

**Power Generator** FD 300 S-C

Article: 37104 Code: F.0300.SA-C3980T999-02

# **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 •

### **General Data**

Maximum power ESP	330,0 kVA / 264,0 kW
Nominal power PRP	300,0 kva / 240,0 kw
Nominal Current PRP	433,0 A
Frequency	50 Hz
Voltage	400 V
Emission standard	fuel optimized
Fuel	Diesel (EN 590)
Fuel tank capacity	990
Fuel consumption @ 50% / 75% 100% /110% PRP	31,2 / 45,2 / 61,7 / 70,2 l/h
Autonomy @ 75% / 100% load	19,7 / 14,4 h
Weight without fuel	~3550 kg
Dimensions L x W x H	3980 x 1530 x 2500 mm
Guaranteed noise power L <sub>wa</sub>	97 dBA
Acoustic pressure @7mLpa	~68 dBA

## 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.



- Performance class G3 (acc. ISO 8528-5)
- Ready to load just after start
- AMF and MRS functionality and protection
- Autonomy 19,7 h with 75 % load

### Main Components & Equipment

- Scania DC09 072A 02-13 engine •
- Leroy Sommer TAL 046 F 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 990 I fuel tank, spill . containment and noise insulation
- Two fuel inlets
- Four lifting eyes
- Extended forklift skids for easy attachment to the ground

For details see page 3

### Norms and Directives

- Machinery directive 2006/42/EC •
- Low voltage directive 2014/35/EU •
- EMC directive 2014/30/EU •
- Noise directive 2000/14/EC •
- ISO 8528-1/2018, ISO 8528-5/2018 •
  - ISO 8528-13:2016
- IEC 60204-1 •

### **Contact data**

#### FOGO Sp. z o.o.

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Engine		Alternator	
Manufacturer	Scania	Manufacturer	Leroy Sommer
Туре	DC09 072A 02-13	Туре	TAL 046 F
Made in	Sweden	Made in	Czech Republic
Engine power	261,0 kW	Nominal Voltage	400 V
Emission standard	fuel optimized	Nominal power factor (cos $\varphi$ )	0,8
<b>Rotation per minute</b>	1500 rpm	Ambient temperature, altitude	40 °C, 1000 m a.s.l.
Engine governor	electronic	Nominal Power	300,0 kVA
Governor class	G3 (ISO 8528-5)	Protection index	IP 23
Displacement	9,3 l	No of bearing	Single bearing
No of cylinder	5	Coupling	Direct
Fuel system	unit injectors, PDE	Technology	Brushless
Electrical system	24 V	Short circuit maintaining capacity	270% 10s
Cooling system capacity	37,0 l	Efficiency	92,3 %
Oil pan capacity	36,0 l	Insulation class	Н
Fuel type	Diesel (EN 590)	Total harmonic content THD	<2,5 %
		Reactance Xd"	11,8 %
		Voltage regulator type	AVR, digital
		Voltage measurement	3 phase
		Voltage accuracy	+/- 0,25 %

### 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



AREP+

PMG

AVR supply system AVR supply optional



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### Standard equipment

- Scania DC09 072A 02-13 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 .
- Coolant inlet outside, on the top of the canopy •
- Starting batteries 2x180Ah •
- Linear automatic battery charger
- Leroy Sommer TAL 046 F alternator •
- Digital AVR •
- GCB Schneider NSX 630 3P + Mic.2.3 •
- GCB shunt release coil •
- ComAp IL-AMF25 controller
- Acoustic alarm •
- Emergency stop button
- Silenced canopy, RAL 7024 .
- Fuel tank integrated with a frame and spill containment •
- Two fuel inlets inside the canopy .
- Fuel level indicator .
- Engine and alternator anti vibration mounts •
- Exhaust silencer with compensator
- Fork lift supports and lifting eyes

# **Maintenance guidelines**

**Fuel filters replacement Oil replacement Oil filters replacement Coolant replacement** Air filter replacement **Battery replacement Electrical installation** 

## 500 h / 1 year

After first 100h, then every 500 h / 1 year After first 100h, then every 500 h / 1 year 1000 h / 2 years 500 h 2 years

### 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 mm<sup>2</sup> Flexible 3x2,5 mm<sup>2</sup> 114 mm

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

# Warranty

**Continuous operation generators** 

12 months up to 1000 working hours

**Optional equipment** 

Battery disconnector

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Oil draining hand pump

4P Schneider NSX Micrologic 2.3 GCB

Transfer switch controlled by generator controller

Power Lock type power output

GPRS communication card

Ethernet card

Remote display

RS 485, RS 232 card

Transfer switch with ATS controller

ATS accessories for outdoor application

Fuel inlet outside of the canopy with lock

Generator spill containment level detector

Fuel tank filling pump and shut-off valve

External, double wall fuel tank 1 000 - 10 000 l

According to local requirements, at least once per year