

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 $\leq 3\%$
- 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
- Manual book and files

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 satisfy tough environment.
- Rotor dynamic balancing complies 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 $^{\circ}\text{C}$ display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a , I_b , I_c
- Active power PA
- Power factor PF
- Temperature $^{\circ}\text{C}$ 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

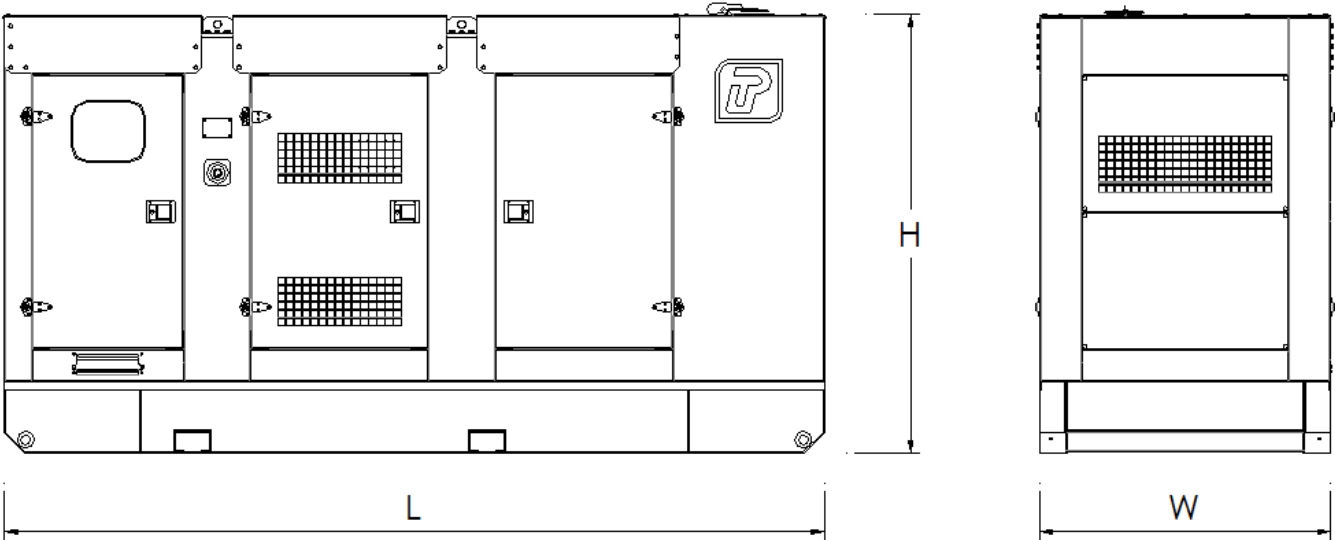
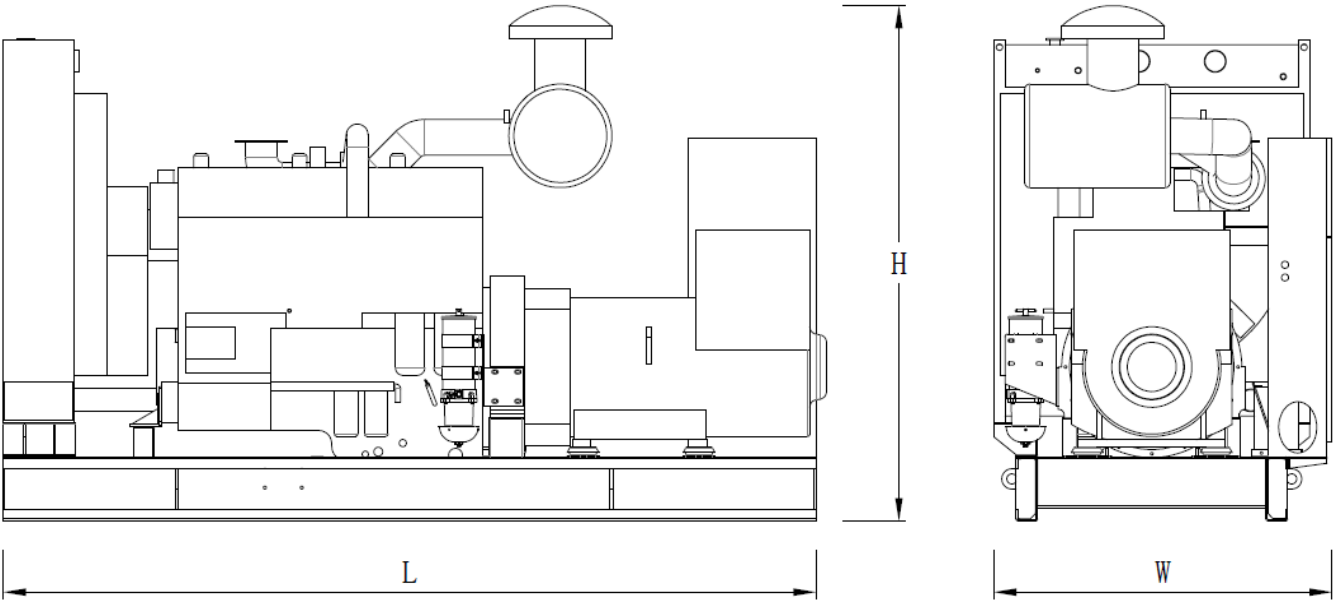
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	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(°C)	104
Minimum air opening to room (m2)	2.5/2.0
Thermostat range (°C)	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	H
Controller	
Brand	POWERTEC



Type	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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