

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 150 VS
Standby power E.S.P. [kVA] / [kW]	167,0 / 134,0
Prime power P.R.P. [kVA] / [kW]	152,0 / 122,0
Prime current P.R.P [A]	219,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	stage II
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	18,4
- 75% load [l/h]	26,6
- 100% load [l/h]	35,3
- 110% load [l/h]	38,9
Standard fuel tank capacity [l]	500
Autonomy with 100% load [h]	14,1
Engine control voltage [V]	12
Weight without fuel [kg]	1450
Dimensions L x W x H [mm]	2720 x 986 x 1782
Acoustic power Lwa [dBA]	117,4 ± 1,8
Acoustic pressure Lpa (7m) [dBA]	87,3 ± 1,8

Nominal power P.R.P.:

Prime power available in variable load application in accordance with ISO 8528, 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation. Average power consumption should not exceed 70% 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 500 operation hours per year, average power consumption should not exceed 80% E.S.P for each 24h

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
- Noise directive 2000/14/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

ALTERNATOR

Brand	Volvo
Type	TAD731GE
Made in	Germany
Engine power [kW]	133,0
Emission standard*	stage II
Rotation per minute [rpm]	1500
Engine governor	electronic
Governor class**	G3
Displacement [l]	7,2
No of cylinder	6
Fuel system	unit injectors
Electrical system [V]	12
Coolant	Volvo Coolant VCS
Cooling system capacity [l]	23,8
Engine oil	Shell Rimula R4L
Oil pan capacity [l]	20,0
Fuel type	Diesel (EN 590)
Fuel consumption at 75% load [l/h]	26,6
Fuel consumption at 100% load [l/h]	35,3

Brand	Sincro*
Type	SK250SL
Made in	Croatia
Power (40 °C, 1000m a.m.s.l.) [kVA]	160,0
Stand by power (27 °C, 1000m a.m.s.l.) [kVA]	176,0
Efficiency [%]	91,4
Voltage regulator type	Analog AVR
Voltage accuracy [%]	+/- 1
IP protection	IP 23
Insulation class	H
Total harmonic content THD [%]	< 2,0
Reactance Xd'' [%]	10,8

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

** According PN-ISO 8528-5/2005

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



FOCUSSED ON GENERATORS ONLY

Power Generator FDF 150 VS

STANDARD EQUIPMENT

OPTIONAL EQUIPMENT

Controller ComAp AMF25	✓	Digital voltage reg. 3 phase sensing, accuracy $\pm 0,25\%$	✓
Controller switch	✓	Alternator with PMG	✓
3 Pole GCB Eaton LZMC2-VE250	✓	4 Pole GCB Schneider NSX Micrologic 2.3	✓
Shunt GCB release coil	✓	Fuel and retention pump	✓
Acoustic alarm	✓	Drip space level sensor	✓
Analog AVR	✓	Dedicated (non-standard) fuel tank *	✓
Emergency stop button	✓	External fuel tank 1 000 – 10 000 l	✓
Starting batteries 2x 100 Ah	✓	Fuel tank filling pump and shut-off valve	✓
Battery charger	✓	Battery disconnection switch	✓
Engine preheating with thermostat	✓	Transfer switch controlled by generator controller	✓
Engine oil Shell Rimula R4L	✓	ATS with ATS controller	✓
Oil low pressure switch	✓	GPRS communication modem	✓
Oil pressure sensor	✓	Ethernet card	✓
Engine high temperature switch	✓	RS 485, RS 232 card	✓
Engine high temperature sensor	✓	Remote display	✓
Electronic engine speed governor	✓		
Fuel tank integrated in frame	✓		
Fuel level measurement	✓	*according to individual agreement	
Fuel filter with water separator	✓		
Exhaust compensator and silencer	✓		
Coolant Volvo Coolant VCS	✓		
Engine and alternator vibro isolators	✓		

**INSTALLATION GUIDELINES**

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x95mm 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)	101,6 mm
Exhaust pipe min diameter (max. 15 m, 4 bends)	114,3 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