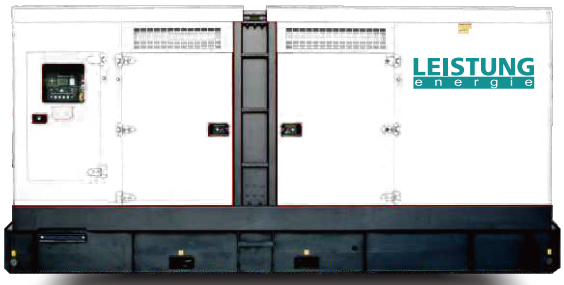
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Model: DE500D5

Powered by DEUTZ





Generator Specification

Service	PRP(1)	ESP(2)
Power (kVA)	450	500
Power (kW)	360	400
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 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):

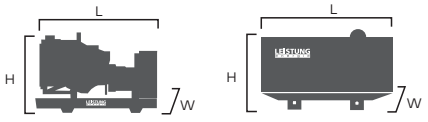
According to ISO 8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures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

Powers	ESP		PRP		Standby
Voltage (V)	KVA	KW	KVA	KW	Amps
415/240	500	400	450	360	695.6
400/230	500	400	450	360	721.7
380/220	500	400	450	360	759.7

Performance Data		
Model		DE500D5
Engine brand		Deutz
Engine model		BF8M1015C-LA G2
Speed control type		ECU
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	-
	75% prime power	-
	50% prime power	-

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)	3040mm	4715mm
Width (W)	1555mm	1650mm
Height (H)	2230mm	2535mm
Net Weight	3760 KG	4200 KG
Fuel Tank (L)	-	-

Note: This parameters allows for some acceptable deviations.

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Engine Specification: BF8M1015CP-LA G2

Basic technical data	
No. of cylinders	6
Cylinder arrangement	V-from 90° angle
Cycle	4 stroke
Cylinder type	One-cylinder-one-head
Displacement	15.874 L
Bore	132 mm
Stroke	145 mm
Compression ratio	16.5:1
Mean effective pressure	23.1bar
Max.exhaust gas temperature	540 ℃
Charge air temperature	220 ℃
Exhaust emission standard	2320kg/h

Cooling system	
Water-pump flow	347 L/min
Water-pump pressure	1.25bar
Coolant capacity(engine)	21L
Heat carry off by coolant	223KW
In&outlet coolant size	70mm
Max.allowable operating temperature	103 ℃
Fan	Exhaust type
Fan connection	Gear drive+coupler
Fan diameter	980mm
Air volume of fan	4.6m³/s
Fan power consumption	≤ 14KW
Fan transmission ratio	0.96

Engine Data	
Dry weight	1060 kg
No. of flywheel teeth	167
Engine support	Rigid
Battery voltage	24V
Starter rated power	9 KW
Generator capacity	55A

Fuel system	
Cylinder ignition sequence	1-6-3-5-2-4
Idle speed	600±50 rpm
Low-pressure pump oil load capacity	190L/h
Fuel filter element type	Disposable filter
No. of the fuel filter element	2

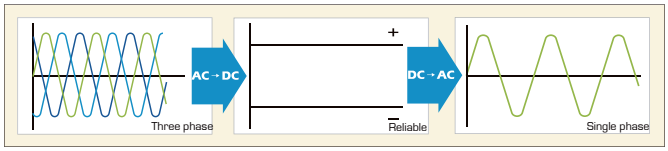
Lubrication system	
Min. oil pressure at 1500rpm (oil temperature 90 ℃)	≥ 3bar
Min. oil pressure at 600rpm (oil temperature 90 ℃)	≥ 1bar
Oil pan	Flywheel side
Oil pan inclination	22.5°
Initial oil filling	48L

Cold starting systems	
Lowest ambient temperature of cold starting without assistant (standard configuration)	-17 ℃
Lowest ambient temperature of cold starting with flame preheat plug	-32 ℃

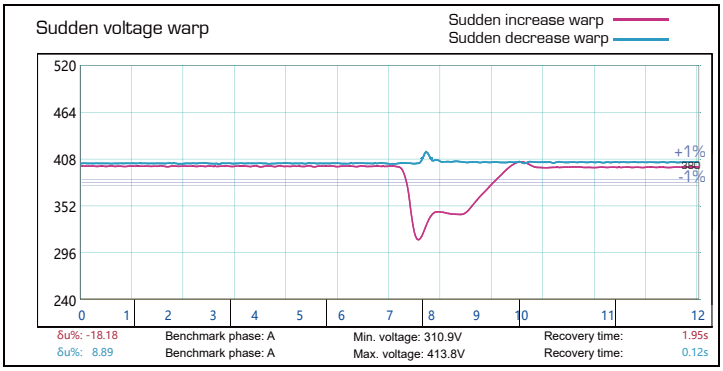
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Alternator Specification

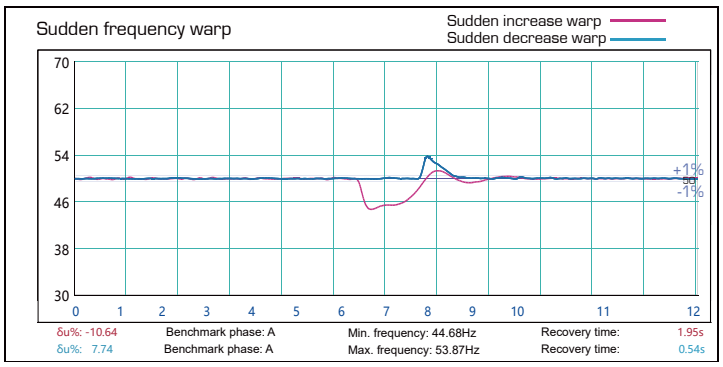
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



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

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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, ±1.6mm
  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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South Africa | Thailand | Vietnam

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