



PPE35A

Prime Power: 24KW/30KVA Standby Power: 26KW/33KVA Voltage: 400V

Powered by Perkins 1103A-33 Engine

Genset Performance

■ 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires

■ Frequency drop ≤3%

■ Voltage regulation ≤0.3%

■ The steady state frequency ≤0.5%

■ The steady state voltage deviation $\leq \pm 1\%$

■ The transient frequency deviation ≤+10% ≤-15%

■ The transient voltage deviation ≤+20% ≤-15%

■ Frequency recovery time ≤3S

■ Voltage recovery time ≤1S(Voltage±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 / IS08528:2018
 (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

Equipment Instruction



Diesel Engine

■ Model: 1103A-33

- 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-33G 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 satify tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.





Intelligent Control System



Standard Meters

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed

- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer: (999999)



Standard Protection Function

Genset Protection

Programmable I/O signal

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost

Control System Components

- Manual/auto/stop/start
- Setting button
- Fault status indicators

- Emergency stop
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail
- Over Voltage
- Over frequency
- Under frequency
- 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;.

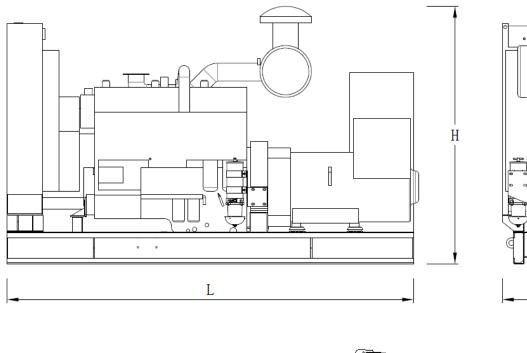
Data sheet of Genset

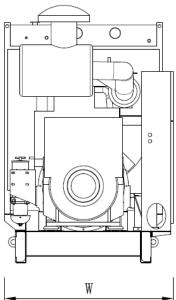


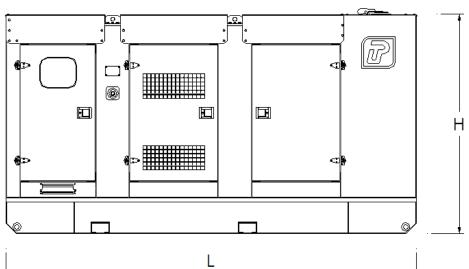
| Gens | et | | | |
|-------------------------------------|-----------------------------|--|--|--|
| Model | PPE35A | | | |
| Prime Rating (kw) | 24 | | | |
| Standby Rating (kw) | 26 | | | |
| Rate current(A) | 43 | | | |
| Power factor | 0.8 | | | |
| Frequency(Hz) | 50 | | | |
| Engine | | | | |
| Engine Model | 1103A-33 | | | |
| Gross Engine output-Prime (kw) | 27.7 | | | |
| Gross Engine output-Standby (kw) | 30.4 | | | |
| Bore * stroke (mm) | 105*127 | | | |
| Cylinders and structure | 3 In line | | | |
| Displacement(Liter) | 3.3 | | | |
| Compression Ratio | 19.25:1 | | | |
| Intake way | Naturally aspirated | | | |
| Max intake resistance (KPa) | 6.5 | | | |
| Air intake (m3/h) | 130 | | | |
| Max exhaust back pressure (KPa) | 8 | | | |
| Exhaust gas flow (m3/h) | 342 | | | |
| Exhaust temp (°C) | 500 | | | |
| 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 ($^{\circ}$ C) | 125 | | | |
| Lubrication system oil capacity (L) | 8.3 | | | |
| Rate load fuel consumption(L/H) | 7.2 | | | |
| Standard Governor/Class | Mechanical speed regulation | | | |
| Alternator | | | | |
| Rated Voltage(V) | 230/400 | | | |
| Output Way | 3 Phases, 4 wires | | | |
| Rated power factor | 0.8 | | | |
| Exciter | | | | |
| Max voltage regulation | Brushless, Self-exciter ±1% | | | |
| Phase | 3 | | | |
| Protection class | IP21-23 | | | |
| Insulation class | H | | | |
| Contro | | | | |
| Brand | POWERTEC | | | |
| Diana | TOWERTED | | | |

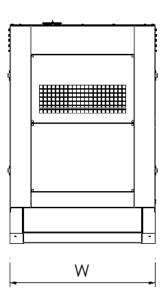
Dimension and Weight











| Туре | Dimension (mm) (L*W*H) | Weight (kg) | Fuel Tank Capacity (L) |
|-------------|---------------------------|----------------|---------------------------|
| Open Type | 1850*850*1320 | 800 | 110 |
| Silent Type | 2300*900*1550 | 1350 | 160 |

Contact Us

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