

PPE50A

Prime Power: 36KW/45KVA

Standby Power: 40KW/50KVA

Voltage: 400V

Powered by Perkins 1103A-33T Engine

Genset Performance

- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop $\leq 3\%$
- Voltage regulation $\leq 0.3\%$
- The steady state frequency $\leq 0.5\%$
- The steady state voltage deviation $\leq \pm 1\%$
- The transient frequency deviation $\leq +10\%$ $\leq -7\%$
- The transient voltage deviation $\leq +20\%$ $\leq -15\%$
- Frequency recovery time $\leq 3S$
- Voltage recovery time $\leq 1S(\text{Voltage} \pm 3\%)$
- THF (Telephone Harmonic Factor) < 3
- TIF (Telephone Influence Factor) < 50
Comply to Standard NEMA MG1-22.43
- Standard equipped with ambient temperature 40°C
Connecting radiator
- Built-in vibration isolator with high performance on
shock absorption.
- Product standards: (1) GB/T 2820-2022 / ISO8528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4) YD/T 1051-2018

Optional Items

- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.

Standard Configuration

- Perkins Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40°C standard ambient
temperature
(50°C Optional)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Bottom fuel tank
- Manual book and files

Diesel Engine

- Model: 1103A-33T
- Building upon Perkins proven reputation within the power generation industry, the 1100 Series range of ElectropaK engines now fit even closer to customers needs;
- In the world of power generation success is only gained by providing more for less. With the 1103A-33T Perkins has engineered even higher levels of reliability, yet lowered the cost of ownership;
- 1100A units are designed for territories that do not require compliance to EPA or EU emissions legislation. These units are able to meet TA luft legislation;
- 1100 Series is the result of an intensive period of customer research that has guided the development of the range;
- The new 3.3 litre cylinder block ensures bore roundness is maintained under the pressures of operation. It also ensures combustion and mechanical noise is lowered;
- A new cylinder head has re-established Perkins mastery of air control;
- Product design and Class A manufacturing improvements enhance product reliability while maintaining Perkins legendary reputation for durability;
- Compact size and low noise;
- Lower fuel consumption and oil use;
- 500 hour service intervals;



Alternator

- Optional brands: **Stamford / Marathon / Faraday / Engga / Mecc Alt**
- Brushless, 4 pole rotating magnetic field, single bearing with protective cover.
- Insulation: H Class.
- IP Class: IP23
- Cooling system
- AC exciter, rotate rectifying
- The stator winding is impregnated and the surface is covered with moisture-proof epoxy insulating paint.
- Rotor and exciter made with high temperature insulating resin, to satisfy tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Standard Meters

- 3 phases voltage: U_a, U_b, U_c
- Frequency $F1$
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature $^{\circ}C$ display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- Active power PA
- Power factor PF
- Temperature $^{\circ}C$ display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



Standard Protection Function

Genset Protection

- Programmable I/O signal
- Emergency stop

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost
- Over Voltage
- Over frequency
- Under frequency

Control System Components

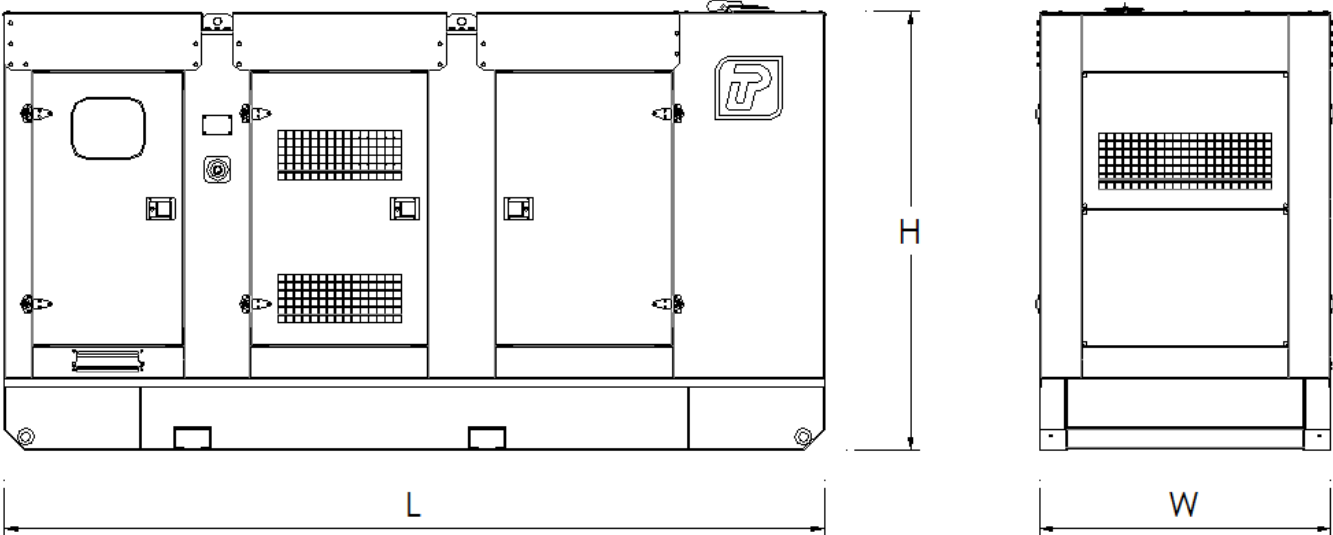
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



Communication Interface (Option)

- International standard MODBUS communication protocol RS232/ RS485 is suitable for remote control and monitor; It is easy integrated with SCADA;.

Genset	
Model	PPE50A
Prime Rating (kw)	36
Standby Rating (kw)	40
Rate current(A)	65
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	1103A-33T
Gross Engine output-Prime (kw)	41.3
Gross Engine output-Standby (kw)	45.6
Bore * stroke (mm)	105*127
Cylinders and structure	3 In line
Displacement(Liter)	3.3
Compression Ratio	17.25:1
Intake way	Turbocharging
Max intake resistance (KPa)	8
Air intake (m3/h)	174
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	420
Exhaust temp (°C)	492
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	53
Coolant capacity (L)	10.2
Highest water temperature(°C)	112
Minimum air opening to room (m2)	1.1/0.75
Thermostat range (°C)	82-93
Max oil temperature (°C)	125
Lubrication system oil capacity (L)	7.9
Rate load fuel consumption(L/H)	10.8
Standard Governor/Class	Mechanical speed regulation
Alternator	
Rated Voltage(V)	230/400
Output Way	3 Phases, 4 wires
Rated power factor	0.8
Exciter	Brushless, Self-exciter
Max voltage regulation	±1%
Phase	3
Protection class	IP21-23
Insulation class	H
Controller	
Brand	POWERTEC



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	1829*823*1317	949	110
Silent Type	2300*900*1550	1499	160

Contact Us

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