Model:P250D5

Powered by PERKINS

Output Rating

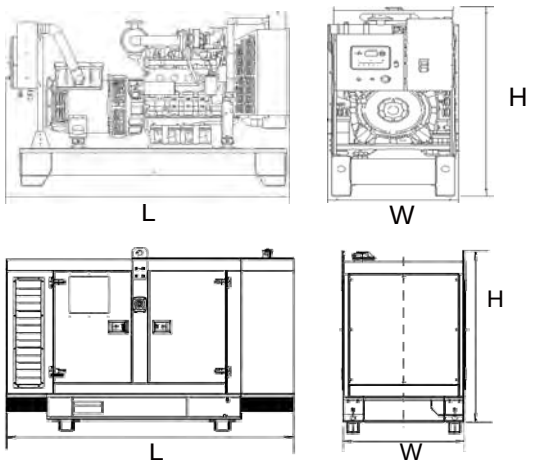
MODEL		Power rating		Voltage available
		PRIME(1)	STANDBY(2)	
P250D5	400V/50HZ	180KW	200KW	380/220V 400/230V 415/240V
	PF:0.8	225KVA	250KVA	

General Information

Model		P250D5
Engine		1506A-E88TAG2
Speed control type		ECM
Phase		3
Control System		Digital
System voltage		24V
Frequency		50HZ
Engine Speed(RPM)		1500
Fuel Consumption (L/H)	Standby power(2)	NA
	Prime Power(1)	48.6
	75% prime power	NA
	50% prime power	NA

Dimension and Weight

Dimension	Open	Silent
Length (L)	2680mm	4350mm
Width (W)	1070mm	1400mm
Height (H)	2322mm	2260mm
Net Weight	2309KG	4895KG



AGG POWER gensets are compliant with EC mark 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)Prime Power(PRP):

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operation conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24h of operation shall not exceed 70% of the PRP.

(2) Standby Power (ESP):

According to ISO 8528-1:2005, standby power is the maximum power available during a variable electrical power sequence, under the stated operation conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the maintenance intervals and procedures being caried out as prescribed by the manufacturers. The permissible average power output over 24h of operation shall not exceed 70% of the ESP.

Engine Specification

Basic technical data

Number of cylinders. 6
Cylinder arrangement .. .. .In-line
Cycle ... ...4 stroke
Induction system.. .. .. Air to air after cooled, turbocharged
Compression ratio 16.1:1
Bore . ... 112 mm (4.41 inches)
Stroke .. .. 149 mm (5.87 inches)
Displacement... ... ... 8.8 litres (537.0 inches³)
Direction of rotation.. ... . Anticlockwise facing flywheel
Firing order (number 1 cylinder furthest from flywheel) 1, 5, 3, 6, 2, 4
Estimated total weight of ElectropaK (dry) ... ... 1156 kg
Estimated total weight of ElectropaK (wet)... ... ...1235 kg

Lubrication system

Total lubrication system capacity (dry engine) ... ... 41 litres
Total lubrication system capacity (oil change). ... ... 39 litres
Sump capacity only . ...36 litres
Oil temperature (in sump) maximum... ... ... .120°C
Oil temperature (in sump) normal continuous operation . ... .115°C
Lubricating oil pressure at bearings. ... ... 370 kPa
Minimum oil pressure .. ..250 kPa
Oil relief opens at. ... ...662 kPa
Oil filter screen spacing ... ... 23 Microns
Lubricating oil flow ... ... 200 litres/min
Oil consumption (highest rating) ... ...<0.1% of fuel

Cooling system

Total coolant capacity.. ... ... .29.6 litres
Engine ... ... 13.9 litres
Radiator .. .. 12.6 litres
Pipes and hoses . ... 3.08 litres
Maximum top tank temperature .. .. .107°C
Maximum static pressure head on pump. ... ... .N/A kPa
Thermostat operating range ... ... 87 - 98°C
Coolant flow, against 30 kPa restriction @ 1500 rpm ... .. .140 litres/min
Coolant flow, against 30 kPa restriction @ 1800 rpm ... .. .190 litres/min
Maximum temperature rise across the engine ... ... .N/A°C

Radiator

Radiator face area... ... ...0.49 m²
Number of rows and material .. .. 4 / Aluminium
Fins per inch and material ... ... .10 FPI
Pressure cap setting (min)... ... ...110 kPa

Charge cooler

Face area ... ... .0.26 m²
Number of rows and material .. .. 2 / Aluminium
Fins per inch and material ... ... .10 FPI

Exhaust system

Maximum back pressure for total system.. ... ... 10 kPa

Electrical system

Type (grounding)... ... ... Negative ground
Alternator type... ... ... 20SI 24 volts
.. ..24 volts

General installation

1506A-E88TAG2

Designation	Units	Type of operation and application			
		Standby Power	Prime Power	Standby Power	Prime Power
		50 Hz @ 1500 rpm		60 Hz @ 1800 rpm	
Gross engine power	kWb	236	213	TBA	TBA
Fan power	kWm	8	8	TBA	TBA
ElectropaK nett engine power	kWm	228	205	TBA	TBA
Gross BMEP	kPa	2145	1936	TBA	TBA
Combustion air flow	m³/min	15.0	14.4	TBA	TBA
	kg/hr	1059	1023	TBA	TBA
Exhaust gas temperature after turbo (Max.)	°C	475	467	TBA	TBA
Exhaust gas flow, wet	m³/min	35.7	34.4	TBA	TBA
	kg/hr	1104	1066	TBA	TBA
Boost pressure ratio		3.0	2.8	TBA	TBA
Overall thermal efficiency (nett)	%	42	42	TBA	TBA
Mean piston speed	m/s	7.4	7.4	TBA	TBA
Engine coolant flow	l/min	140	140	TBA	TBA
Cooling fan air flow	m³/min	370	370	TBA	TBA
Typical Genset electrical output (0.8pf)	kWe	200	184	TBA	TBA
	kVA	250	230	TBA	TBA
Assumed alternator efficiency	%	90	90	TBA	TBA

Alternator

Alternator		
Poles	Num	4
Winding Connections (standard)		Star-serie
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		Brushless
Voltage Regulator		A.V.R. (Electronic)
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)

Options

Engine	Alternator	Generator Sets	Fuel System	Canopy
●Water Jacket Preheater ●Oil Preheater	●Winding Temperature measuring Instrument ●Alternator Preheater ●PMG ●Anti-damp and anti-corrosion treatment ●Anti-condensation heater	●Tools with the machine	● Low fuel level alarm ●Automatic fuel feeding system ●Fuel T-valves	●Rental Type Canopy ●Trailer
Lubricating System	**Exhaust System**	**Cooling System**	**Control Panel**	**Voltages**
●Oil with the machine	●Protection board from hotness	● Front heat protection ● Coolant (-30°C)	●Remote control panel ● ATS ● Remote controller ● Synchronizing controller	● 415/240V ● 380/220V ● 220/127V ● 220/127V ● 200-115V

Control Panel

Product description

- Single gen-set controller for Stand-by and Prime-power applications
- Direct communication with EFI engines
- Total remote monitoring and control

Key features

- Easy to install, configure and use
- Wide range of communication capabilities including:
  - connection via RS232, RS485, CAN and on board USB
  - internet access using Ethernet or GPRS
  - support for Modbus and SNMP protocols
- Cloud-based monitoring and control
- Active SMS and emails in different languages
- 2x 5 A binary outputs for cranking and fuel solenoid
- Option for up to 16 additional binary inputs/outputs
- Flexible event based history with up to 350 events
- Load shedding, dummy load capability
- Automatic temperature based cooling/heating
- Comprehensive gen-set protections
- Multipurpose flexible timers
- True RMS measurement

Available extension modules

Product	Description	Order code
CM-Ethernet	Ethernet interface	CM2ETHERXBX
CM-GPRS	GSM modem / wireless internet	CM2GPRSXXBX
CM-RS232-485	Dual port interface	CM223248XBX
EM-BIO8-EFCP	8 additional binary inputs/outputs	EM2BIO8EXBX

Functions and protections

Description	ANSI code	Descritption	ANSI code
Over voltage	59	**Load shedding**	32P
Under voltage	27	**Overload**	32
Voltage asymmetry and Phase rotation**	47	**Power factor**	55
Over frequency	81H	**Temperature**	49T
Under frequency	81L	**Gas (fuel) level**	71
Over current*	50 + 51	**Earth fault current**	50N + 64
Current unbalance	46		

* Short current only

** Fixed setting