

# Power Generator FDG 730 VA draft

#### **MAIN FEATURES**

Highest quality and reliability.	Wide range of standard and optional equipment.
ComAp IL-NT AMF25 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.
Schneider NS type GCB.	



### **GENERAL DATA**

Model	F.0730.VA.G
Standby power E.S.P. [kVA] / [kW]	766,0 / 613,0
Prime power P.R.P. [kVA] / [kW]	696,0 / 557,0
Prime current P.R.P [A]	1005,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	stage II
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	78,1
- 75% load [l/h]	109,0
- 100% load [1/h]	140,1
- 110% load [l/h]	155,2
Standard fuel tank capacity [1]	985
Autonomy with 100% load [h]	7,0
Engine control voltage [V]	24
Weight without fuel [kg]	~6000
Dimensions L x W x H [mm]	4700 x 1830 x 2667
Guaranteed noise power Lwa [dBA]	~107
Acoustic pressure Lpa (7m) [dBA]	~75

#### 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 12-hour period of operation. Average power consumption should not exceed 70% PRP for each 24 hours 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 500h of operation per year, average power consumption should not exceed 80% ESP for each 24 hours of operation. Continuous operation limited to 300h.

#### Remark

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

#### Norms and directives:

- Machinery directive 2006/42/EC
- Low voltage directive 2014/35/EC
- EC directive 2014/30/EC
- Noise directive 2000/14/ECEmission directive 97/68/EC
- ISO 8528-1:2005, ISO 8528-5:2013
- ISO 8528-13:2016
- EN 60204-1



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#### STANDARD CONTROLLER

Controller type: AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

AMF function available

Flexible event based history with up to 119 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter

Battery charging alternator circuit connection

Fuel level measurement

Generator protection (over/under frequency, voltage, overcurrent)

Communication with ECU supporting CAN J1939 standard

Communication interface RS 485 and RS 232 supporting Modbus RTU (IL-NT RS232-485 module required)

GSM modem / wireless internet (IL-NT GPRS module required)

Internet/Ethernet communication (IB-Lite module required)

InteliMonitor software for single gen-set view

WebSupervisor software for Android mobile devices or PC's for fleet management

Active SMS or e-mail (IL-NT GPRS or IB-Lite module required)



#### **ENGINE**

#### **ALTERNATOR**

		ALILIMATON	
Brand	Volvo	Nominal Voltage [V]	400
Type	TWD1645GE	Nominal power factor (cos phi)	0,8
Made in	Sweden	Ambient temperature, altitude	40 °C, 1000m a.m.s.1
Engine power [kW]	595,0	Nominal Power [kVA]	730,0
Emission standard*	stage II	IP protection	IP 23
Rotation per minute [rpm]	1500	No of bearing	single bearing
Engine governor	electonic	Coupling	direct
Governor class**	G3	Technology	brushless
Displacement [l]	16,1	Short circuit maintaining capacity	270% 10s
No of cylinder	6	Efficiency [%]	93,6
Fuel system	unit injectors	Insulation class	Н
Electrical system [V]	24	Total harmonic content THD [%]	3,5
Cooling system capacity [1]	95,0	Reactance Xd'' [%]	15,9
Oil pan capacity [1]	48,0	Voltage regulator type	digital
Fuel type	Diesel (EN 590)	Voltage measurement	3 phases
		Voltage accuracy [%]	+/- 0,25
		AVR supply system	auxiliary winding
		AVR supply optional	PMG
		Made in	EU

<sup>\*</sup> According directive 97/68/EC non road mobile machinery engine emission.

<sup>\*\*</sup> According ISO 8528-5:2013



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#### STANDARD EQUIPMENT

### **OPTIONAL EQUIPMENT**

Volvo TWD1645GE engine	✓	Battery disconnection switch	✓
Electronic engine speed governor	<b>√</b>	GCB 4P Schneider NS Micrologic 2.0	<b>√</b>
Oil low pressure switch	<b>√</b>	Power Lock type power output	√ ·
Oil pressure sensor	<b>√</b>	Power socket box	<b>√</b>
Engine high temperature switch	<b>✓</b>	Transfer switch controlled by generator controller	<b>√</b>
Engine high temperature sensor	· ✓	Transfer switch with ATS controller	✓
Engine preheating with thermostat	✓	GPRS communication card	· ✓
Engine oil Titan Cargo 15W40	· ✓	Ethernet card	✓
Oil draining hand pump	<b>√</b>	RS 485, RS 232 card	<b>√</b>
Fuel filter with water separator	<b>√</b>	Remote display	<b>√</b>
Coolant Fuchs Maintain Fricofin LL-35	<b>√</b>	Drip space level sensor	<b>√</b>
Coolant inlet outside of the canopy	<b>√</b>	Fuel and retention pump	<b>√</b>
Starting batteries 2x 180 Ah	✓	Non-standard fuel tank size	✓
Battery charger	✓	External fuel tank 1 000 – 10 000 1	✓
GCB Schneider NS1250 3P +Mic 2.0	✓	3-way valve for external fuel tank connection	✓
GCB shunt release coil	✓	Fuel tank filling pump and shut-off valve	✓
Bar connection	✓	Non-standard canopy color (RAL palette)	✓
Controller ComAp IL-NT-AMF25	✓		
Controller switch	✓		
Acoustic alarm	✓		
Emergency stop button	✓		
Silenced canopy made with AlZn.	✓		
Standard color RAL 7032	✓		
Fuel tank integrated with a frame with drip tray	✓		
Welded frame with fuel tank	✓		
Fuel inlet outside of the canopy with lock	✓		
Fuel level measurement	✓		
Exhaust compensator and silencer	✓		
Engine and alternator vibro isolators	✓		
Transportation brackets	✓		



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#### **INSTALLATION GUIDELINES**

Power terminal	Busbar
Recommended cable for up to 30m power cable way	Flexible 3x5x150 mm <sup>2</sup>
Recommended cable for do 30m generator heater supply	Flexible 3x2,5 mm <sup>2</sup>
*For additional cable connection with FOGO ATS see ATS wiring diagram	
Exhaust pipe min diameter (max. 7 m, 4 bends)	159 mm
Exhaust pipe min diameter (max. 15 m, 4 bends)	159 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 work generators 12 months up to 1000 working hours	

Wersja: 01.2019

Datasheet could be changed without notification

