Model: DE55D5

Powered by DEUTZ

Generator Specification

Service	PRP(1)	ESP(2)
Power (kVA)	50	55
Power (kW)	40	44
Rated speed (r.p.m)	1500	
Standard voltage (V)	400/230V	
Rated at power factor(cos phi)	0.8	

AGG Power gensets are compliant with ISO9001 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 ISO12100: 2010, EN ISO13849-1: 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):

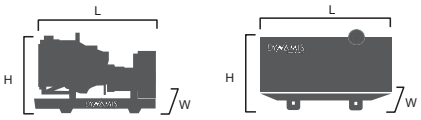
According to ISO8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Power	ESP		PRP		Standby
Voltage (V)	KVA	KW	KVA	KW	Amps
415/240	55	44	50	40	76.5
400/230	55	44	50	40	79.4
380/220	55	44	50	40	83.6

Performance Data		
Model		DE55D5
Engine brand		Deutz
Engine model		BFM3C
Speed control type		Electronic
Phase		3
Control system		Digital
Starter motor voltage		12/24V
Frequency		50HZ
Engine speed (RPM)		1500
Fuel Consumption (L/H)	100% standby power	-
	100% prime power	11.2
	75% prime power	8.7
	50% prime power	6

Standard reference Conditions

Note: Standard reference condition 25°C[77°F] air inlet temp, 1000m(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)	1860mm	2650mm
Width (W)	1035mm	1000mm
Height (H)	1485mm	1276mm
Net Weight	815KG	900KG
Fuel Tank (L)	-	-

Note: This parameters allows for some acceptable deviations.

DYNAMIS POWER SOLUTIONS

Engine Specification: BFM3C

Basic technical data	
No. of cylinders	4
Cylinder arrangement	In-line
Cycle	4 stroke
Injection system	in-line pump
Displacement	3.168 L
Bore	98 mm
Stroke	105 mm
Compression ratio	18.5:1
Mean effective pressure	12.6bar
Piston speed	5.25m/s
Rotation	CCW
Engine dry, w/o cooling system	265

Cooling system	
Delivery of coolant pump	4.2 m^3/h
Min. pressure before coolant pump	0.15bar
Coolant capacity(engine)	4.8L
Coolant capacity (incl. cooling unit)	TBD
Air to boil	50℃
Fan power consumption	3KW
Cooling air flow	4680m^3/h
Air pressure loss, external	1.5 mbar
Heat balance	
Heat dissipation (engine radiator)	42KW
Heat dissipation (CAC)	8.5KW
Heat dissipation (Convection)	TBD

Inlet / Exhaust Data	
Max. intake depression(switch setting)	30 mbar
Combustion air volume	170 m^3/h
Max. exhaust back pressure	100 mbar
Max. exhaust gas temperature	560℃
Exhaust gas flow (at above temp)	330 m^3/h
Exhaust flange/pipe diameter	TBD

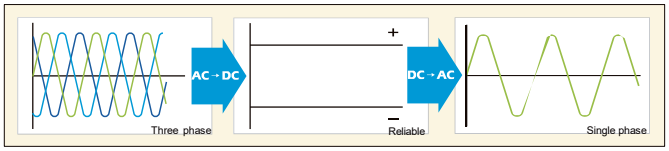
Output	
Gross output (LTP)	50 KW
Fan reduction	3 KW
Net flywheel	TBD
Electrical output	52kVA
Gross output (PRP)	45KW
Gross output (Continous power)	42KW

Lubrication system	
Oil specification	CF-4
Oil consumption (as % of fuel consumption)	0.5
Oil capacity (sump)	7.5 L
Min. oil pressure (warning)	1.5 bar
Min. oil pressure (shut down)	1.0 bar
Max. permissible oil temp(oil pan)	120℃

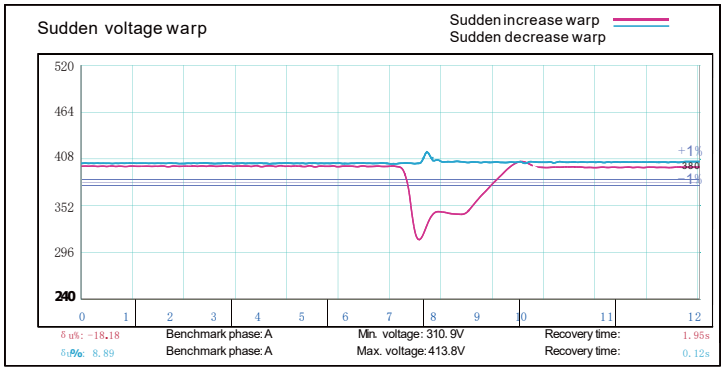
Electrical system	
Voltage	12 V
Starter	3 KW
Alternator output	55 A

Alternator Specification

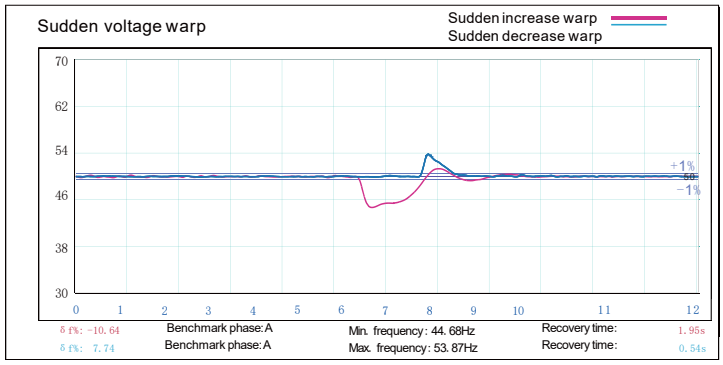
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



Emergency voltage curve



Emergency frequency curve



Options

Engine	Alternator	Generator Sets	Fuel System
· Water Jacket Pre-heater · Fuel heater	· Winding Temp measuring Instrument · Alternator Pre-heater · PMG · Anti-damp and anti-corrosion treatment • Anti-condensation heater · Winding and bearing RTD	· Tools with the machine • Extended range fuel tank • Bunded fuel tank	· Low fuel level alarm • Automatic fuel feeding system · Fuel T-valves
Canopy	**Lub oil system**	**Cooling System**	**Control Panel**
· Rental type Canopy • Trailer	· Oil Pre-heater · Oil temp sensor	• Front heat protection	· Remote control panel · ATS · Synchronizing controller · Adjustable earth leakage relay

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 ℃to +70 ℃
- Storage temp: -30 ℃to +80 ℃
- Operating humidity: 95% w/o condensation
- Vibration： 5-25Hz, ±1.6 mm
  5-100Hz, a= 4g
- Shocks: a= 500m/s²

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

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