

## Model: S625E6

Powered by SCANIA



### Generator Specification

Service	PRP <sup>(1)</sup>	ESP <sup>(2)</sup>
Power (kVA)	563	625
Power (kW)	450.4	500
Rated speed ( r.p.m )	1800	
Standard voltage (V)	220/127V, 440/254V	
Rated at power factor(cos phi)	0.8	



AGG Power gensets are compliant with ISO 9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery safety.
- 2006/95/EC Low voltage
- EN 60204-1: 2006+A1: 2009, EN ISO 12100: 2010, EN ISO 13849-1: 2008, EN 12601 : 2010

#### (1) PRP (Prime Power):

According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

#### (2) ESP (Standby Power):

According to ISO 8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Powers Voltage (V)	ESP		PRP		Standby Amps
	KVA	KW	KVA	KW	
480/277	625	500	563	450.4	751.8
440/254	625	500	563	450.4	820.1
380/220	625	500	563	450.4	949.6
220/127	625	500	563	450.4	1640.2
208/120	625	500	563	450.4	1734.9

Performance Data		
Model	S625E6	
Engine brand	Scania	
Engine model	DC16 O72A O2-11	
Speed control type	ECU	
Phase	3	
Control system	Digital	
Starter motor voltage	24V	
Frequency	60HZ	
Engine speed (RPM)	1800	
Fuel Consumption (g/kwh)	100% standby power	199
	100% prime power	199
	75% prime power	196
	50% prime power	203

#### Standard reference Conditions

Note: Standard reference condition 25°C (77°F) air inlet temp, 100m(328ft) A.S.L 30% relative humidity. Fuel consumption dat with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998 , Class A2



Dimension and Weight		
Dimension	Open	Silent
Length (L)	3600mm	4600mm
Width (W)	2090mm	1450mm
Height (H)	1460mm	2200mm
Net Weight	REQ	REQ
Fuel Tank (L)	REQ	REQ

Note: This parameters allows for some acceptable deviations.

## ■ Engine Specification: DC16 072A 02-11

Basic technical data	
No. of cylinders	8
Cylinder arrangement	90° V
Cycle	4 stroke
Displacement	16.4 dm <sup>3</sup>
Bore	130 mm
Stroke	154 mm
Compression ratio	16.7:1
Piston speed	
at 1500rpm	7.7 m/s
at 1800rpm	9.24 m/s
Pistons	Steel pistons
Camshaft	High position alloy steel

Cooling system	
Coolant volume excl. radiator	24 dm <sup>3</sup>
Coolant volume incl. 1.5 m <sup>2</sup> radiator	68 dm <sup>3</sup>
Coolant temperature	90-95 ° C
Number of thermostats	1
Opening temperature	80/87 ° C

Injection system	
Type	Unit injectors, PDE
Governor	ECU
Fuel filter	Paper filter element, 6 micro
Fuel pre-filter with water separator	Paper filter element, 10 micro

Inlet System	
Permissible pressure drop in intake system	
with cleaned or new filter	30 mbar
with blocked(dirty) filter	65 mbar

Lubrication system	
Oil capacity	
min	40 dm <sup>3</sup>
max	48 dm <sup>3</sup>
Oil consumption	<0.2 g/kWh
Oil change intervals	500 h
Oil pressure	
normal	3-6 bar
minimum permitted at idle speed	0.7 bar
Oil temp (normal)	90-110 ° C
Oil cleaner	Centrifugal
Oil filter	Paper/full flow
Oil cooler	Water cooled/full flow

Electrical system	
Type	1 pole, 24V DC
Starter, standard equipment	1 pole, 24V, 7KW
Alternator, standard equipment	1 pole, 28V, 100A

General installation	Prime power
Gross power	576 KW
	650 KVA
Heat rejection	
to coolant	222 KW
to exhaust gas	421 KW
to charge air	98 KW
to surrounding air	55 KW
Air consumption	41 kg/min
Air temperature	
before charge air cooler	185° C
after charge air cooler	46° C
Pressure in intake manifold	1.9 Bar
Fall of pressure, charge air cooler	0.10 Bar
Exhaust flow	43 kg/min
Exhaust temperature	551
Step load performance (according to class G2)	70% 403 KW

## ■ Alternator Specification

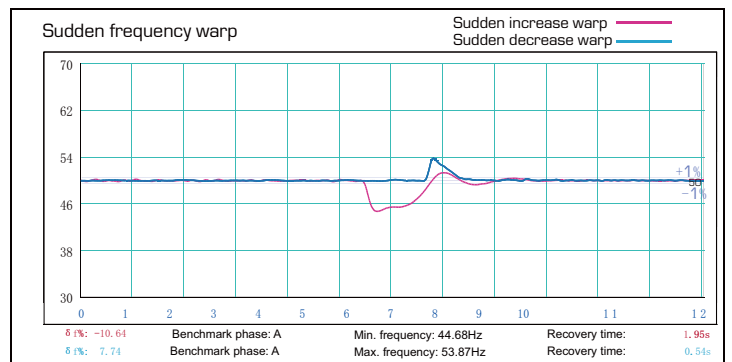
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



Emergency voltage curve



Emergency frequency curve



## ■ Options

Engine	Alternator	Generator Sets	Fuel System
<ul style="list-style-type: none"> <li>Water Jacket Pre-heater</li> <li>Fuel heater</li> </ul>	<ul style="list-style-type: none"> <li>Winding Temp measuring Instrument</li> <li>Alternator Pre-heater</li> <li>PMG</li> <li>Anti-damp and anti-corrosion treatment</li> <li>Anti-condensation heater</li> <li>Winding and bearing RTD</li> </ul>	<ul style="list-style-type: none"> <li>Tools with the machine</li> <li>Extended range fuel tank</li> <li>Bunded fuel tank</li> </ul>	<ul style="list-style-type: none"> <li>Low fuel level alarm</li> <li>Automatic fuel feeding system</li> <li>Fuel T-valves</li> </ul>
Canopy	Lub oil system	Cooling System	Control Panel
<ul style="list-style-type: none"> <li>Rental type Canopy</li> <li>Trailer</li> </ul>	<ul style="list-style-type: none"> <li>Oil Pre-heater</li> <li>Oil temp sensor</li> </ul>	<ul style="list-style-type: none"> <li>Front heat protection</li> </ul>	<ul style="list-style-type: none"> <li>Remote control panel</li> <li>ATS</li> <li>Synchronizing controller</li> <li>Adjustable earth leakage relay</li> </ul>

## Control Panel

### Configuration

- Emergency stop button
- Protection MCB
- Battery charger
- Integrated aviation plug
- ATS connection
- Digital control module

### Features

- 3 phase generator set monitoring
- Support of engines equipped with electronic control unit
- Comprehensive diagnostic message
- Automatic or manual start/stop of the gensets
- Push buttons for simple control, lamp test
- Graphic back-lit LCD display
- Parameters adjustable via keyboard or PC
- Mains measurements ( 50HZ/60HZ)
- Generator measurements ( 50HZ/60HZ)
- Comprehensive shutdown or warning on fault condition
- 3 phase Generator protections
  - Over-/under voltage
  - Over-/under frequency
  - Current/voltage asymmetry
  - Over current/overload
- 3 phase AMF function
  - Over-/under frequency
  - Over-/under voltage
  - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measurement
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions
- Generator C.B. and Mains C.B. control with feedback and return timer
- RS232 interface
- Modem communication support
- Hours counter
- Sealed to Ip65
- Event log

### Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- User friendly set-up and button layout
- Module can be configured to suit individual applications
- PC software for simplified configuration
- Wide range of communication capabilities

### Operation conditions

- Operation temp: -20 °C to + 70 °C
- Storage temp: -30 °C to + 80 °C
- Operating humidity: 95% w/o condensation
- Vibration : 5-25Hz,  $\pm 1.6$  mm  
5-100Hz, a=4g
- Shocks: a= 500m/s<sup>2</sup>

### Options

- Ethernet interface (Remote monitoring and control)
- GSM modem/wireless internet (Remote monitoring and control)
- RS232-RS485 Dual port interface
- Synchronizing control panel
- Distribution board with sockets kit and power busbar
- Battery trickle charge ammeter
- Earth leakage protection
- Earth fault protection
- Low fuel level alarm
- Low fuel level shutdown
- High fuel level alarm
- Fuel transfer system control
- Low coolant level shutdown
- High lube oil temp shutdown
- Overload via alarm switch on breaker
- Engine coolant heater controls
- Control panel heater
- Speed adjust switch
- Oil temp displayed on LCD screen
- Additional 8 inputs and outputs