

MAIN FEATURES

Highest quality and reliability.	Wide range of standard and optional equipment.
ComAp IntelliLite AMF 25 controller.	Engine heater – ready to load just after start.
Ready to control MAINS – GENERATOR transfer switch.	Drip tray,
Configured for both manual and automatic mode (MRS + AMF).	Anticorrosion coating: frame - Zr, canopy – Zr, Al-Zn.
Wide range of remote communications options.	Brushless alternator.



Pictures for reference only

GENERAL DATA

Standby power E.S.P. [kVA] / [kW]	109,0 / 87,0	
Prime power P.R.P. [kVA] / [kW]	99,0 / 79,0	
Prime current P.R.P [A]	143,0	
Frequency [Hz]	50	
Voltage [V]	400	
Exhaust emission	stage II	
Fuel type	Diesel (EN 590)	
Fuel consumption - 50% load [l/h]	12,5	
- 75% load [l/h]	17,6	
- 100% load [l/h]	22,1	
- 110% load [l/h]	24,4	
Engine control voltage [V]	12	
Standard fuel tank capacity [l]	290	
Autonomy with 100% load [h]	12,4	
Design	S2671T290	
Generator version	open	canopy
Model	FD 100 I-ST1	FD 100 I-ST
Weight without fuel [kg]	~1000	1390
Dimensions L x W x H [mm]	2660 x 1110 x 1470	2670 x 1130 x 1700
Guaranteed noise power L _{wa} [dBA]	114 ± 2,7	97
Acoustic pressure L _{pa} 7m [dBA]	84,2 ± 2,7	67,4 ± 1

Prime Power PRP:

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 12h period of operation. Average power consumption should not exceed 80% PRP for each 24h of operation.

Standby power ESP:

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

Remarks:

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/EC
- Low voltage directive 2014/35/EU
- EMC directive 2014/30/EU
- Noise directive 2000/14/EC
- Emission directive 97/68/EC
- ISO 8528-1/2018, ISO 8528-5/2018
- ISO 8528-13:2016
- IEC 60204-1

STANDARD CONTROLLER

Controller type: ComAp IntelliLite AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

Stan-by and Prime power applications, AMF function available

Flexible event based history with up to 350 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter, multipurpose flexible timers

Battery charging alternator circuit connection

Comprehensive gen-set protections

Wide range of communication capabilities including :

- CAN and USB on board
- Internet access using Ethernet, GPRS or 4G module
- Support for Modbus and SNMP protocols

Cloud-based monitoring and control via WebSupervisor

Active SMS or e-mails (module required)

Geofencing and tracking via WebSupervisor

Operating temperature -20 + 70°C

IP65 operator interface protection


ENGINE

Brand	FPT (Iveco)
Type	NEF45TM2A
Made in	Italy
Engine power [kW]	87,0
Emission standard*	stage II
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
Cooling system capacity [l]	18,5
Oil pan capacity [l]	12,8
Fuel type	Diesel (EN 590)

ALTERNATOR

Nominal Voltage [V]	400
Nominal power factor (cos phi)	0,8
Ambient temperature, altitude	40 °C, 1000m n.p.m.
Nominal Power [kVA]	100,0
IP protection	IP 23
No of bearing	single bearing
Coupling	direct
Technology	brushless
Short circuit maintaining capacity	270% 10s
Efficiency [%]	90,8
Insulation class	H
Total harmonic content THD [%]	<2
Reactance Xd'' [%]	8,8
Voltage regulator type	DVR, digital
Voltage measurement	3 fazy
Voltage accuracy [%]	+/- 0,25
AVR supply system	auxiliary winding
AVR supply optional	PMG
Made in	EU

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

** According PN-ISO 8528-5/2018



FOCUSSED ON GENERATORS ONLY

Power Generator FD 100 I-ST

STANDARD EQUIPMENT

FPT (Iveco) NEF45TM2A engine	✓
Oil low pressure switch	✓
Engine high temperature switch	✓
Engine preheating with thermostat	✓
Engine oil Titan Cargo 15W40	✓
Fuel filter with water separator	✓
Coolant Fuchs Maintain Fricofin LL-50	✓
Coolant inlet outside of the canopy *	✓
Starting batteries 100 Ah	✓
Battery charger	✓
GCB Schneider NSX 160 3P + Mic.2.2	✓
GCB shunt release coil	✓
Controller ComAp IL-AMF25	✓
Acoustic alarm	✓
Emergency stop button	✓
Silenced canopy made with Al.-Zn. *	✓
Standard color 7024	✓
Fuel tank integrated with a frame with drip tray	✓
Welded frame with fuel tank	✓
Fuel inlet inside, protected by canopy locked doors *	✓
Fuel level measurement	✓
Engine and alternator vibro isolators	✓
Exhaust compensator and silencer	✓
Transportation brackets	✓

OPTIONAL EQUIPMENT

Electronic engine speed governor	□
Oil pressure sensor	□
Engine temperature sensor	□
Oil draining hand pump	□
Battery disconnection switch	□
GCB 4P Schneider NSX Micrologic 2.2	□
Power Lock type power output *	□
Power sockets box SOM 104 *	□
Transfer switch controlled by generator controller	□
Transfer switch with ATS controller	□
GPRS communication card	□
Ethernet card	□
RS 485, RS 232 card	□
Remote display	□
Fuel inlet outside of the canopy with lock *	□
Drip space level sensor	□
Fuel and retention pump	□
Alternative fuel tank size 720l	□
External fuel tank 1 000 – 10 000 l	□
Fuel tank filling pump and shut-off valve	□

* Applies only for canopied version

INSTALLATION GUIDELINES

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x50 mm ²
Recommended cable for do 30m generator heater supply	Flexible 3x2,5 mm 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

Continuous operation generators	12 months up to 1000 working hours
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Version: Apr-21

Datasheet could be changed without notification

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