

P50D5

Industrial Range Powered By PERKINS

AGG Power Solutions



Standards : 2006/42/EC Machinery safety, 2006/95/EC Low voltage, EN 60204-1 : 2006+A1 : 2009, EN ISO 12100 : 2010, EN ISO 8528-13:2016, ENISO 13849-1: 2015, EN 60204-1:2018

PRP: Prime power is available for an unlimited number of annual operating hours in variable load applications , in accordance with ISO 8528-1.

ESP : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. overload is not allowed.

Conditions : According to the standard, the nominal power assigned by the genset is given for 25° C air inlet temperature, of a barometric pressure of 100 kPa (100 m A.S.L), and 30 % relative humidity.

GENERATOR SPECIFICATION

ITEMS	PRP	EPS
Power	46kVA	50kVA
Power	36kW	40kW
Frequency / Phase / Power factor	50Hz / 3P / PF0.8	
Standard voltage	400/230V	
Available voltage	380/220V · 415/240V	



GENERAL INSTALLATION

ITEMS	OPEN	SILENT
Dimension(L*W*H)(mm)	1860*750*1362	2298*954*1250
Weight(kg)	830	1060
Fuel tank(L)	150	90
Sound pressure level		
@75% load&1m dB(A)		TBA
@75% load&7m dB(A)		TBA



NOTE: Weights and dimensions based on standard products. According to 2000/14/CE , sound data is provided at 7m for 75% prime power. For actual installation, please contact the manufacturer.

PERFORMANCE DATA		
Engine brand	PERKINS	
Engine model	1103A-33TG1	
Fuel	Diesel	
Aspiration	Turbocharged	
Cooling	Water-cooled	
Governor	Mechanical	
Cyl arrangement	3 L	
Application	Prime & Standby	
Fuel consumption	100% ESP(L/H)	8.1
	100% PRP(L/H)	7.2
	75% PRP(L/H)	5.61
	50% PRP(L/H)	4.06

ENGINE SPECIFICATION

BASIC DATA

Engine brand	PERKINS
Engine model	1103A-33TG1
Displacement	3.3 L
No. of cyl / arrangement	3 L
Bore x stroke	105 x 127mm
Compression ratio	17.25 : 1
Engine speed	1500rpm
Engine type	4-stroke diesel

EXHAUST SYSTEM

Exhaust stack gas temperature (max.)	537 °C
Exhaust gas flow rate (max.)	7.7 m³/min
Exhaust system backpressure (maximum allowable)	10 kPa

FUEL SYSTEM

Maximum restriction at lift pump	75 kPa
Max. fuel flow	150 L/H

COOLING SYSTEM

Radiator air flow	53 m³/min
Total oil capacity	8.3 L
Total coolant capacity	10.2 L

ELECTRICAL SYSTEM

Starter motor rated voltage	DC12V
Start battery	60Ah(580CCA)
Battery charging alternator	DC12V/65A

INLET AIR

Air filter	Dry type
Max. combustion air Intake restriction	8 kPa
Combustion air inlet flow rate	3.1 m³/min
Max. allowable combustion air inlet temp	50°C

ALTERNATOR SPECIFICATION

BASIC DATA

Insulation & temperature rise	Class H/H
Excitation type	Self-excited
Winding leads	12
Winding connections (standard)	Star
Winding pitch	Two thirds
Number of phase	Three phase

BASIC DATA

Type	Brushless
No. of bearings	Single bearing
Coupling system	Flexible disc
Maximum over speed	2250 RPM
Coating type	Vacuum impregnation
IP rating	IP23

CONTROL SYSTEM

Key features

- Single generator set controller can be used in prime or standby scenarios 
- Manual and remote start, MRS application 
- Auto mains failure, AMF application 
- Genset power/frequency/factor /voltage/current detection 
- Engine / alternator / generator protections, emergency stop 
- Event log / running hours history / maintenance warning, LCD screen 
- User access management, software and tools are easy to use 
- Input or output configuration, USB communication port 



GENSET VERSION

STANDARD FEATURES

- ◆ Diesel engine, 50 degrees radiator, brushless alternator
- ◆ Intelligent controller
- ◆ Output circuit breaker (up to 1250A)
- ◆ Maintenance-free start battery, battery charge, battery switch
- ◆ Steel industrial silencer, exhaust bellows and elbows
- ◆ Steel chasis and anti-vibration shock absorbers
- ◆ Lifting and moving structure, expansion of oil and coolant discharge
- ◆ Moving parts protection, hot parts protection
- ◆ Special toolbox, delivery attached documentation



OPTIONAL FEATURES

ENGINE

- ◆ Water jacket preheater
- ◆ Oil Preheater, oil level maintainer, oil manual pump
- ◆ Heavy air filtration
- ◆ Residential silencer
- ◆ Remote radiator, heat exchanger

ALTERNATOR

- ◆ PMG/AREP excitation system
- ◆ Anti-condensation heater
- ◆ Winding/bearing RTD
- ◆ Double bearing structure
- ◆ IP44 protection class

CONTROL SYSTEM

- ◆ Synchronizing panel, remote control panel
- ◆ RS232/485, 4G & GPS wireless, ethernet communication card
- ◆ Additional digital/analog input/output
- ◆ Monitoring software, mobile APP
- ◆ Ni-Cad batteries

GENERATING SET

- ◆ External fuel tank, automatic fuel feeding
- ◆ ATS/output /combining/distribution cabinet
- ◆ Load test cabinet
- ◆ Mobile trailer
- ◆ Customized design

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