Model: DE88D5

Powered by DEUTZ

Generator Specification

Service	PRP(1)	ESP(2)
Power (kVA)	80	88
Power (kW)	64	70
Rated speed (r.p.m)	1500	
Standard voltage (V)	400/230V	
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

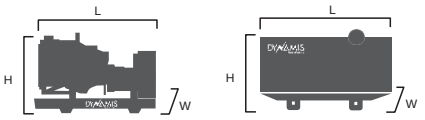
(1) PRP (Prime Power):
According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 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 KVA	ESP KW	PRP KVA	PRP KW	Standby Amps
415/240	88	70	80	64	122.4
400/230	88	70	80	64	127.0
380/220	88	70	80	64	133.7

Performance Data		
Model		DE88D5
Engine brand		Deutz
Engine model		BF4M2012C
Speed control type		Mechanical
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	19.3
	75% prime power	14.4
	50% prime power	9.7

Standard reference Conditions
Note: Standard reference condition 25℃ (77℉) 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)	1860mm	2930mm
Width (W)	1035mm	1100mm
Height (H)	1485mm	1732mm
Net Weight	1180KG	1615KG
Fuel Tank (L)	210L	170L

DYNAMIS POWER SOLUTIONS

Engine Specification:

Basic technical data	
No. of cylinders	4
Cylinder arrangement	In-line
Cycle	4 stroke
Injection system	Single injection pumps
Displacement	4.04 L
Bore	101 mm
Stroke	126 mm
Compression ratio	18.4:1
Mean effective pressure	14.8 bar
Piston speed	6.3 m/s
Rotation	CCW
Exhaust emission standard	TBD

Output	
Gross output (LTP)	74.9 KW
Fan reduction	4.9 KW
Net flywheel	70 KW
Electrical output	79 KVA
Gross output (PRP)	71 KW
Gross output (Continous power)	64 KW

Lubrication system	
Oil specification	TR0199-99-1217
Oil consumption (as % of fuel consumption)	0.15
Oil capacity (sump)	8.5 L
Min. oil pressure (warning)	1.8 bar
Min. oil pressure (shut down)	1.5 bar
Max. permissible oil temp(oil pan)	125 ° C

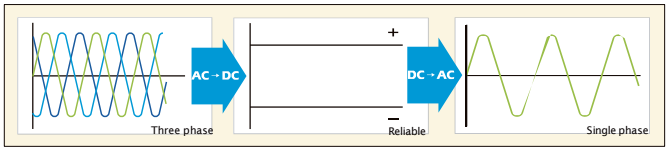
Cooling system	
Delivery of coolant pump	7.2 m 3 /h
Min. pressure before coolant pump	0.3 bar
Coolant capacity(engine)	6 L
Coolant capacity (incl. cooling unit)	15.9 L
Air to boil	55
Fan power consumption	4.9 KW
Cooling air flow	4700 m 3 /h
Air pressure loss, external	1.5 mbar
Heat balance	
Heat dissipation (engine radiator)	43.1 KW
Heat dissipation (CAC)	7.5 KW
Heat dissipation (Convection)	7.5 KW

Electrical system	
Voltage	12V
Starter	3 KW
Alternator output	45 A

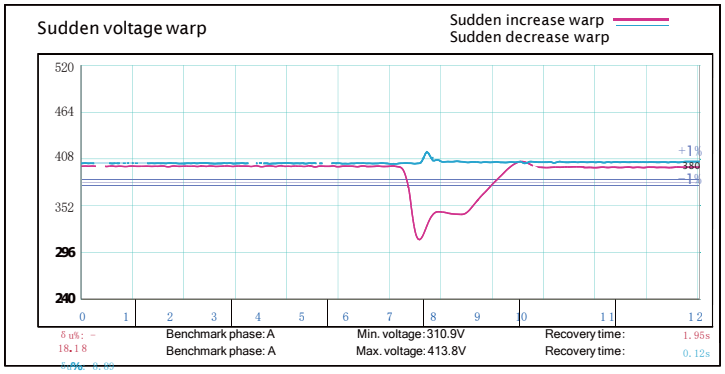
Inlet / Exhaust Data	
Max. intake depression(switch setting)	25mbar
Combustion air volume	219.6 m3/h
Max. exhaust back pressure	30 mbar
Max. exhaust gas temperature	610 ° C
Exhaust gas flow (at above temp)	526 m3/h
Exhaust flange/pipe diameter	TBD

Alternator Specification

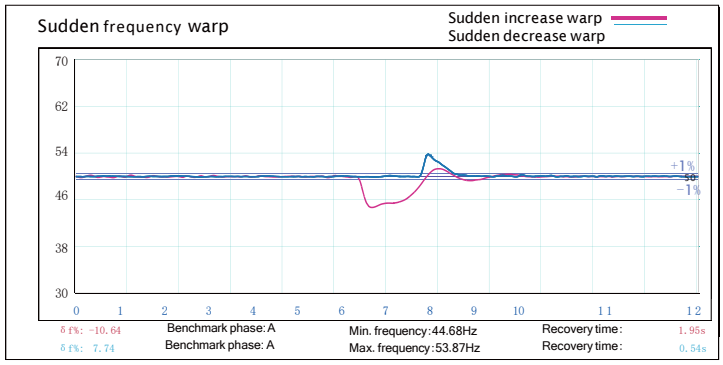
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
W inding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible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

info.dynamis@netisgroup.net

Distributed by