

FOCUSED ON GENERATORS ONLY

Power Generator FD 60 I-ST

MAIN FEATURES

Highest quality and reliability.

ComAp InteliLite AMF 25 controller.

Ready to control MAINS – GENERATOR transfer switch.

Configured for both manual and automatic mode (MRS + AMF).

Wide range of remote communications options.

Wide range of standard and optional equipment.

Engine heater – ready to load just after start.

Drip tray,

Anticorrosion coating: frame - Zr, canopy - Zr, Al-Zn.

Brushless alternator.





Pictures for reference only

66,0 / 53,0

GENERAL DATA

Standby power ESP [kVA] / [kW]

	· _	,	
Prime power PRP [kVA] / [kW	60,0 / 48,0		
Prime current PRP [A]	Prime current PRP [A] 86,0		
Frequency [Hz]		50	
Voltage [V]		400	
Exhaust emission		stage II	
Fuel type	D	iesel (EN 590)	
Fuel consumption - 50% load [1/h	1]	7,2	
- 75% load [l/h	n]	10,3	
- 100% load [l/h]		13,7	
- 110% load [l/h] 15,0		15,0	
Engine control voltage [V] 12		12	
Standard fuel tank capacity [1]	240		
Autonomy with 100% load [h]	16,6		
Design		S2200T240	
Generator version	open	canopy	
Model	FD 60 I-ST1	FD 60 I-ST	
Weight without fuel [kg]	910	1170	
Dimensions L x W x H [mm]	2190 x 1110 x 1320	2200 x 1130 x 1460	
Guaranteed noise power Lwa [dBA]	$113,6 \pm 2,2$	94	
Acoustic pressure @7m Lpa [dBA]	$83,6 \pm 2,1$	65,5 ± 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/ECEmission directive 97/68/EC
- ISO 8528-1/2018, ISO 8528-5/2018
- ISO 8528-13:2016
- IEC 60204-1



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STANDARD CONTROLLER

Controller type: ComAp InteliLite 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

ALTERNATOR

Engine power [kW] $53,3$ Nominal Power [kVA] $60,0$ Emission standard*stage IIIP protectionIP 23Rotation per minute [rpm] 1500 No of bearingsingle bearingEngine governormechanicalCouplingdirectGovernor class**G2TechnologybrushlessDisplacement [l] $4,5$ Short circuit maintaining capacity 270% 10sNo of cylinder 4 Efficiency [%] $89,9$ Fuel systemdirect injectionInsulation classHElectrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [l] $18,5$ Reactance Xd'' [%] $7,3$ Oil pan capacity [l] $12,8$ Voltage regulator typeDVR, digitalFuel typeDiesel (EN 590)Voltage measurement 3 phaseVoltage accuracy [%] $+/-$ 0,25AVR supply systemauxiliary windingAVR supply optionalPMG				
Made inItalyAmbient temperature, altitude $40 ^{\circ}\text{C}$, 1000m AMSIEngine power [kW] $53,3$ Nominal Power [kVA] $60,0$ Emission standard*stage IIIP protectionIP 23Rotation per minute [rpm] 1500 No of bearingsingle bearingEngine governormechanicalCouplingdirectGovernor class**G2TechnologybrushlessDisplacement [I] $4,5$ Short circuit maintaining capacity 270% $10s$ No of cylinder 4 Efficiency [%] $89,9$ Fuel systemdirect injectionInsulation classHElectrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [I] $18,5$ Reactance Xd'' [%] $7,3$ Oil pan capacity [I] $12,8$ Voltage regulator typeDVR, digitalFuel typeDiesel (EN 590)Voltage measurement 3 phaseVoltage accuracy [%] $+/ 0,25$ AVR supply systemauxiliary windingAVR supply optionalPMG	Brand	FPT (Iveco)	Nominal Voltage [V]	400
Engine power [kW]53,3Nominal Power [kVA]60,0Emission standard*stage IIIP protectionIP 23Rotation per minute [rpm] 1500 No of bearingsingle bearingEngine governormechanicalCouplingdirectGovernor class**G2TechnologybrushlessDisplacement [I] $4,5$ Short circuit maintaining capacity 270% 10sNo of cylinder 4 Efficiency [%] $89,9$ Fuel systemdirect injectionInsulation classHElectrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [I] $18,5$ Reactance Xd'' [%] $7,3$ Oil pan capacity [I] $12,8$ Voltage regulator typeDVR, digitalFuel typeDiesel (EN 590)Voltage measurement 3 phaseVoltage accuracy [%] $+/-$ 0,25AVR supply systemauxiliary windingAVR supply optionalPMG	Type	NEF45SM1A	Nominal power factor (cos phi)	0,8
Emission standard*stage IIIP protectionIP 23Rotation per minute [rpm] 1500 No of bearingsingle bearingEngine governormechanicalCouplingdirectGovernor class** $G2$ TechnologybrushlessDisplacement [I] $4,5$ Short circuit maintaining capacity 270% $10s$ No of cylinder 4 Efficiency [%] $89,9$ Fuel systemdirect injectionInsulation classHElectrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [I] $18,5$ Reactance Xd'' [%] $7,3$ Oil pan capacity [I] $12,8$ Voltage regulator typeDVR, digitalFuel typeDiesel (EN 590)Voltage measurement 3 phaseVoltage accuracy [%] $+/-$ 0,25AVR supply systemauxiliary windingAVR supply optionalPMG	Made in	Italy	Ambient temperature, altitude	40 °C, 1000m AMSL
Rotation per minute [rpm] 1500 No of bearing single bearing Engine governor mechanical Coupling direct Governor class** G2 Technology brushless Displacement [I] 4,5 Short circuit maintaining capacity 270% 10s No of cylinder 4 Efficiency [%] 89,9 Fuel system direct injection Insulation class H Electrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [I] 18,5 Reactance Xd'' [%] 7,3 Oil pan capacity [I] 12,8 Voltage regulator type DVR, digital Fuel type Diesel (EN 590) Voltage measurement 3 phase Voltage accuracy [%] +/- 0,25 AVR supply system AVR supply optional PMG	Engine power [kW]	53,3	Nominal Power [kVA]	60,0
	Emission standard*	stage II	IP protection	IP 23
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Rotation per minute [rpm]	1500	No of bearing	single bearing
Displacement [1] 4,5 Short circuit maintaining capacity 270% 10s No of cylinder 4 Efficiency [%] 89,9 Fuel system direct injection Insulation class H Electrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [1] 18,5 Reactance Xd'' [%] 7,3 Oil pan capacity [1] 12,8 Voltage regulator type DVR, digital Fuel type Diesel (EN 590) Voltage measurement 3 phase Voltage accuracy [%] +/- 0,25 AVR supply system auxiliary winding AVR supply optional PMG	Engine governor	mechanical	Coupling	direct
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Governor class**	G2	Technology	brushless
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Displacement [1]	4,5	Short circuit maintaining capacity	270% 10s
Electrical system [V] 12 Total harmonic content THD [%] <2 Cooling system capacity [1] 18,5 Reactance Xd'' [%] 7,3 Oil pan capacity [1] 12,8 Voltage regulator type DVR, digital Fuel type Diesel (EN 590) Voltage measurement 3 phase Voltage accuracy [%] $+/-0.25$ AVR supply system auxiliary winding AVR supply optional PMG	No of cylinder	4	Efficiency [%]	89,9
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Fuel system	direct injection	Insulation class	Н
Oil pan capacity [1] 12,8 Voltage regulator type DVR, digital Fuel type Diesel (EN 590) Voltage measurement 3 phase Voltage accuracy [%] +/- 0,25 AVR supply system auxiliary winding AVR supply optional PMG	Electrical system [V]	12	Total harmonic content THD [%]	<2
Fuel type Diesel (EN 590) Voltage measurement 3 phase Voltage accuracy [%] +/- 0,25 AVR supply system auxiliary winding AVR supply optional PMG	Cooling system capacity [1]	18,5	Reactance Xd'' [%]	7,3
Voltage accuracy [%] +/- 0,25 AVR supply system auxiliary winding AVR supply optional PMG	Oil pan capacity [1]	12,8	Voltage regulator type	DVR, digital
AVR supply system auxiliary winding AVR supply optional PMG	Fuel type	Diesel (EN 590)	Voltage measurement	3 phase
AVR supply optional PMG			Voltage accuracy [%]	+/- 0,25
			AVR supply system	auxiliary winding
Made in FII			AVR supply optional	PMG
Wade iii EC			Made in	EU

- * According directive 97/68/WE non road mobile machinery engine emission.
- ** According PN-ISO 8528-5/2018



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STANDARD EQUIPMENT

OPTIONAL EQUIPMENT

FPT (Iveco) NEF45SM1A engine	✓	Electronic engine speed governor	
Oil low pressure switch	✓	Oil pressure sensor	
Engine high temperature switch	✓	Engine temperature sensor	
Engine preheating with thermostat	✓	Oil draining hand pump	
Engine oil Titan Cargo 15W40	✓	Battery disconnection switch	
Fuel filter with water separator	✓	GCB 4P Schneider NSX Micrologic 2.2	
Coolant Fuchs Maintain Fricofin LL-50	✓	Power socket connection *	
Coolant inlet outside of the canopy *	✓	Power sockets box SOM 104 *	
Starting batteries 100 Ah	✓	Transfer switch controlled by generator controller	
Battery charger	✓	Transfer switch with ATS controller	
GCB Schneider NSX 160 3P + Mic.2.2	✓	GPRS communication card	
GCB shunt release coil	✓	Ethernet card	
Controller ComAp IL-AMF25	✓	RS 485, RS 232 card	
Acoustic alarm	✓	Remote display	
Emergency stop button	✓	Fuel inlet outside of the canopy with lock *	
Silenced canopy made with AlZn. *	✓	Drip space level sensor	
Standard color 7024	✓	Fuel and retention pump	
Fuel tank integrated with a frame with drip tray	✓	Alternative fuel tank size 590 l	
Welded frame with fuel tank	✓	External fuel tank 1 000 - 10 000 l	
Fuel inlet inside, protected by canopy locked doors *	✓	Fuel tank filling pump and shut-off valve	
Fuel level measurement	✓		
Engine and alternator vibro isolators	✓		
Exhaust compensator and silencer	✓		
Transportation brackets	✓		

^{*} Applies only for canopied version

INSTALLATION GUIDELINES

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x25 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)	88,9 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

Version: Dec-21

Datasheet could be changed without notification

