

■ Model: D E 6 6 D 5

Powered by DEUTZ



■ Generator Specification

Service	PRP ⁽¹⁾	ESP ⁽²⁾
Power (kVA)	60	66
Power (kW)	48	53
Rated speed (r.p.m)	1500	
Standard voltage (V)	400 / 230 V	
Rated at power factor(cos phi)	0.8	



Dynamis 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):

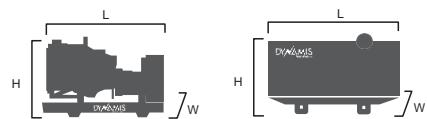
According to ISO 8528-1, it is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures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

Powers Voltage (V)	ESP		PRP		Standby Amps
	KVA	KW	KVA	KW	
415 / 240	66	53	60	48	91.8
400 / 230	66	53	60	48	95.3
380 / 220	66	53	60	48	100.3

Performance Data		
Model	DE 66 D 5	
Engine brand	Deutz	
Engine model	BF4M2012	
Speed control type	Mechanical	
Phase	3	
Control system	Digital	
Starter motor voltage	12 / 24 V	
Frequency	50 HZ	
Engine speed (RPM)	1500	
Fuel Consumption (L/H)	100% standby power	-
	100% prime power	16.9
	75% prime power	11.8
	50% prime power	8.1

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



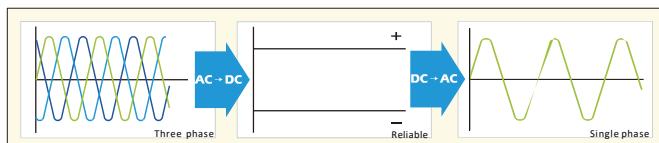
Dimension and Weight		
Dimension	Open	Silent
Length (L)	1860 mm	2930 mm
Width (W)	1035 mm	1100 mm
Height (H)	1485 mm	1732 mm
Net Weight	1180 KG	1460 KG
Fuel Tank (L)	210 L	170 L

■ Engine Specification: BF4M2012

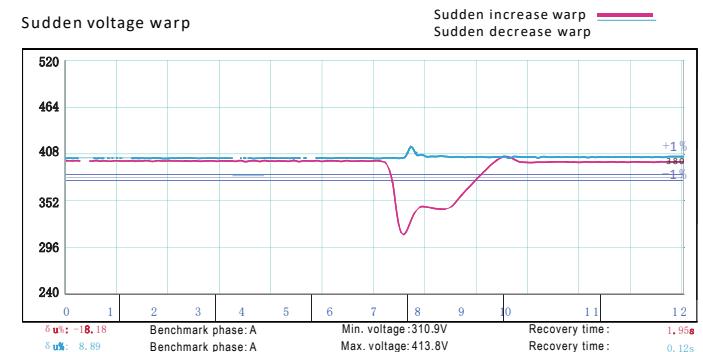
Basic technical data		Output																																							
No. of cylinders	4	Gross output (LTP)	60 kW																																						
Cylinder arrangement	In-line	Fan reduction	2 kW																																						
Cycle	4 stroke	Net flywheel	58 kW																																						
Injection system	single injection pumps	Electrical output	65 kVA																																						
Displacement	4.04 L	Gross output (PRP)	54 kW																																						
Bore	101 mm	Gross output (Continuous power)	51 kW																																						
Stroke	126 mm																																								
Compression ratio	18.4:1																																								
Mean effective pressure	11.9 bar																																								
Piston speed	6.3 m/s																																								
Rotation	CCW																																								
Exhaust emission standard	COM II																																								
Cooling system		Lubrication system																																							
Delivery of coolant pump	7.2 ° C	Oil specification	TR0199-99-3002/6																																						
Min. pressure before coolant pump	0.3 bar	Oil consumption																																							
Coolant capacity(engine)	6 L	(as % of fuel consumption)	0.15																																						
Coolant capacity (incl. cooling unit)	15.9 L	Oil capacity (sump)	8.5 L																																						
Air to boil	55	Min. oil pressure (warning)	1.8 bar																																						
Fan power consumption	2 kW	Min. oil pressure (shut down)	1.5 bar																																						
Cooling air flow	5400 m ³ /h	Max. permissible oil temp(oil pan)	125 ° C																																						
Air pressure loss, external	1.5 mbar																																								
Heat balance																																									
Heat dissipation (engine radiator)	41.1 kW	Electrical system																																							
Heat dissipation (CAC)	TBD	Heat dissipation (Convection)	6 kW	Voltage	24 V			Starter	6 kW			Alternator output	35 A	Inlet / Exhaust Data				Max. intake depression(switch setting)	25 mbar			Combustion air volume	219.6 m ³ /h			Max. exhaust back pressure	30 mbar			Max. exhaust gas temperature	610 ° C			Exhaust gas flow (at above temp)	526 m ³ /h			Exhaust flange/pipe diameter	TBD		
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■ Alternator Specification

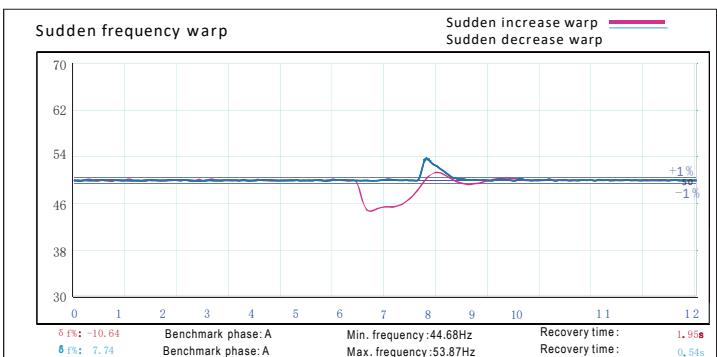
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2 / 3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Coupling	Flexible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



Emergency voltage curve



Emergency frequency curve



■ Options

Engine	Alternator	Generator Sets	Fuel System
<ul style="list-style-type: none"> Water Jacket Pre-heater Fuel heater 	<ul style="list-style-type: none"> Winding Temp measuring Instrument Alternator Pre-heater PMG Anti-damp and anti-corrosion treatment Anti-condensation heater Winding and bearing RTD 	<ul style="list-style-type: none"> Tools with the machine Extended range fuel tank Bunded fuel tank 	<ul style="list-style-type: none"> Low fuel level alarm Automatic fuel feeding system Fuel T-valves
Canopy	Lub oil system	Cooling System	Control Panel
<ul style="list-style-type: none"> Rental type Canopy Trailer 	<ul style="list-style-type: none"> Oil Pre-heater Oil temp sensor 	<ul style="list-style-type: none"> Front heat protection 	<ul style="list-style-type: none"> 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 °C to + 70 °C
- Storage temp: -30 °C to + 80 °C
- 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