Model: P 6 6 D 5

Powered by PERKINS

Generator Specification

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

Dynamis 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

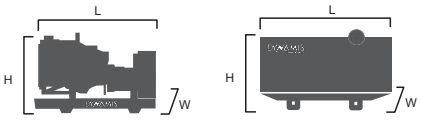
(1) PRP (Prime Power):
According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 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 Voltage (V)	ESP KVA	ESP KW	PRP KVA	PRP KW	Standby Amps
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		P66D5
Engine brand		Perkins
Engine model		1103A-33TG2
Speed control type		Mechanical
Phase		3
Control system		Digital
Starter motor voltage		12V
Frequency		50HZ
Engine speed (RPM)		1500
Fuel Consumption (L/H)	100% standby power	15.4
	100% prime power	13.9
	75% prime power	10.4
	50% prime power	7.2

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)	1920mm	2590mm
Width (W)	750mm	1005mm
Height (H)	1410mm	1296mm
Net Weight	913KG	1208KG
Fuel Tank (L)	200L	90L

Note: This parameters allows for some acceptable deviations.

DYNAMIS POWER SOLUTIONS

Engine Specification: 1103A-33TG2

Basic technical data	
No. of cylinders	3
Cylinder arrangement	In-line
Cycle	4 stroke
Induction system	Turbocharged
Compression ratio	17.25:1
Bore	105mm
Stroke	127mm
Displacement	3.3L
All ratings certified to within	± 3%
Total weight	420kg

Cooling system	
Total coolant capacity	
-with radiator	10.2L
-without radiator	4.4L
Maximum top tank temp	110℃
Thermostat operation range	82-93℃
Radiator face area	0.276 m²
Rows and material	single row aluminium
Pressure cap setting	107 kPa
Fan diameter	457,0 mm
Drive ratio	1,25 :1
Number of blades	7

Fuel system	
Injection system	Direct
Fuel injection pump	Rotary
Fuel atomiser	Multi-hole
Nozzel opening pressure	29,0 MPa
Fuel lift pump type	Mechanical
- flow/hour	120 -150 l/h
- pressure	30 -75 kPa
Maximum suction head:	
-1500 rev/min	20 kPa

Induction system	
Clean filter	5kpa
Dirty filter	8kpa
Air filter type	Dry

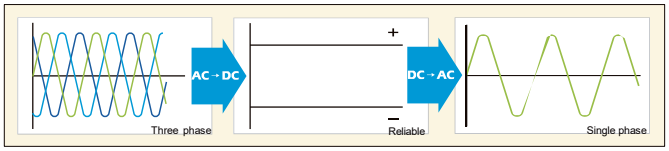
Lubrication system	
Total lub capacity	8.3L
Sump minimum	6.2L
Sump maximum	7.8L
Maximum engine operating angles	
-front up, front down, right side	
or left side	25°
Lubricating oil pressure	
-Relief valve opens	415-470 KPA
-at maximum no-load speed	276-414 KPA
Oil consumption at full load	
as a % of fuel consumption	0.15%

Electrical system	
Type	Negative ground
Alternator voltage	12 volts
Alternator output	65 amps
Starter motor voltage	12 volts
Starter motor power	3KW

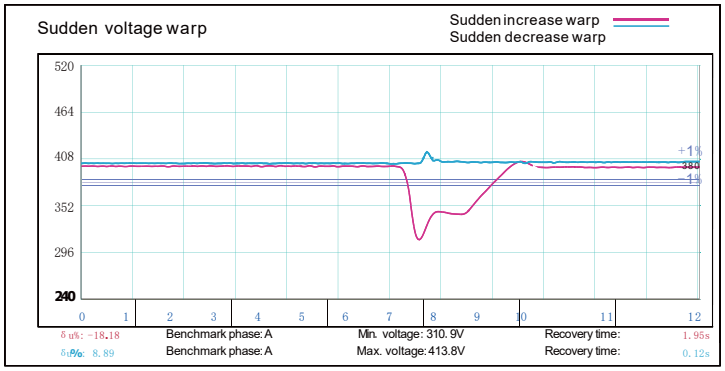
General installation	Prime power
Gross engine power	55kW
Brake mean effective pressure	1333kPa
Combustion air flow	3.8m³/min
Exhaust gas temperature outlet	557°C
Energy to coolant	35kW
Energy to exhaust	41kW

Alternator Specification

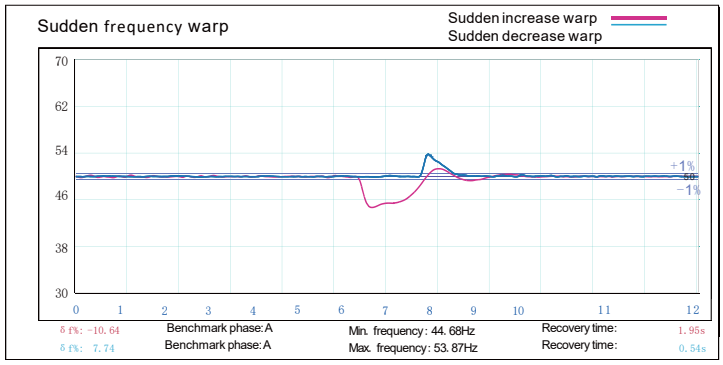
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



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

info.dynamis@netisgroup.net

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