

**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 1400 SS
Standby power E.S.P. [kVA] / [kW]	1553,0 / 1242,0
Prime power P.R.P. [kVA] / [kW]	1412,0 / 1130,0
Prime current P.R.P [A]	2038,0
Frequency [Hz]	50
Voltage [V]	400
Exhaust emission	fuel optimized
Fuel type	Diesel (EN 590)
Fuel consumption - 50% load [l/h]	152,2
- 75% load [l/h]	222,5
- 100% load [l/h]	282,4
- 110% load [l/h]	317,6
Standard fuel tank capacity [l]	1 990
Autonomy with 100% load [h]	7,0
Engine control voltage [V]	24
Weight without fuel [kg]	≈12 800
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)



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 02-43
Made in	Sweden
Engine power [kW]	2x596
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	2xSK355WL
Made in	Croatia
Power (40 °C, 1000m a.m.s.l.) [kVA]	2x720,0
Stand by power (27 °C, 1000m a.m.s.l) [kVA]	2x792,0
Efficiency [%]	94,8
Voltage regulator type	Digital AVR
Voltage accuracy [%]	+/- 0,25
IP protection	IP 23
Insulation class	H
Total harmonic content THD [%]	< 2
Reactance Xd'' [%]	10,5

**STANDARD EQUIPMENT**

Scania DC16 078A 02-43 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	✓
Sincro SK355WL alternators	✓
Digital 3 phase AVR	✓
3 pole GCB Schneider – NS 1250 Micrologix 2.0 x 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 1400 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 <sup>2</sup>

\*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