

**MAIN FEATURES**

- Innovative generating set consisting of two synchronized generator, arranged in one common canopy
- Easy synchronization with other generators, and optionally with the mains
- Possibility of single generator work in case of low power consumption, maintenance 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
- Various fuel tank size available on request
- Various standard and optional equipment

**GENERAL DATA**

| | |
|--------------------------------------|--------------------|
| Model | FDT 1300 SS |
| Standby power E.S.P. [kVA] / [kW] | 1430,0 / 1144,0 |
| Prime power P.R.P. [kVA] / [kW] | 1300,0 / 1040,0 |
| Prime current P.R.P [A] | 1876,0 |
| Frequency [Hz] | 50 |
| Voltage [V] | 400 |
| Exhaust emission | fuel optimized |
| Fuel type | Diesel (EN 590) |
| Fuel consumption - 50% load [l/h] | 135,8 |
| - 75% load [l/h] | 196,0 |
| - 100% load [l/h] | 249,4 |
| - 110% load [l/h] | 286,8 |
| Standard fuel tank capacity [l] | 1990 |
| Autonomy with 100% load [h] | 8,0 |
| Engine control voltage [V] | 24 |
| Weight without fuel [kg] | ≈ 12 500 |
| Dimensions L x W x H [mm] | 8970 x 1970 x 2520 |
| Guaranteed noise power Lwa [dBA] | ~108 |
| Acoustic pressure Lpa (dla 7m) [dBA] | ~77,0 |

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 1 hour within a 12-hour period of operation. Average power consumption should not exceed 70% P.R.P for each 24h 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 200 operation hours per year. Max mean load factor of 70% of rated power over 24h of operation

Remark:

Ratings represent the genset performance capabilities to standard conditions specified in ISO 8528-1

Norms and directives:

- Machinery directive 2006/42/WE
- Low voltage directive 2006/95/WE
- EC directive 2004/108/WE
- Noise directive 2000/14/WE
- Emission directive 97/68/WE
- ISO 8528-1/2005, PN-ISO 8528-5/2005
- PN-EN 12601
- PN-EN 60204-1



STANDARD CONTROLLER

| |
|---|
| Controller type: IL-NT-MINT |
| Easy to operate, intuitive graphical interface |
| Automatic synchronizing (multiply in island mode) |
| Parallel to Mains function (with MainsCompact) |
| Runing Hours equalization |
| Active and Reactive Load Sharing |
| Load demand start / stop |
| Event based history with up to 200 records |
| Generator current 3 phase measurement |
| Generator and bus 3 phase voltage measurement |
| Active/Reactive Power and Power Factor per phase measurement |
| Generator Active and Reactive Energy counter |
| Battery charging alternator circuit connection |
| Fuel level measurement |
| Real-time clock |
| Generator protection (over/under frequency, voltage, overcurrent) |
| Communication with ECU supporting CAN J1939 standard |
| USB communication interface (IL-NT-S-USB module required) |
| 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) |



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|--|
| WebSupervisor software for Android mobile devices or PC's for fleet management |
| InteliMonitor software for single gen-set view |
| Active SMS or e-mail (IL-NT GPRS or IB-Lite module required) |

ENGINE

| | |
|-----------------------------|-------------------------|
| Brand | Scania |
| Type | 2xDC16 078A 02-42 |
| Made in | Sweden |
| Engine power [kW] | 2x578 |
| Emission standard* | fuel optimized |
| Rotation per minute [rpm] | 1500 |
| Engine governor | electronic |
| Governor class** | G3 |
| Displacement [l] | 16,4 |
| No of cylinder | 8 |
| Fuel system | extra high pressure XPI |
| Electrical system [V] | 24 |
| Cooling system capacity [l] | 68,0 |
| Oil pan capacity [l] | 48,0 |
| Fuel type | Diesel (EN 590) |

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

** According PN-ISO 8528-5/2005

ALTERNATOR

| | |
|---|-------------|
| Brand | Sincro |
| Type | 2xSK355LM |
| Made in | Croatia |
| Power (40 °C, 1000m a.m.s.l.) [kVA] | 2x650,0 |
| Stand by power (27 °C, 1000m a.m.s.l) [kVA] | 2x709,0 |
| Efficiency [%] | 94,6 |
| Voltage regulator type | Digital AVR |
| Voltage accuracy [%] | +/- 0,25 |
| IP protection | IP 23 |
| Insulation class | H |
| Total harmonic content THD [%] | < 2 |
| Reactance Xd'' [%] | 9,8 |

**STANDARD EQUIPMENT**

| | |
|---|---|
| Scania DC16 078A 02-42 engines | ✓ |
| 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 Shell Rimula R4L | ✓ |
| Oil draining hand pump | ✓ |
| Fuel filter with water separator | ✓ |
| Coolant Anti Freeze | ✓ |
| Coolant inlet outside of the canopy | ✓ |
| Starting batteries 4x180 Ah | ✓ |
| Battery charger | ✓ |
| Battery disconnection switch | ✓ |
| Sincro SK355LM alternators | ✓ |
| Digital 3 phase AVR | ✓ |
| 3 pole GCB Schneider NS1000 Micrologic 2.0x 2 | ✓ |
| GCB undervoltage release coil | ✓ |
| Bar connection | ✓ |
| Controller IC-NT-MINT | ✓ |
| Controller switch | ✓ |
| Acoustic alarm | ✓ |
| Emergency stop button | ✓ |
| Silenced canopy made with Al.-Zn. | ✓ |
| Standard color RAL 7032 | ✓ |
| Frame with fuel tank | ✓ |
| Fuel inlet inside the canopy protected by locked door | ✓ |
| Fuel level measurement | ✓ |
| Exhaust compensator and silencer | ✓ |
| Engine and alternator vibro isolators | ✓ |



FOCUSSED ON GENERATORS ONLY

Power Generator FDT 1300 SS draft

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 cabale 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

| | |
|----------------------------|--|
| Back-up power generators | 60 months up to 1000 working hours, under condition of required maintenance according to the warranty conditions |
| Continuous work generators | 12 months up to 1000 working hours |