

## MAIN FEATURES

Highest quality and reliability. ComAp IL-NT AMF25 controller.	Wide range of standard and optional equipment. 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

Code F.0500.VA.G

Standby power E.S.P. [kVA] / [kW] 550,0 / 440,0

Prime power P.R.P. [kVA] / [kW] 500,0 / 400,0

Prime current P.R.P [A] 722,0

Frequency [Hz] 50

Voltage [V] 400

Exhaust emission stage II

Fuel type Diesel (EN 590)

Fuel consumption - 50% load [l/h] 53,1

- 75% load [l/h] 77,2

- 100% load [l/h] 103,7

- 110% load [l/h] 114,3

Standard fuel tank capacity [l] 960

Autonomy with 100% load [h] 9,3

Engine control voltage [V] 24

Weight without fuel [kg] ~5110

Dimensions L x W x H [mm] 4500 x 1830 x 2637

Guaranteed noise power Lwa [dBA] 104

Acoustic pressure Lpa (7m) [dBA] 73,2 ± 2,2

### 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°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/EC
- Emission directive 97/68/EC
- ISO 8528-1:2005, ISO 8528-5:2013
- ISO 8528-13:2016
- EN 60204-1

## 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

Brand	Volvo
Type	TAD1641GE
Made in	Sweden
Engine power [kW]	430,0
Emission standard*	stage II
Rotation per minute [rpm]	1500
Engine governor	electronic
Governor class**	G3
Displacement [l]	16,1
No of cylinder	6
Fuel system	unit injectors
Electrical system [V]	24
Cooling system capacity [l]	60,0
Oil pan capacity [l]	48,0
Fuel type	Diesel (EN 590)

## ALTERNATOR

Nominal Voltage [V]	400
Nominal power factor (cos phi)	0,8
Ambient temperature, altitude	40 °C, 1000m a.m.s.l
Nominal Power [kVA]	500,0
IP protection	IP 23
No of bearing	single bearing
Coupling	direct
Technology	brushless
Short circuit maintaining capacity	270% 10s
Efficiency [%]	93,9
Insulation class	H
Total harmonic content THD [%]	1,5
Reactance Xd'' [%]	15,2
Voltage regulator type	digital
Voltage measurement	3 phases
Voltage accuracy [%]	+/- 0,25
AVR supply system	auxiliary winding
AVR supply optional	PMG
Made in	EU

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

\*\* According ISO 8528-5:2013

## STANDARD EQUIPMENT

## OPTIONAL EQUIPMENT

Volvo TAD1641GE engine	✓	Battery disconnection switch	✓
Electronic engine speed governor	✓	GCB 4P Schneider NS Micrologic 2.0	✓
Oil low pressure switch	✓	Power Lock type power output	✓
Oil pressure sensor	✓	Power socket box	✓
Engine high temperature switch	✓	Transfer switch controlled by generator controller	✓
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	✓	RS 485, RS 232 card	✓
Fuel filter with water separator	✓	Remote display	✓
Coolant Fuchs Maintain Fricofin LL-35	✓	Drip space level sensor	✓
Coolant inlet outside of the canopy	✓	Fuel and retention pump	✓
Starting batteries 2x 180 Ah	✓	Non-standard fuel tank size	✓
Battery charger	✓	External fuel tank 1 000 – 10 000 l	✓
GCB Schneider NS800 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 Al.-Zn.	✓		
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	✓		

**INSTALLATION GUIDELINES**

Power terminal	Busbar
Recommended cable for up to 30m power cable way	Flexible 2x5x240 mm <sup>2</sup>
Recommended cable for do 30m generator heater supply	Flexible 3x2,5 mm <sup>2</sup>
*For additional cable connection with ATS see ATS wiring diagram	
Exhaust pipe min diameter (max. 7 m, 4 bends)	133 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
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Datasheet could be changed without notification