

**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**

Code	F.0820.SAG2.T	<b>Nominal power P.R.P.:</b>	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.
Standby power E.S.P. [kVA] / [kW]	902,0 / 722,0	<b>Stand-by power E.S.P.:</b>	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.
Prime power P.R.P. [kVA] / [kW]	820,0 / 656,0	<b>Remark:</b>	Ratings represent the genset performance capabilities to standard conditions specified in ISO 8528-1
Prime current P.R.P [A]	1184,0	<b>Norms and directives:</b>	<ul style="list-style-type: none"> <li>• Machinery directive 2006/42/EC</li> <li>• Low voltage directive 2014/35/EC</li> <li>• EC directive 2014/30/EC</li> <li>• Noise directive 2000/14/EC</li> <li>• Emission directive 97/68/EC</li> <li>• ISO 8528-1:2005, ISO 8528-5:2013</li> <li>• ISO 8528-13:2016</li> <li>• EN 60204-1</li> </ul>
Frequency [Hz]	50		
Voltage [V]	400		
Exhaust emission	fuel optimized		
Fuel type	Diesel (EN 590)		
Fuel consumption - 50% load [l/h]	82,3		
- 75% load [l/h]	119,9		
- 100% load [l/h]	157,5		
- 110% load [l/h]	175,7		
Standard fuel tank capacity [l]	1990		
Autonomy with 100% load [h]	11,9		
Engine control voltage [V]	24		
Weight without fuel [kg]	~10220		
Dimensions L x W x H [mm]	8970 x 1970 x 2520		
Guaranteed noise power Lwa [dBA]	105		
Acoustic pressure Lpa (@7m) [dBA]	74,1 ± 2,0		

### STANDARD CONTROLLER

Controller type: ComAp IntelliGen 200

Easy to operate, intuitive, user friendly graphical interface

Remote control and monitoring

Direct communication with ECU

Parallel operation for up to 32 gen-sets

Parallel to Mains function (with InteilGen 210)

Running Hours equalization

Load sharing and VAr sharing via CAN

Load demand start / stop

Detailed event based history with up to 350 records

Rental timers

PLC support with PLC editor and monitor

High accuracy of voltage and current measurement

True RMS measurement

Generator protection (over/under frequency, voltage, overcurrent)

Multipurpose flexible timers with full calendar

Communication with ECU, supporting CAN J1939 standard

Up to 5 languages in the controller

Integrated USB for configuration

Active SMS and emails in different languages \*

Support of MODBUS RTU/TCP or SNMP v1/v2c \*

\*function available with extension module



Integrated USB Host for uploading/downloading

Geofencing and tracking via WebSupervisor \*

Cloud-based monitoring and control \*

### ENGINE

Brand	Scania
Type	DC13 072A 02-12
Made in	Sweden
Engine power [kW]	355,0
Emission standard*	fuel optimized
Rotation per minute [rpm]	1500
Engine governor	electronic
Governor class**	G3
Displacement [l]	12,7
No of cylinder	6
Fuel system	unit injectors, PDE
Electrical system [V]	24
Cooling system capacity [l]	38,0
Oil pan capacity [l]	36,0
Fuel type	Diesel (EN 590)

### 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]	410,0
IP protection	IP 23
No of bearing	single bearing
Coupling	direct
Technology	brushless
Short circuit maintaining capacity	270% 10s
Efficiency [%]	93,3
Insulation class	H
Total harmonic content THD [%]	1,5
Reactance Xd'' [%]	15,1
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

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

\*\* According ISO 8528-5:2013

**FOCUSSED ON GENERATORS ONLY****Power Generator FDT 820 S****STANDARD EQUIPMENT****OPTIONAL EQUIPMENT**

Scania 2 x DC13 072A 02-12 engine	✓	Battery disconnection switch	✓
Electronic engine speed governor	✓	4 pole GCB Schneider NSX Micrologic 2.3	✓
Oil low pressure switch	✓	Transfer switch with ATS controller	✓
Oil pressure sensor	✓	GPRS communication card	✓
Engine high temperature switch	✓	Ethernet card	✓
Engine high temperature sensor	✓	RS 485, RS 232 card	✓
Engine preheating with thermostat	✓	Remote display	✓
Engine oil Shell Rimula R4L	✓	Drip space level sensor	✓
Oil draining hand pump	✓	Fuel tank filling pump and shut-off valve	✓
Fuel filter with water separator	✓	Non-standard canopy color	✓
Coolant Anti Freeze	✓		
Coolant inlet outside of the canopy	✓		
Starting batteries 4x180Ah	✓		
Battery charger	✓		
GCB 2 x Schneider NSX630 3P + Micrologic 2.3	✓		
GCB under voltage release coil	✓		
Bar connection	✓		
Controller 2 x InteliGen 200	✓		
Controller switch	✓		
Acoustic alarm	✓		
Emergency stop button	✓		
Silenced canopy made with Al.-Zn.	✓		
Standard color RAL 7032	✓		
Fuel tank installed in drip tray	✓		
Fuel inlet inside, protected by canopy locked doors	✓		
Fuel level measurement	✓		
Exhaust compensator and silencer	✓		
Engine and alternator vibro isolators	✓		
Transportation brackets	✓		

**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