Model: P1100D6

Powered by PERKINS

Generator Specification

Service	PRP(1)	ESP(2)
Power (kVA)	1000	1100
Power (kW)	800	880
Rated speed (r.p.m)	1800	
Standard voltage (V)	440/254V	
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
480/277	1100	880	1000	800	1323.1
440/254	1100	880	1000	800	1443.4
380/220	1100	880	1000	800	1671.3
220/127	1100	880	1000	800	2886.8
208/120	1100	880	1000	800	3053.4

Performance Data		
Model		P1100D6
Engine brand		Perkins
Engine model		4008TAG2
Speed control type		Electronic
Phase		3
Control system		Digital
Starter motor voltage		24V
Frequency		60HZ
Engine speed (RPM)		1800
Fuel Consumption (L/H)	100% standby power	249
	100% prime power	224
	75% prime power	162
	50% prime power	108

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)	4675mm	6058mm
Width (W)	2050mm	2438mm
Height (H)	2208mm	2591mm
Net Weight	7202KG	11500KG
Fuel Tank (L)	-	-

Note: This parameters allows for some acceptable deviations.

Engine Specification: 4008TAG2

Basic technical data	
No. of cylinders	8
Cylinder arrangement	In-line
Cycle	4 stroke, compression ignition
Induction system	Turbocharged
Compression ratio	13.6:1
Bore	160mm
Stroke	190mm
Displacement	30.6L
All ratings certified to within	TBD
Speed variation at constant load	±0. 25%

Cooling system	
Maximum pressure in crankcase water jacket	170 kPa
Maximum top tank temperature (Standby)	98°C
Thermostat operation range	71-85°C
Maximum static pressure on pump	70 kPa
Total coolant capacity Electrounit (engine only)	48 litres
Fan diameter	TBD
Drive ratio	TBD
Number of blades	TBD

Fuel system	
Injection system	Direct
Fuel injection pump	Combined unit injector
Injector pressure	23.4 Mpa
Lift pump type	Gerotor
Fuel lift pump type	Electronic
- flow/hour	TBD
- pressure	TBD
Maximum suction head: -1500 rev/min	2.5 m

Induction system	
Clean filter	1.2kpa
Dirty filter	3.7kpa
Air filter type	5001-00-00 MF&T

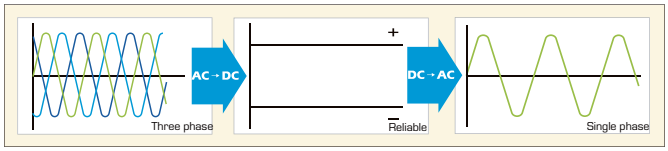
Lubrication system	
Total lub capacity	TBD
Sump minimum	127L
Sump maximum	153L
Lubricating oil pressure At rated speed	340 kPa
Minimum	240 kPa
Oil filter screen spacing	40 microns
Sump drain plug tapping size	G1
Oil pump speed and method of drive	1.4 x e rpm,gear driven
Shutdown switch - pressure setting (where fitted)	193 kPa (falling)

Electrical system	
Type	Insulated return
Alternator voltage	24 volts
Alternator output	40 amps
Starter motor voltage	24 volts
Starter motor power	8.2 kW

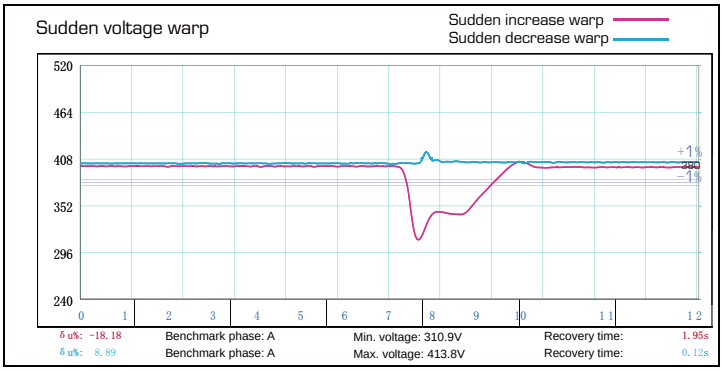
General installation	Prime power
Combustion air flow	72 m^3/min
Exhaust gas temp	505°C
Exhaust gas flow, wet	202 m^3/min
Engine coolant flow	12 l/min
Engine coolant flow	720 l/s
Gross engine power	899kW
Nett engine power	861kW

Alternator Specification

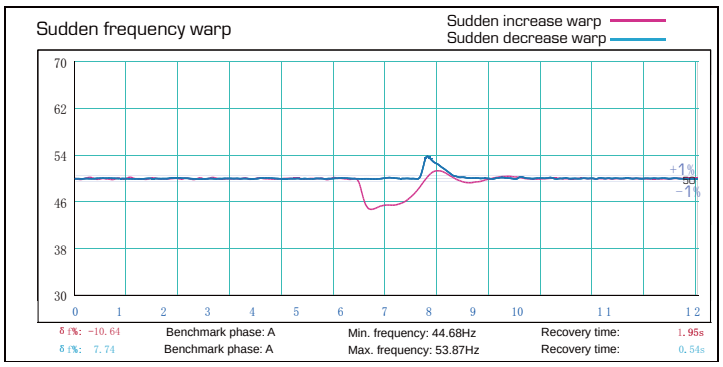
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



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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