

FOCUSED ON GENERATORS ONLY

Power Generator FD 40 M-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.





F.0040.MA.S2003T210-01

F.0040.MA.S2003T210-02

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

GENERAL DATA

Standby power E.S.P. [kVA] / [kV	W]	44,0 / 35,2	
Prime power P.R.P. [kVA] / [k	.W]	40,0 / 32,0	
Prime current P.R.P [A]		57,7	
Frequency [Hz]		50	
Voltage [V]		400	
Exhaust emission		non-emission	
Fuel type		Diesel (EN 590)	
Fuel consumption - 50% load [l/h	1]	5,2	
- 75% load [l/h	1]	7,6	
- 100% load [l/h]		10,1	
- 110% load [l/	/h]	11,1	
Engine control voltage [V]		12	
Standard fuel tank capacity [1]		210	
Autonomy with 100% load [h]		19,7	
Generator version	open	canopy	
Model	FD 40M-ST1	FD 40M-ST	
Weight without fuel [kg]	~780	~990	
Dimensions L x W x H [mm]	2000 x 1110 x 1310	2000 x 1130 x 1450	
Guaranteed noise power Lwa [dBA]	$111,9 \pm 0,7$	93	
Acoustic pressure Lpa 7m [dBA]	$82,9 \pm 0,7$	$64,3 \pm 1$	

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% PRP for each 24h of operation.

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

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/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



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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

Fuel type

Brand	Mitsubishi]
Type	S4S-DT61SD]
Made in	Japan	4
Engine power [kW]	36,8]
Emission standard*	non-emission]
Rotation per minute [rpm]	1500]
Engine governor	mechanical	(
Governor class**	G2	-
Displacement [l]	3,3	5
No of cylinder	4]
Fuel system]
Electrical system [V]	12	-
Cooling system capacity [1]	5,5]
Oil pan capacity [1]	10,0	1

Diesel (EN 590)

ALTERNATOR

ALILMAION	
Nominal Voltage [V]	400
Nominal power factor (cos phi)	0,8
Ambient temperature, altitude	40 °C, 1000m a.m.s.1
Nominal Power [kVA]	40,0
IP protection	IP 23
No of bearing	single bearing
Coupling	direct
Technology	brushless
Short circuit maintaining capacity	270% 10s
Efficiency [%]	88,9
Insulation class	Н
Total harmonic content THD [%]	<2
Reactance Xd'' [%]	7,4
Voltage regulator type	DVR, digital
Voltage measurement	3 phases
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

Mitsubishi S4S-DT61SD 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 105 *	
Engine oil Titan Cargo 15W40	✓	Transfer switch controlled by generator controller	
Coolant Fuchs Maintain Fricofin LL-50	✓	Transfer switch with ATS controller	
Coolant inlet outside of the canopy *	√ *	GPRS communication card	
Coolant draining valve	✓	Ethernet card	
Starting batteries 100 Ah	✓	RS 485, RS 232 card	
Battery charger	✓	Remote display	
GCB Schneider Z63/4	✓	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	✓		
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	✓		

^{*} Applies only for canopied version

INSTALLATION GUIDELINES

Power terminal	GCB terminal
Recommended cable for up to 30m power cable way	Flexible 5x16 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

Version: Mar-21 Datasheet could be changed without notification

