

MAIN FEATURES

- Innovative generating set consisting of two synchronized generator, arranged in one common canopy
- Easy synchronization with other generators, and optionally with mains
- Possibility of single generator work in case of low power consumption or breakdown of one machine
- Alternating work mode provides even wear out of each machine
- Total power output accessible at one connection point
- Canopy made of Al. Zn. coated steel plate
- Easy service access


GENERAL DATA

| | |
|-----------------------------------|--------------------|
| Code | F.1000.VAG5.T |
| Standby power E.S.P. [kVA] / [kW] | 1100,0 / 880,0 |
| Prime power P.R.P. [kVA] / [kW] | 1000,0 / 800,0 |
| Prime current P.R.P [A] | 1443,0 |
| Frequency [Hz] | 50 |
| Voltage [V] | 400 |
| Exhaust emission | stage II |
| Fuel type | Diesel (EN 590) |
| Fuel consumption - 50% load [l/h] | 106,2 |
| - 75% load [l/h] | 154,4 |
| - 100% load [l/h] | 207,4 |
| - 110% load [l/h] | 228,6 |
| Standard fuel tank capacity [l] | 1990 |
| Autonomy with 100% load [h] | 9,6 |
| Engine control voltage [V] | 24 |
| Weight without fuel [kg] | ~9670 |
| Dimensions L x W x H [mm] | 8970 x 1970 x 2520 |
| Guaranteed noise power Lwa [dBA] | ~110 |
| Acoustic pressure Lpa (7m) [dBA] | ~80 |

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/WE
- Low voltage directive 2014/35/WE
- EMC directive 2014/30/WE
- Noise directive 2000/14/WE
- Emission directive 97/68/EC
- ISO 8528-1:2018, ISO 8528-5:2018
- ISO 8528-13:2016
- EN 60204-1

STANDARD CONTROLLER

Controller type: ComAp IntelliGen 500

Easy to operate, intuitive, user friendly graphical interface

Remote control and monitoring

Direct communication with ECU

Parallel operation for up to 32 gen-sets

Parallel to Mains function (with InteilGen 210)

Running Hours equalization

Load sharing and VAR sharing via CAN

Load demand start / stop

Detailed event based history with up to 500 records

Rental timers

PLC support with PLC editor and monitor

High accuracy of voltage and current measurement

True RMS measurement

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

Multipurpose flexible timers with full calendar

Communication with ECU, supporting CAN J1939 standard

Up to 5 languages in the controller

Integrated USB for configuration

Active SMS and emails in different languages *

Support of MODBUS RTU/TCP or SNMP v1/v2c *

Integrated USB Host for uploading/downloading

*function available with extension module



Geofencing and tracking via WebSupervisor *

Cloud-based monitoring and control *

Work at a temperature of -30°C to +70°C

Color display

ENGINE

| | |
|-----------------------------|-----------------|
| Brand | Volvo |
| Type | TAD1641GE |
| Made in | Sweden |
| Engine power [kW] | 430 |
| 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/WE non road mobile machinery engine emission.

** According ISO 8528-5:2018



FOGO ON GENERATORS ONLY

Power Generator FDT 1000 V draft

STANDARD EQUIPMENT

| | |
|---|---|
| Volvo 2 x TAD1641GE engine | ✓ |
| Electronic engine speed governor | ✓ |
| Oil low pressure switch | ✓ |
| Oil pressure sensor | ✓ |
| Engine high temperature switch | ✓ |
| Engine high temperature sensor | ✓ |
| Engine preheating with thermostat | ✓ |
| Engine oil Titan Cargo 15W40 | ✓ |
| Oil draining hand pump | ✓ |
| Fuel filter with water separator | ✓ |
| Coolant Fuchs Maintain Fricofin LL-35 | ✓ |
| Coolant inlet outside of the canopy | ✓ |
| Starting batteries 4x180 Ah | ✓ |
| Battery charger | ✓ |
| GCB 2 x Schneider NS800 3P + Micrologic 2.0 | ✓ |
| GCB under voltage release coil | ✓ |
| Bar connection | ✓ |
| Controller 2 x IntelliGen 500 | ✓ |
| Controller switch | ✓ |
| Acoustic alarm | ✓ |
| Emergency stop button | ✓ |
| Silenced canopy made with Al.-Zn. | ✓ |
| Standard color RAL 7032 | ✓ |
| Fuel tank installed in 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 | ✓ |

OPTIONAL EQUIPMENT

| | |
|---|---|
| Battery disconnection switch | ✓ |
| 4 pole GCB Schneider NS Micrologic 2.0 | ✓ |
| Transfer switch with ATS controller | ✓ |
| GPRS communication module | ✓ |
| Ethernet module | ✓ |
| RS 485, RS 232 module | ✓ |
| Remote display | ✓ |
| Drip space level sensor | ✓ |
| Fuel and retention pump | ✓ |
| External fuel tank 1 000 – 10 000 l | ✓ |
| Fuel tank filling pump and shut-off valve | ✓ |
| Non-standard canopy color | ✓ |



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INSTALLATION GUIDELINES

| | |
|---|---|
| Power terminal | Busbar |
| Recommended cable for up to 30m power cable way | Flexible – to be calculated based on local conditions and regulations |
| Recommended cable for do 30m generator heater supply | Flexible 3 x 2,5mm ² |
| *For additional cable connection with FOGO ATS see ATS wiring diagram | |
| Exhaust pipe min diameter (max. 7 m, 4 bends) | - |
| Exhaust pipe min diameter (max. 15 m, 4 bends) | - |

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 |
|----------------------------|------------------------------------|