h
COOLING SYSTEM	
Total system cap. - only engine	10,0 lt - 8,5 lt
Fan air flow	132 m ³ /min.
LUBRIFICATION SYSTEM	
Total oil system capacity	12.8 l
Oil capacity in sump	8.5 lt ÷ 5.5 lt.
Oil consumption at full load	< 0.017 l/h

EXHAUST SYSTEM	
Maximum exhaust gas flow	3,52 kg/mim.
Max. exhaust gas temp.	483 °C
Maximum back pressure	10 kPa (0,1 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	
Starter motor power	3 kW
Battery charging alternator cap.	90 A
Cold start	-10°C
With cold start aid	- 25 °C
AIR FILTER	
Combustion air flow	3,33 m ³ /min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/

ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS	
Continuous power	50 kVA
Stand-by power	55 kVA
Three phase voltage	380 - 415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	HVR-30 (3ph. sensing)
Voltage regulation acc.	± 1 %
Sustained short circuit current	3 In
Transient dip (100% load)	< 10 %
Recovery time	< 0.3 sec
Efficiency at 100% load	89,4 % (400V - Cos φ 0.8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN 55011
Waveform distorsion - THD	< 3 %
Telephone interference - THF	< 2 %

REACTANCES (50 kVA - 400V)	
Direct axis synchronuos - X _d	255 %
Direct axis transient - X' _d	20 %
Subdirect axis transient - X'' _d	7 %
Quadrature axis synchronuos - X _q	146 %
Quadr. axis subtransient - X'' _q	/
Negative sequence - X ₂	/
Zero sequence - X ₀	/
TIME CONSTANTS	
Transient - T' _d	0,014 sec
Subtransient - T'' _d	0,009 sec
Open circuit - T' _{do}	0,188 sec
Armature - T _a	/
Short-circuit ratio K _{cc}	0.62
Grado di Protezione IP	0.17 m ³ /sec.
Coupling Bearing	Direct SAE 3 - 11 ½ - N°1



CONTROL PANELS

GE 55 FSX

MANUAL CONTROL PANEL (TERMINAL BLOCK ONLY)

- IntelliLite 4 AMF9 Controller
- Power switch
- Horn
- Emergency stop button
- Connector for TCM 35 remote control
- Switch magnetermic
- Power terminal block
- Earth terminal (PE)

AUTOMATIC CONTROL PANEL (TERMINAL BLOCK ONLY)

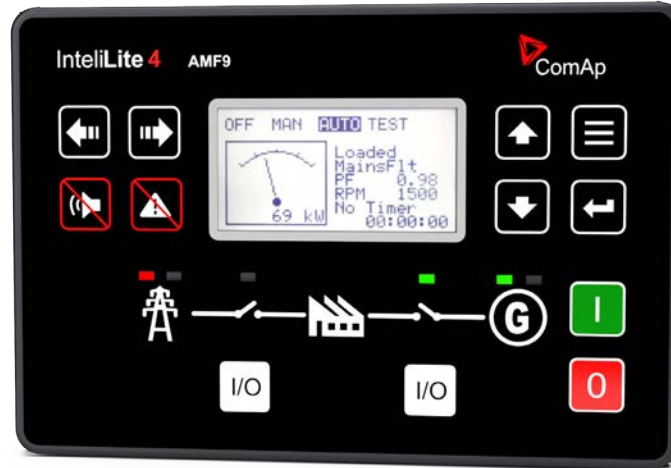
- IntelliLite 4 AMF9 Controller
- Power switch
- Horn
- Emergency stop button
- Connector for TCM 35 remote control
- PAC connection terminal block (ATS)
- Charger
- Switch magnetermic
- Power terminal block
- Earth terminal (PE)

MANUAL CONTROL PANEL WITH SOCKETS

- IntelliLite 4 AMF9 Controller
- Power switch
- Horn
- Emergency stop button
- Connector for TCM 35 remote control
- Switch magnetermic
- Electronic differential relay
- Power terminal block
- 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+E SCHUKO
- Magnetothermic switch for 400V 63A socket
- Differential circuit breaker for 400V 32A socket
- Differential circuit breaker for 400V 16A socket
- Differential circuit breaker for 230V 16A socket
- Earth terminal (PE)

CONTROL PANELS

GE 55 FSX



AMF25 CONTROLLER CHARACTERISTICS	
Operating mode	<ul style="list-style-type: none"> • OFF - MAN. - AUTO - TEST
Display	<ul style="list-style-type: none"> • Graphic back-light LCD display 128x64 pixels
LEDs	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<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 (totali e per fase) • Energy : kVAh - kWh - kVARh • Cos (medium and per phase) • Frequency
Engine Measures	<ul style="list-style-type: none"> • Water temperature • Oil pressure • Fuel level • Rpm meter • Battery voltage • Maintance • Hours meter • Starts number
Generator Protections	<ul style="list-style-type: none"> • Overload • Overcurrent • Short circuit • Over-Undervoltage • Over-Underfrequency • 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 • Stop failure • Emergency stop • Low water level shutdown (option)
AMF functins (Automatic control panel only)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Event log and alarms • Tests run scheduler (Automatic test or scheduled starts) • Engine idle management (Idle) • Remote Start and Stop • Pre-heating • 5 selectable languages (other languages available) • Setpoints adjustable via controller buttons or PC • Direct connection to engines with ECU via Can bus J1939 • Configurable inputs and outputs (only via PC) • IP65 protection • Operation temperature: -20°C / +70°C
onnectivity (OPTIONAL)	<ul style="list-style-type: none"> • GSM / GPRS modem • 4G GSM and GPS modem (locator) • Ethernet module (MODBUS TCP and SNMP protocols - RJ45 output) • RS232 and RS485 communication module

WEIGHT - DIMENSIONS AND ACCESSORIES

GE 55 FSX



DRY WEIGHT MACHINE:

- 1155 kg
- 1345 kg (350 lt)

Generating set pictured may include optional accessories.

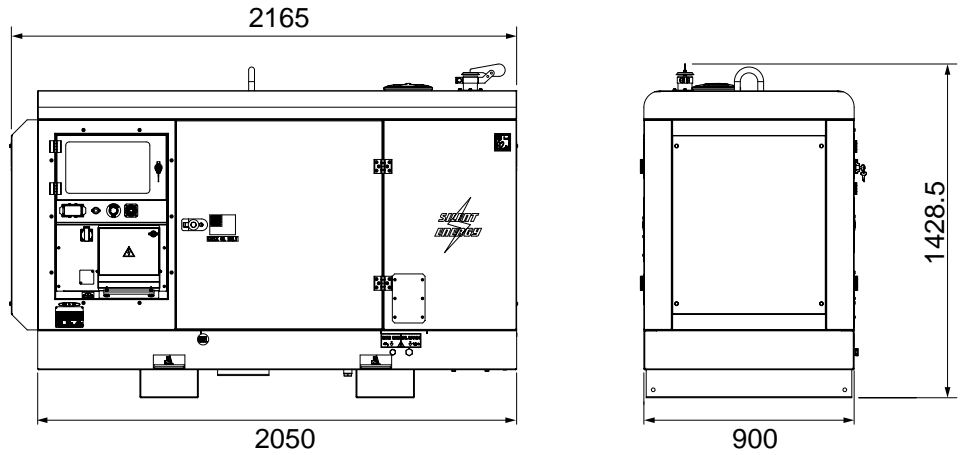


DIMENSIONS DRAW

- 2165 x 900 x 1730 (tank version 350 lt)
- For version with **100 lt tank**, see the illustrations as shown below.

ACCESSORIES ON REQUEST

- Internet plug-in module
- GPS/4G modem with antenna
- Plug-in module with double RS232 and RS485 port
- Report card for 15 alarms/statuses (configurable)
- Teleswitching panel (ATS), PAC 70 (100A) (Only with Automatic control panels)
- Teleswitching panel (ATS) PAC-I 70 (100A) (Only with manual control panels)
- TCM35 remote control
- CTV1 road trolley
- Drag sled
- MT25 earthing



VERSIONS IN ADDITION TO THE STANDARD FEATURES

	PLUS	REMOTE	3WAY	350L	HEATER	ISOMETER	GFI	TOP
T. Water + P. Oil	✓	✓	✓	✓		✓		✓
GFI Eletr.	✓	✓	✓	✓			✓	✓
Radio control		✓						
3-way valve			✓			✓		✓
350l tank				✓				✓
Engine water heater					✓			✓
Isometer						✓		
Glow plugs		✓						

AVAILABLE VERSION

MANUAL WITH TERMINAL BLOCK (WITHOUT SOCKETS)		AUTOMATIC WITH TERMINAL BLOCK (WITHOUT SOCKETS)		MANUAL WITH SOCKETS + TERMINAL BLOCK	
CJ4V3051	STANDARD	CJ4V30F1	STANDARD	CJ4V30G1R	GFI
CJ4V3051BR	PLUS	CJ4V30F1A	HEATER	CJ4V30G1BR	PLUS
CJ4V3051BDRW	REMOTE	CJ4V30F1ABR	PLUS+HEATER	CJ4V30G1BDRW	REMOTE
CJ4V3051BHR	3WAY	CJ4V30F1ABLR	PLUS+HEATER+350L	CJ4V30G1BHR	3WAY
CJ4V3051BLR	350L	CJ4V30F1ABHLR	TOP	CJ4V30G1BHT	ISOMETER
CJ4V3051BHLR	TOP			CJ4V30G1BLR	350L
				CJ4V30G1ABHLR	TOP

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.

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