

**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.0820.VAG2.T
Standby power E.S.P. [kVA] / [kW]	902,0 / 722,0
Prime power P.R.P. [kVA] / [kW]	820,0 / 656,0
Prime current P.R.P [A]	1184,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	stage II
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	87,0
- 75% load [l/h]	126,2
- 100% load [l/h]	164,2
- 110% load [l/h]	181,0
Standard fuel tank capacity [l]	1380
Autonomy with 100% load [h]	8,4
Engine control voltage [V]	24
Weight without fuel [kg]	~8400
Dimensions L x W x H [mm]	7920 x 1553 x 2408
Guaranteed noise power Lwa [dBA]	105
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°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 8528-1:2005, ISO 8528-5:2013
- ISO 8528-13:2016
- EN 60204-1

**STANDARD CONTROLLER**

Controller type: ComAp IntelliGen 200

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 IntelliGen 210)

Running Hours equalization

Load sharing and VAR sharing via CAN

Load demand start / stop

Detailed event based history with up to 350 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

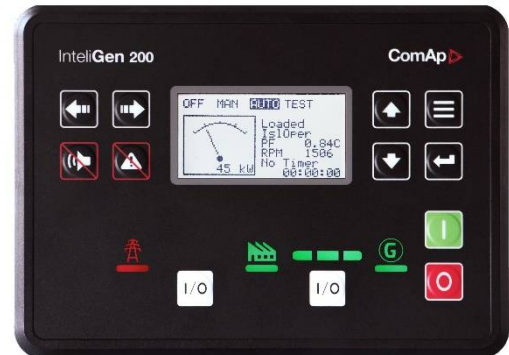
Up to 5 languages in the controller

Integrated USB for configuration

Active SMS and emails in different languages \*

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

\*function available with extension module



Integrated USB Host for uploading/downloading

Geofencing and tracking via WebSupervisor \*

Cloud-based monitoring and control \*

**ENGINE**

Brand	Volvo
Type	TAD1344GE
Made in	Sweden
Engine power [kW]	354
Emission standard*	stage II
Rotation per minute [rpm]	1500
Engine governor	electronic
Governor class**	G3
Displacement [l]	12,8
No of cylinder	6
Fuel system	unit injectors
Electrical system [V]	24
Cooling system capacity [l]	44,0
Oil pan capacity [l]	36,0
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]	410,0
IP protection	IP 23
No of bearing	single bearing
Coupling	direct
Technology	brushless
Short circuit maintaining capacity	270% 10s
Efficiency [%]	93,3
Insulation class	H
Total harmonic content THD [%]	1,5
Reactance Xd'' [%]	15,1
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 8528-5:2013

**FOCUSED ON GENERATORS ONLY****Power Generator FDT 820 V****STANDARD EQUIPMENT****OPTIONAL EQUIPMENT**

Volvo 2 x TAD1344GE engine	✓	Battery disconnection switch	✓
Electronic engine speed governor	✓	4 pole GCB Schneider NSX Micrologic 2.2	✓
Oil low pressure switch	✓	Transfer switch with ATS controller	✓
Oil pressure sensor	✓	GPRS communication module	✓
Engine high temperature switch	✓	Ethernet module	✓
Engine high temperature sensor	✓	RS 485, RS 232 module	✓
Engine preheating with thermostat	✓	Remote display	✓
Engine oil Titan Cargo 15W40	✓	Drip space level sensor	✓
Oil draining hand pump	✓	Fuel and retention pump	✓
Fuel filter with water separator	✓	External fuel tank 1 000 – 10 000 l	✓
Coolant Fuchs Maintain Fricofin LL-35	✓	Fuel tank filling pump and shut-off valve	✓
Coolant inlet outside of the canopy	✓	Non-standard canopy color	✓
Starting batteries 4x180 Ah	✓		
Battery charger	✓		
GCB 2 x Schneider NSX630 3P + Micrologic 2.3	✓		
GCB under voltage release coil	✓		
Bar connection	✓		
Controller 2 x IntelliGen 200	✓		
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	✓		

**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 <sup>2</sup>
*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
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