



PPE1500B

Prime Power:1100KW/1375KVA Standby Power:1200KW/1500KVA Voltage: 400VAC

Powered by Perkins 4012-46TWG3A Engine

Genset Performance

- 230/400VAC, 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 deviatio
 - **≤+10% ≤-15%**
- The transient voltage deviation
- **≤+20% ≤-15%**
- Frequency recovery time
- ≤3S
- Voltage recovery time
- \leq 1S(Voltage \pm 3%)
- THF (Telephone Harmonic Factor) <3
- TIF (Telephone Influence Factor) <50
 - Comply to Standard NEMA MG1-22.43
- Built-in vibration isolator with high performance on shock absorption.

Standard Configuration

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

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
- Soundproof canopy
- Trailer
- 20GP or 40HQ container type canopy
- Design and construction of environmental protection
- Engineering for the Genset room



Equipment Instruction



Diesel Engine

- Model: Perkins 4012-46TWG3A
- Construction: Forged steel crankshaft, cast iron steel body and Replaceable wet cylinder liner, two/four valves per cylinder;
- Cooling system: Thermostatically-controlled system with belt driven coolant pump and pusher fan; mounted radiator, piping and guards;
- Fuel system: Mechanically regulated embedded fuel injection pump, non-direct injection;

Environment: The engine can work under the following conditions without modulating power:

1800r/min engine--altitude less than 1000 m, ambient temperature less than 40 $^{\circ}$ C 1500r/min engine--altitude less than 1000 m, ambient temperature less than 40 $^{\circ}$ C



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
- Rotor and exciter made with high temperature insulating resin, to satify tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.
- Sealed with advanced lubricating grease to prolong life of bearing.



Notes: Above data of alternator comes from Stamford. Specification may alternated without advance notice.

Intelligent Control System



Standard

- 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

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;.

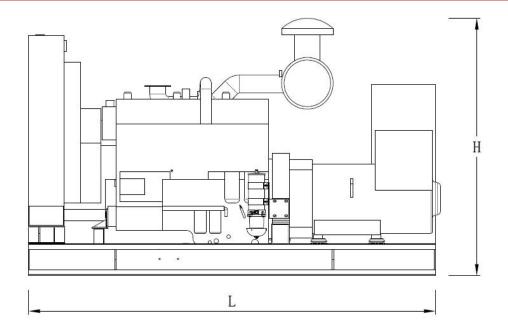
Data sheet of Genset

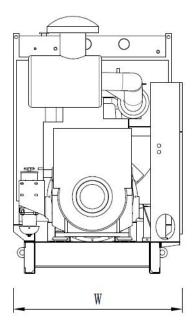


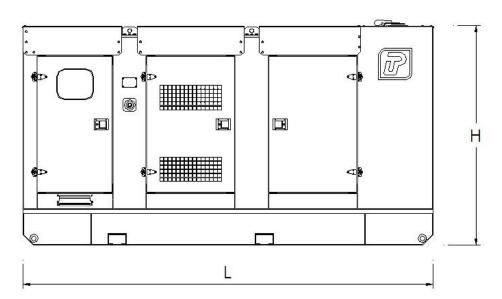
Ormani				
Model PPE1500B				
Prime Rating (kw)	1100			
Standby Rating (kw)	1200			
Rate voltage(V)	400			
Rate current(A)	1985			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	4012-46TWG3A			
Gross Engine output-Prime (kw)	1149			
Gross Engine output-Standby (kw)	1263			
Bore * stroke (mm)	160*190			
Cylinders and structure	12 V-type			
Displacement(Liter)	45.84			
Compression Ratio	13:1			
Intake way	Supercharge / Air to air intercooled			
Max intake resistance (KPa)	2.5			
Air intake (m3/h)	6480			
Max exhaust back pressure (KPa)	3			
Exhaust gas flow (m3/h)	10920			
Exhaust temp (°C)	470			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	1680			
Coolant capacity (L)	201			
Highest water temperature(℃)	98			
Minimum air opening to room (m2)	8.0/7.2			
Thermostat range (℃)	71-85			
Max oil temperature (℃)	· · · · · · · · · · · · · · · · · · ·			
Lubrication system oil capacity (L)	177			
Rate load fuel consumption(L/H)	281			
Standard Governor/Class	Electronic			
Alternator				
Rated Voltage(V)	400/230			
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 or DEEPSEA			

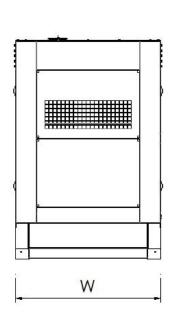
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	5400*2165*2484	12118	-
Silent Type	12192*2438*2896	18918	2000

Contact Us

Powertec Generator System Co., Ltd

Add: Danshui Yanna Industry Zone, Huiyang, Huizhou, Guangdong, China

Tel: +86 752-3911119 / 3911118

Fax: +86 752-3911110 **Web:** www.powertec.com.cn

Email: powertec@powertec.com.cn