

FOCUSED ON GENERATORS ONLY

Power Generator FD 18 M5-ST draft

MAIN FEATURES

Highest quality and reliability.	Wide range of standard and optional equipment.
ComAp InteliLite 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.





Sample photos, details of devices may slightly differ from the illustrations.

GENERAL DATA

Standby power ESP [kVA] / [kW	']	18,9 / 15,1
Prime power PRP [kVA] / [kW]	17,2 / 13,8
Prime current PRP [A]		24,8
Frequency [Hz]		50
Voltage [V]		400
Exhaust emission		Stage V
Fuel type	Diesel (EN 590)	
Fuel consumption - 50% load [l/h	Fuel consumption - 50% load [l/h]	
- 75% load [1/h	- 75% load [l/h]	
- 100% load [1/h]		5,2
- 110% load [l/h] 5,7		5,7
Engine control voltage [V]	12	
Standard fuel tank capacity [1]	140	
Autonomy with 100% load [h]	25,7	
Design	S1902T140	
Generator version	open	canopy
Model	FD 18 M5-ST1	FD 18 M5-ST
Weight without fuel [kg]	~520	710
Dimensions L x W x H [mm]	1900 x 850 x 1230	1900 x 850 x 1400
Guaranteed noise power Lwa [dBA]		87
Acoustic pressure @7m Lpa [dBA]		$58,3 \pm 1$

Nominal power PRP:

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% PRP for each 24h of operation.

Stand-by 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 200 hours of operation per year, average power consumption should not exceed 70% ESP for each 24 of operation

Remark

Ratings represent the genset performance capabilities to standard conditions specified in ISO 8528-1.

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 $-20 + 70^{\circ}$ C

IP65 operator interface protection



ENGINE

ALTERNATOR

Brand	Mitsubishi	Nominal Voltage [V]	400
Type	S4L2-Z5T61SD	Nominal power factor (cos phi)	0,8
Made in	India	Ambient temperature, altitude	40 °C, 1000m a.m.s.1
Engine power [kW]	16,0	Nominal Power [kVA]	17,5
Emission standard*	stage V	IP protection	IP 23
Rotation per minute [rpm]	1500	No of bearing	single bearing
Engine governor	mechanical	Coupling	direct
Governor class**	G1	Technology	brushless
Displacement [1]	1,8	Short circuit maintaining capacity	270% 10s
No of cylinder	4	Efficiency [%]	86,1
Fuel system		Insulation class	Н
Electrical system [V]	12	Total harmonic content THD [%]	<3,5
Cooling system capacity [1]	2,5	Reactance Xd" [%]	7,7
Oil pan capacity [1]	6,0	Voltage regulator type	DVR, digital
Fuel type	Diesel (EN 590)	Voltage measurement	3 phase
		Voltage accuracy [%]	+/- 0,5
		AVR supply system	auxiliary winding
		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

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Mitsubishi S4L2-Z5T61SD engine	✓	Oil pressure sensor	
Glow plugs	✓	Engine temperature sensor	
Oil low pressure switch	✓	Oil draining hand pump	
Engine high temperature switch	✓	Battery disconnection switch	
Engine preheating with thermostat	✓	Power sockets box SOM 106 *	
Engine oil Titan Cargo 15W40	\checkmark	Transfer switch controlled by generator controller	
Coolant Fuchs Maintain Fricofin LL-50	✓	Transfer switch with ATS controller	
Coolant inlet outside of the canopy *	\checkmark	GPRS communication card	
Coolant draining valve	✓	Ethernet card	
Starting batteries 75 Ah	\checkmark	RS 485, RS 232 card	
Battery charger	✓	Remote display	
GCB Schneider Z32/4	\checkmark	Fuel inlet outside of the canopy with lock *	
GCB shunt release coil	✓	Drip space level sensor	
Controller ComAp IL-AMF25	✓	External fuel tank 1 000 - 10 000 1	
Acoustic alarm	✓	Fuel tank filling pump and shut-off valve	
Emergency stop button	✓		
Silenced canopy made with AlZn. *	✓		
Standard color 7024	\checkmark		
Fuel tank integrated with a frame with drip tray	✓		
Welded frame with fuel tank	\checkmark		
Fuel inlet inside, protected by canopy locked doors *	✓		
Fuel level measurement	\checkmark		
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 5x6 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)	48,3 mm
Exhaust pipe min diameter (max. 15 m, 4 bends)	60,3 mm

MAINTENANCE GUIDELINES

Fuel filters replacement	250 h / 1 year
Oil replacement	After first 50h, then every 250 h / 1 year
Oil filters replacement	After first 50h, then every 250 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: Dec-21 Datasheet could be changed without notification

