

FOCUSED ON GENERATORS ONLY

Power Generator FD 40 K-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.

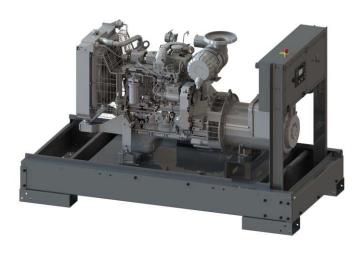
Wide range of standard and optional equipment.

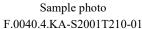
Engine heater – ready to load just after start.

Drip tray,

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

Brushless alternator.







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GENERAL DATA

Standby power E.S.P. [kVA] / [kW]	44,0 / 35,0	
Prime power P.R.P. [kVA] / [kW]		40,0 / 32,0	
Prime current P.R.P [A]		58,0	
Frequency [Hz]		50	
Voltage [V]		400	
Exhaust emission		non-emission	
Fuel type		Diesel (EN 590)	
Fuel consumption - 50% load [1/h]		5,2	
- 75% load [l/h]		7,5	
- 100% load [l/h]		9,8	
- 110% load [l/h]		10,7	
Engine control voltage [V]		12	
Standard fuel tank capacity [1]		210	
Autonomy with 100% load [h]		20,3	
Generator version	open	canopy	
Model	FD 40 K-ST1	FD 40 K-ST	
Weight without fuel [kg]	~800	950	
Dimensions L x W x H [mm]	2000 x 1100 x 1320	2000 x 1100 x 1490	
Guaranteed noise power Lwa [dBA]	108 ± 2	91	
Acoustic pressure Lpa 7m [dBA]	$79,7 \pm 2$	$60,6 \pm 1,6$	

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 1h within a 12h period of operation. Average power consumption should not exceed 80% 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 200h of operation per year, max average power consumption 70% of ESP.

Remark:

All parameters are given for reference conditions: ambient air temperature up to $40~\mathrm{C}$ and site altitude above sea level $1000\mathrm{m}$

Norms and directives:

- Machinery directive 2006/42/WE
- Low voltage directive 2014/35/WE
- EMC directive 2014/30/WE
- Noise directive 2000/14/WE
- Emission directive 97/68/WE
- ISO 8528-1/2018, ISO 8528-5/2018
- PN-EN ISO 8528-13:2016
- PN-EN 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

Brand	Kohler
Туре	KDI2504TM-40
Made in	Italy
Engine power [kW]	36,2
Emission standard*	non-emission
Rotation per minute [rpm]	1500
Engine governor	mechanical
Governor class**	G2
Displacement [1]	2,5
No of cylinder	4
Fuel system	
Electrical system [V]	12
Cooling system capacity [1]	7,7
Oil pan capacity [1]	11,5
Fuel type	Diesel (EN 590)

ALTERNATOR

ALIERNATUR	
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 [%]	+/- 0,25
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

Kohler KDI2504TM-40 engine	✓	Electronic engine speed governor	
Oil low pressure switch	✓	Oil pressure sensor	
Engine high temperature switch	✓	Oil draining hand pump	
Engine high temperature sensor	✓	Battery disconnection switch	
Engine preheating with thermostat	✓	Power sockets box SOM 105*	
Engine oil Titan Cargo 15W40	✓	Transfer switch controlled by generator controller	
Fuel filter with water separator	✓	Transfer switch with ATS controller	
Coolant Fuchs Maintain Fricofin HDD Premix	✓	GPRS communication card	
Coolant inlet outside of the canopy *	√ *	Ethernet card	
Starting batteries 100 Ah	✓	RS 485, RS 232 card	
Battery charger	✓	Remote display	
GCB Schneider Schneider Z63/4	✓	Fuel inlet outside of the canopy with lock *	
GCB shunt release coil	✓	Drip space level sensor	
Controller ComAp Inteli Lite AMF 25	✓	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 7016	✓		
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

TOTAL CONTROL OF THE	
Continuous work generators	12 months up to 1000 working hours

Version: Nov-20 Datasheet could be changed without notification

