



PPE450B

Prime Power: 320KW/400KVA Standby Power: 360KW/450KVA Voltage: 400V

Powered by Perkins 2206C-E13TAG3 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 $^{\circ}\mathrm{C}$

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
- Manual book and files

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Equipment Instruction



Diesel Engine

■ Model: 2206C-E13TAG3

- The 2200 range has been developed using the latest engineering techniques and builds on the strengths of the already very successful 2000 Series family. Developed from a proven heavy-duty industrial base, these products offer the superior performance and reliability required to meet today's uncompromising demands within the power generation industry;
- The 2206C-E13TAG is a 6 cylinder, turbocharged air-to-air charge cooled diesel engine. Its premium features provide exceptional power to weight ratio resulting in exceptional fuel consumption;
- The overall performance and reliability characteristics make this the prime choice for today's power generation industry;
- Mechanically operated unit fuel injectors with electronic control combined with carefully matched turbocharging, give excellent fuel atomisation and combustion with optimum economy;
- Low emissions result from electronic control of fuel injected;
- Developed and tested using the latest engineering techniques and finite element analysis for high reliability, low oil usage and low wear rates;
- High compression ratios ensure clean rapid starting in all conditions;
- Perkins global product support is designed to enhance the customer experience of owning a Perkins powered machine.
 We deliver this through the quality of our distribution network, extensive global coverage and a range of Perkins supported OEM partnership options. So whether you are an end-user or an equipment manufacturer our engine expertise is essential to your success;

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.





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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;.

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Data sheet of Genset

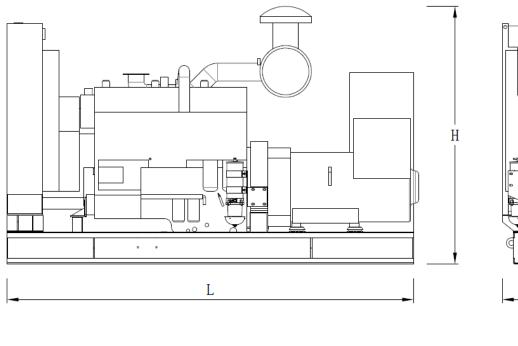


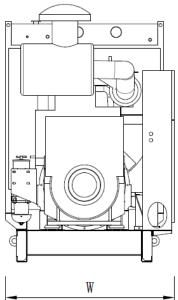
| Genset | | | | |
|-------------------------------------|---|--|--|--|
| Model | PPE450B | | | |
| Prime Rating (kw) | 320 | | | |
| Standby Rating (kw) | 360 | | | |
| Rate current(A) | 577 | | | |
| Power factor | 0.8 | | | |
| Frequency(Hz) | 50 | | | |
| Engine | | | | |
| Engine Model | 2206C-E13TAG3 | | | |
| Gross Engine output-Prime (kw) | 348.9 | | | |
| Gross Engine output-Standby (kw) | 392.3 | | | |
| Bore * stroke (mm) | 130*157 | | | |
| Cylinders and structure | 6 In line | | | |
| Displacement(Liter) | 12.5 | | | |
| Compression Ratio | 16.3:1 | | | |
| Intake way | Turbocharged and air-to-air charge cooled | | | |
| Max intake resistance (KPa) | 6.4 | | | |
| Air intake (m3/h) | 1602 | | | |
| Max exhaust back pressure (KPa) | 10 | | | |
| Exhaust gas flow (m3/h) | 4320 | | | |
| Exhaust temp (°C) | 630 | | | |
| Cooling way | Water Radiator & Fan | | | |
| Fan exhaust flow (m3/min) | 654 | | | |
| Coolant capacity (L) | 51.4 | | | |
| Highest water temperature(℃) | 104 | | | |
| Minimum air opening to room (m2) | 2.5/2.0 | | | |
| Thermostat range (℃) | 87-98 | | | |
| Max oil temperature (°C) | 113 | | | |
| Lubrication system oil capacity (L) | 40 | | | |
| Rate load fuel consumption(L/H) | 85 | | | |
| Standard Governor/Class | Electronic fuel injection | | | |
| 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 | Н | | | |
| Controller | | | | |
| Brand | POWERTEC | | | |

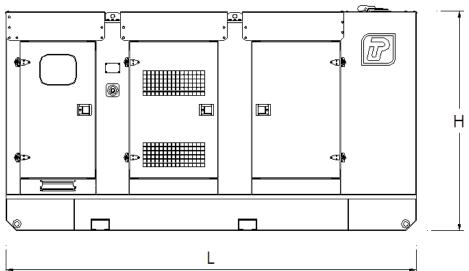
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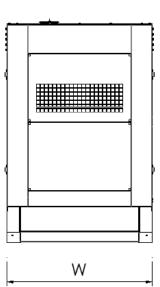
Dimension and Weight











| Туре | Dimension (mm) (L*W*H) | Weight (kg) | Fuel Tank Capacity (L) |
|-------------|---------------------------|----------------|---------------------------|
| Open Type | 3400*1400*2100 | 3400 | - |
| Silent Type | 4300*1594*2250 | 5200 | 900 |

Contact Us

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