POWERTEC
Powertec Generator System Inc.

Perkins

PPE550B

Prime Power:400KW/500KVA Standby Power: 440KW/550KVA Voltage: 400V

Powered by Perkins 2506C-E15TAG2 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 ≤±1%
- The transient frequency deviation ≤+10% ≤-7%
- 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℃
  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

Standard Configuration

- Perkins Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40℃ standard ambient temperature
  （50℃ Optional）
- 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
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.

Diesel Engine

- Model：2506C-E15TAG2
- The 2500 Series engine has been developed using the latest engineering techniques and builds on the strengths of the already very successful 2000 Series family and addresses today's uncompromising demands within the power generation industry. Developed from a proven heavy-duty industrial base, these products offer superior performance and reliability;

- The 2506C-E15TAG2 is a turbocharged and air-to-air charge-cooled, 6 cylinder diesel engine. Its premium features provide economic and durable standby duty, exceptional power-to-weight ratio resulting in exceptional fuel consumption and low gaseous emissions and advanced overall performance and reliability making this the prime choice for today's power generation industry;
- Mechanically operated unit fuel injectors with advanced electronic control, combined with carefully matched turbocharging, give excellent fuel atomisation which leads to exceptional low fuel consumption;
- Developed and tested using the latest engineering techniques and finite element analysis for high reliability;
- Low oil usage and low wear rates;
- High compression ratio ensures 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.

Standard Meters

- 3 phases voltage: U_a, U_b, U_c
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature ℃ display
- Oil pressure OP
- Engine speed
- 3 phases current: L_a, L_b, L_c
- Active power PA
- Power factor PF
- Temperature ℃ 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

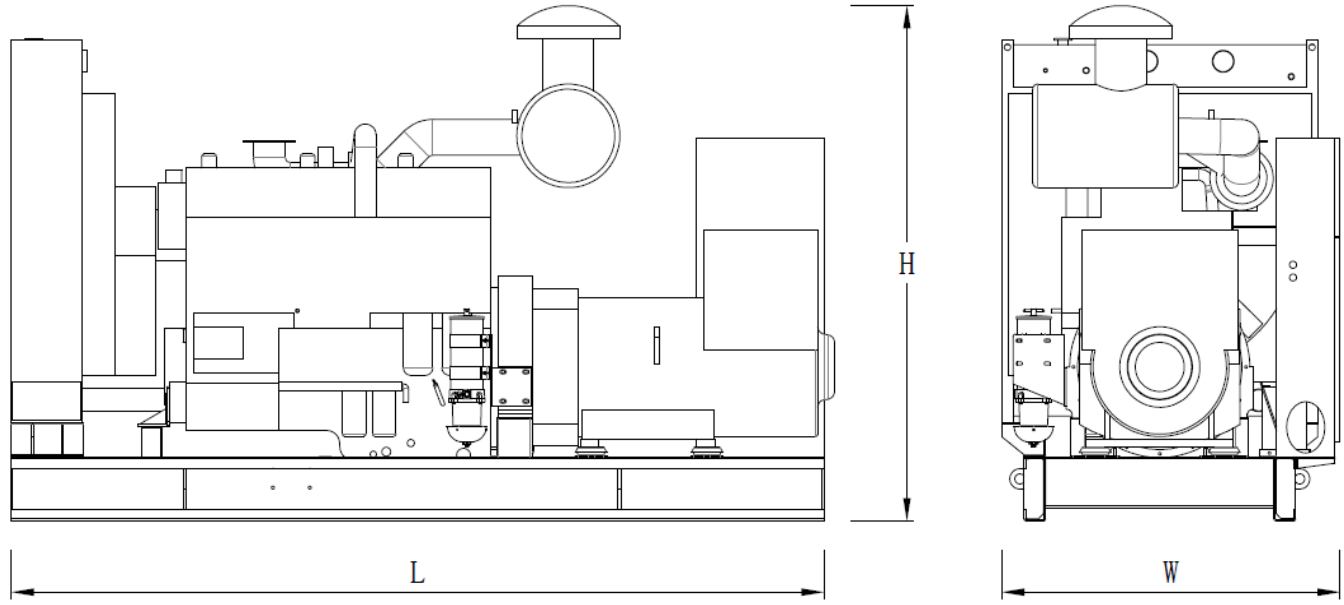
Control System Components

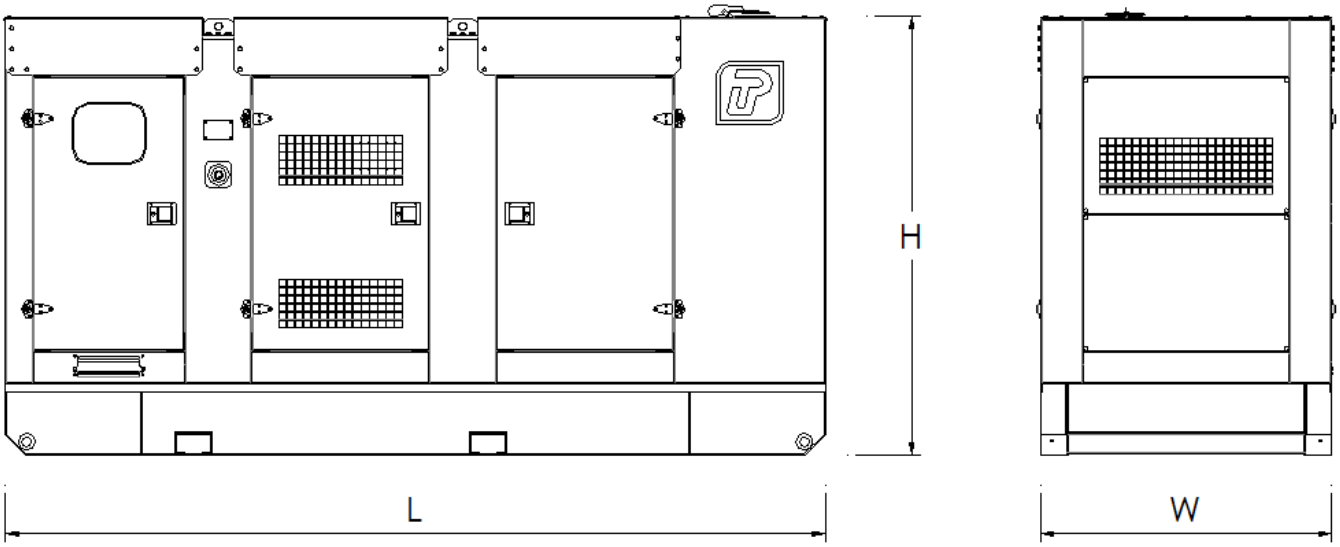
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer

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	PPE550B
Prime Rating (kw)	400
Standby Rating (kw)	440
Rate current(A)	722
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	2506C-E15TAG2
Gross Engine output-Prime (kw)	435
Gross Engine output-Standby (kw)	478
Bore * stroke (mm)	137*171
Cylinders and structure	6 In line
Displacement(Liter)	15.2
Compression Ratio	16:1
Intake way	Turbocharged and air-to-air charge cooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	2149
Max exhaust back pressure (KPa)	6.8
Exhaust gas flow (m3/h)	5640
Exhaust temp (℃)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	660
Coolant capacity (L)	58
Highest water temperature(℃)	104
Minimum air opening to room (m2)	2.8/2.3
Thermostat range (℃)	88-98
Max oil temperature (℃)	114
Lubrication system oil capacity (L)	62
Rate load fuel consumption(L/H)	106
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	3600*1630*2186	4050	-
Silent Type	4700*1700*2450	6000	1100

Contact Us

Powertec Generator System Inc.

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