

Power Generator

FD 275 S-F

Code: F.0275.SA-C3980T999-01



Picture for reference only

Main Features

- Digital voltage regulation +/-0,25 %
- Three phase voltage control
- Low disturbance level THD <2,5%
- Alternator short circuit capacity 270 % In (optional 300 %)
- Class H insulation
- Protection index IP23

- Performance class G3 (acc. ISO 8528-5)
- Ready to load just after start
- AMF and MRS functionality and protection
- Autonomy 21,9 h with 75 % load

General Data

Maximum power ESP 303,0 kVA / 242,0 kW **Nominal power PRP** 275,0 kVA / 220,0 kW

Nominal Current PRP 397 O A

> Frequency 50 Hz

Voltage 400 V

Emission standard fuel optimized

> Fuel Diesel (EN 590)

Fuel tank capacity

Fuel consumption @

28,7 / 41 /55,4 / 62,1 l/h 50% / 75% 100% /110% PRP

Autonomy @ 75% / 100% load 21,9 / 16,2 h

Weight without fuel ~2700 kg

Dimensions D x S x W 2967 x 1564 x 2110mm

~125 dBA Measured noise power Lwa Acoustic pressure @7mLpa ~95 dBA

Main Components & Equipment

- Scania DC09 072A 02-12 engine
- Leroy Sommer TAL 046 E alternator
- Brushless alternator
- Digital AVR
- ComAp IL-AMF25 Controller
- Schneider NSX type generator circuit breaker
- GCB shunt release coil
- Linear automatic battery charger
- Engine heater
- Electronic speed governor
- Fuel system unit injectors, PDE
- Welded frame with 999 I fuel tank
- Two fuel inlets
- Extended forklift skids for easy attachment to the ground

For details see page 3

Definitions

Nominal Power PRP:

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% PRP for each 24-hour period of operation.

Maximum power ESP:

Emergency standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed, limited to 200h of operation per year. Max mean load factor of 70% of rated power over 24-hour period of operation.

Norms and Directives

- Machinery directive 2006/42/EC
- Low voltage directive 2014/35/EU
- EMC directive 2014/30/EU
- ISO 8528-1/2018, ISO 8528-5/2022
- ISO 8528-13:2016
- IEC 60204-1

Contact data

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1/3 Wersia:mar-23



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Engine

Manufacturer Scania

Type DC09 072A 02-12

Made in Sweden

Engine power 242,0 kW

Emission standard fuel optimized

Rotation per minute 1500 rpm

Engine governor electronic

Governor class G3 (ISO 8528-5)

Displacement 9,3 l

No of cylinder 5

Fuel system unit injectors, PDE

Electrical system 24 V
Cooling system capacity 37,0 I
Oil pan capacity 36,0 I

Fuel type Diesel (EN 590)

Alternator

Manufacturer Leroy Sommer

Type TAL 046 E

Made in Czech Republic

Nominal Voltage 400 V

Nominal power factor ($\cos \varphi$) 0,8

Ambient temperature, altitude 40 °C, 1000 m a.s.l.

Nominal Power 275,0 kVA

Protection index IP 23

No of bearing Single bearing

Coupling Direct

Technology Brushless

Short circuit maintaining capacity 270% 10s

Efficiency 93,1 %

Insulation class H

Total harmonic content THD <2,5 %

Reactance Xd" 10,8 %

Voltage regulator type AVR, digital

Voltage measurement 3 phase

Voltage accuracy +/- 0,25 %

AVR supply system AREP+

AVR supply optional PMG

Controller

- Controller type: ComAp InteliLite AMF 25
- Support of Dual AMF/MRS applications
- Direct communication with EFI engines
- Total remote monitoring and control
- Intuitive operator interface, adjustable Main Screen
- Real time clock
- Comprehensive history log with up to 350 events
- 3 phase true RMS current and voltage measurement
- Both mains and generator voltage detection
- Active/Reactive Power and Power Factor per phase measurement
- Run Hours counter with source selector
- 3 maintenance timers (counting even under zero)
- Multipurpose flexible timers (also for rental)
- Battery voltage measurement
- Complete engine and alternator protection
- CAN modules support
- USB port on-board
- 2 slots for plug-in modules
- Plug-in module concept for more capabilities (RS232, RS485, Ethernet, GPRS, 4G/LTE, Modbus, SNMP, emails, SMS, I/Os)
- Cloud-based monitoring and control via WebSupervisor) (optional module required)
- Geofencing and tracking via WebSupervisor (optional module required)
- Control and monitoring over SMS (GSM module required)
- 3 levels of password protection
- In-built PLC, complemented with a monitoring/debugging tool, for additional functionality, if required
- Spare inputs and outputs available by default: binary input 2, binary output 1, analogue input 3,
- A version for low temperature is also available



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Standard equipment

- Scania DC09 072A 02-12 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
- Fuel filter with water separator
- Coolant Fuchs Maintain Fricofin LL-50
- Starting batteries 2x180Ah
- Linear automatic battery charger
- Leroy Sommer TAL 046 E alternator
- Digital AVR
- GCB Schneider NSX 630 3P + Mic.2.3
- GCB shunt release coil
- ComAp IL-AMF25 controller
- Acoustic alarm
- Emergency stop button
- Fuel tank integrated with a frame
- Welded fuel tank in spill containment
- Two fuel inlets
- Fuel level indicator
- Engine and alternator anti vibration mounts
- Exhaust silencer with compensator

Optional equipment

- Oil draining hand pump
- 4P Schneider NSX Micrologic 2.3 GCB
- Transfer switch controlled by generator controller
- Transfer switch with ATS controller
- ATS accessories for outdoor application
- GPRS communication card
- Ethernet card
- RS 485, RS 232 card
- Remote display
- Generator spill containment level detector
- External, double wall fuel tank 1 000 10 000 l
- Fuel tank filling pump and shut-off valve

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

Air filter replacement500 hBattery replacement2 years

Electrical installation According to local requirements, at least once per year

Installation guidelines

Power terminal

Recommended cable for up to 30m power cable way Recommended cable for do 30m generator heater supply Exhaust pipe min diameter (max. 7 m, 4 bends) Exhaust pipe min diameter (max. 15 m, 4 bends) GCB terminal Flexible 2x5x95 mm²

Flexible 3x2,5 mm²

114 mm

*For additional cable connection with FOGO ATS see ATS wiring diagram

Warranty

Continuous operation generators

12 months up to 1000 working hours

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