

**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.        | Frame anticorrosion coating – Zr.               |
| Configured for both manual and automatic mode (MRS + AMF). | Brushless alternator.                           |
| Wide range of remote communications options.               |   |
| Schneider NSX type GCB.                                    |   |



The presented image is for illustration purpose only.

**GENERAL DATA**

|                                   |                   |
|-----------------------------------|-------------------|
| Code                              | F.0150.VA.F       |
| Standby power E.S.P. [kVA] / [kW] | 165,0 / 132,0     |
| Prime power P.R.P. [kVA] / [kW]   | 150,0 / 120,0     |
| Prime current P.R.P [A]           | 217,0             |
| Frequency [Hz]                    | 50                |
| Voltage [V]                       | 400               |
| Exhaust emission                  | stage II          |
| Fuel type                         | Diesel (EN 590)   |
| Fuel consumption - 50% load [l/h] | 19,2              |
| - 75% load [l/h]                  | 27,1              |
| - 100% load [l/h]                 | 35,6              |
| - 110% load [l/h]                 | 39,0              |
| Standard fuel tank capacity [l]   | 500               |
| Autonomy with 100% load [h]       | 14                |
| Engine control voltage [V]        | 12                |
| Weight without fuel [kg]          | 1450              |
| Dimensions L x W x H [mm]         | 2720 x 986 x 1782 |
| Acoustic power Lwa [dBA]          | 117,4 ± 1,8       |
| Acoustic pressure Lpa (7m) [dBA]  | 87,3 ± 1,8        |

**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 hour

**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
- 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                        | TAD731GE        |
| Made in                     | Germany         |
| Engine power [kW]           | 134,0           |
| Emission standard*          | stage II        |
| Rotation per minute [rpm]   | 1500            |
| Engine governor             | electronic      |
| Governor class**            | G3              |
| Displacement [l]            | 7,2             |
| No of cylinder              | 6               |
| Fuel system                 | unit injectors  |
| Electrical system [V]       | 12              |
| Cooling system capacity [l] | 23,8            |
| Oil pan capacity [l]        | 20,0            |
| Fuel type                   | Diesel (EN 590) |

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

\*\* According ISO 8528-5:2013

**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]                | 150,0                |
| IP protection                      | IP 23                |
| No of bearing                      | single bearing       |
| Coupling                           | direct               |
| Technology                         | brushless            |
| Short circuit maintaining capacity | 270% 10s             |
| Efficiency [%]                     | 92,3                 |
| Insulation class                   | H                    |
| Total harmonic content THD [%]     | <2                   |
| Reactance Xd'' [%]                 | 10,2                 |
| Voltage regulator type             | DVR, digital         |
| Voltage measurement                | 3 phases             |
| Voltage accuracy [%]               | +/- 0,25             |
| AVR supply system                  | auxiliary winding    |
| AVR supply optional                | PMG                  |
| Made in                            | EU                   |



# FOGO ON GENERATORS ONLY

## Power Generator FDF 150 V

### STANDARD EQUIPMENT

|                                       |   |
|---------------------------------------|---|
| Volvo TAD731GE 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 | ✓ |
| Starting batteries 2x 100 Ah          | ✓ |
| Battery charger                       | ✓ |
| GCB Schneider NSX 250 3P + Mic.2.2    | ✓ |
| GCB shunt release coil                | ✓ |
| Controller ComAp IL-NT-AMF25          | ✓ |
| Controller switch                     | ✓ |
| Acoustic alarm                        | ✓ |
| Emergency stop button                 | ✓ |
| Welded frame with fuel tank           | ✓ |
| Frame with drip tray                  | ✓ |
| Fuel level measurement                | ✓ |
| Exhaust compensator                   | ✓ |
| Engine and alternator vibro isolators | ✓ |
| Silencer delivered with the generator | ✓ |
| Transportation brackets               | ✓ |

### OPTIONAL EQUIPMENT

|  |   |
|--|---|
| Battery disconnection switch                       | ✓ |
| GCB 4P Schneider NSX Micrologic 2.2                | ✓ |
| Power Lock type power output                       | ✓ |
| Power socket box                                   | ✓ |
| Transfer switch controlled by generator controller | ✓ |
| Transfer switch with ATS controller                | ✓ |
| GPRS communication card                            | ✓ |
| Ethernet card                                      | ✓ |
| RS 485, RS 232 card                                | ✓ |
| Remote display                                     | ✓ |
| Fuel and retention pump                            | ✓ |
| External fuel tank 1 000 – 10 000 l                | ✓ |
| 3-way valve for external fuel tank connection      | ✓ |
| Fuel tank filling pump and shut-off valve          | ✓ |

**INSTALLATION GUIDELINES**

|  |                                |
|--|--------------------------------|
| Power terminal                                       | GCB terminal                   |
| Recommended cable for up to 30m power cable way      | Flexible 5x95 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)  | 101,6 mm |
| Exhaust pipe min diameter (max. 15 m, 4 bends) | 114,3 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 |
|----------------------------|------------------------------------|