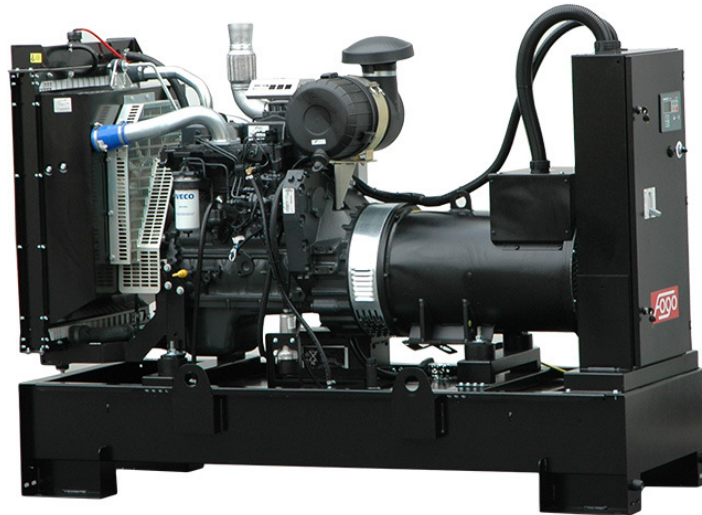


MAIN FEATURES

- Optimal performance resulting from the engine and alternator parameters,
- The highest quality of electrical components,
- Welded frame with integrated fuel tank,
- Large capacity fuel tanks available on request,
- Compact frame, adapted to the monoblock dimensions,
- Easy maintenance access,
- Fuel tank non integrated with the frame as well as drip tray protecting against engine liquid leakage, available on request,
- Wide range of standard and optional equipment


GENERAL DATA

Model	FDF 120 IS
Standby power E.S.P. [kVA] / [kW]	136,0 / 109,0
Prime power P.R.P. [kVA] / [kW]	124,0 / 99,0
Prime current P.R.P [A]	179,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	non-emission
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	14,4
- 75% load [l/h]	20,4
- 100% load [l/h]	27,6
- 110% load [l/h]	30,4
Standard fuel tank capacity [l]	200
Autonomy with 100% load [h]	7,2
Engine control voltage [V]	12
Weight without fuel [kg]	1100
Dimensions L x W x H [mm]	2232 x 790 x 1554
Acoustic power Lwa [dBA]	111,3 ± 1,9
Acoustic pressure Lpa (7m) [dBA]	82,5 ± 1,9

Nominal power P.R.P.:

Prime power available in variable load application in accordance with ISO 8528, A 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation. Average power consumption should not exceed 80% P.R.P for each 24h of work.

Stand-by power E.S.P.:

Emergency standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed, limited to 200 operation hours per year, max average power consumption 70% of ESP.

Remark:

All parameters are given for reference conditions: ambient air temperature up to 40 C and site altitude above sea level 1000m

Norms and directives:

- Machinery directive 2006/42/WE
- Low voltage directive 2006/95/WE
- EC directive 2004/108/WE
- Emission directive 97/68/WE
- ISO 8528-1/2005, PN-ISO 8528-5/2005
- PN-EN 12601
- PN-EN 60204-1

STANDARD CONTROLLER

Controller type: AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

AMF function available

Flexible event based history with up to 119 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter

Battery charging alternator circuit connection

Fuel level measurement

Generator protection (over/under frequency, voltage, overcurrent)

Communication with ECU supporting CAN J1939 standard

Communication interface RS 485 and RS 232 supporting Modbus RTU (IL-NT RS232-485 module required)

GSM modem / wireless internet (IL-NT GPRS module required)

Internet/Ethernet communication (IB-Lite module required)

InteliMonitor software for single gen-set view

WebSupervisor software for Android mobile devices or PC's for fleet management

Active SMS or e-mail (IL-NT GPRS or IB-Lite module required)


ENGINE

Brand	Iveco
Type	NEF45TM3
Made in	Italy
Engine power [kW]	107,2
Emission standard*	non-emission
Rotation per minute [rpm]	1500
Engine governor	mechanical
Governor class**	G2
Displacement [l]	4,5
No of cylinder	4
Fuel system	direct injection
Electrical system [V]	12
Coolant	Anti Freeze
Cooling system capacity [l]	18,5
Engine oil	Shell Rimula R4L
Oil pan capacity [l]	12,8
Fuel type	Diesel (EN 590)
Fuel consumption at 75% load [l/h]	20,4
Fuel consumption at 100% load [l/h]	27,6

* According directive 97/68/WE non road mobile machinery engine emission.

** According PN-ISO 8528-5/2005

ALTERNATOR

Brand	Sincro*
Type	SK225LS
Made in	Croatia
Power (40 °C, 1000m a.m.s.l.) [kVA]	125,0
Stand by power (27 °C, 1000m a.m.s.l.) [kVA]	138,0
Efficiency [%]	92,3
Voltage regulator type	AVR analog
Voltage accuracy [%]	+/- 1
IP protection	IP 23
Insulation class	H
Total harmonic content THD [%]	< 2,5
Reactance Xd'' [%]	10,6

* STAMFORD or other alternator suppliers on request. Genset general data may change in this case.



FOCUSSED ON GENERATORS ONLY

Power Generator FDF 120 IS

STANDARD EQUIPMENT

Controller ComAp AMF25	✓
Controller switch	✓
3 Pole GCB Eaton LZMC2-VE250	✓
Shunt GCB release coil	✓
Acoustic alarm	✓
Emergency stop button	✓
Starting batteries 100 Ah	✓
Battery charger	✓
Engine preheating with thermostat	✓
Engine oil Shell Rimula R4L	✓
Oil low pressure switch	✓
Engine high temperature switch	✓
Fuel tank integrated in frame with drip tray	✓
Frame with fuel tank	✓
Fuel level measurement	✓
Fuel filter with water separator	✓
Exhaust compensator and silencer	✓
Coolant Anti Freeze	✓
Engine and alternator vibro isolators	✓
Transportation brackets	✓

OPTIONAL EQUIPMENT

Digital voltage reg. 3 phase sensing, accuracy $\pm 0,25\%$	✓
Alternator with PMG	✓
4 Pole GCB Schneider NSX Micrologic 2.3	✓
Oil draining hand pump	✓
Fuel and retention pump	✓
Electronic engine speed governor	✓
Oil pressure sensor	✓
Engine high temperature sensor	✓
Drip space level sensor	✓
Dedicated (non-standard) fuel tank *	✓
External fuel tank 1 000 – 10 000 l	✓
Fuel tank filling pump and shut-off valve	✓
Battery disconnection switch	✓
Transfer switch controlled by generator controller	✓
ATS with ATS controller	✓
GPRS communication modem	✓
Ethernet card	✓
RS 485, RS 232 card	✓
Remote display	✓

*according to individual agreement

**INSTALLATION GUIDELINES**

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x50mm ²
Recommended cable for do 30m generator heater supply	Flexible 3x2,5mm ²
*For additional cable connection with FOGO ATS see ATS wiring diagram	
Exhaust pipe min diameter (max. 7 m, 4 bends)	88,9 mm
Exhaust pipe min diameter (max. 15 m, 4 bends)	101,6 mm

MAINTENANCE GUIDELINES

Fuel filters replacement	500 h / 1 year
Oil replacement	After first 100h, then every 500 h / 1 year
Oil filters replacement	After first 100h, then every 500 h / 1 year
Coolant replacement	1000 h / 2 years
Battery replacement	2 years
Electrical installation supervising	According to local requirements, at least once per year

WARRANTY

Back-up power generators	60 months up to 1000 working hours, under condition of required maintenance according to the warranty conditions
Continuous work generators	12 months up to 1000 working hours