



# **PPE275A**

Prime Power: 200KW/250KVA Standby Power: 220KW/275KVA Voltage: 400V

 $\leq$ 1S(Voltage $\pm$ 3%)

Powered by Perkins 1206A-E70TTAG3 Engine

### **Genset Performance**

- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- ≤3% Frequency drop
- Voltage regulation ≪0.3%
- The steady state frequency ≤0.5%
- The steady state voltage deviation  $\leq \pm 1\%$
- The transient frequency deviation ≤+10% ≤-15%
- **≤+20% ≤-15%** The transient voltage deviation
  - Frequency recovery time **≤**3S
- Voltage recovery time

- 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
- **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

Fuel tank



## **Diesel Engine**

- Model: 1206A-E70TTAG3
- Perkins is pleased to announce the natural expansion of the 1200 Series to include a new addition to the ElectropaK range;
- The whole engine has been built around the demands of our customers and as such offers a great package with a simple integration design;
- Perkins have developed a reputation for designing and building reliable and durable engines suitable for the most demanding applications;
- World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life;
- Series turbocharging with smart wastegate available on all ratings;



- A high power density product that combine dependable power and high efficiency at the same time. Driving lower cost of ownership along with better performance To find more, visit: www.perkins.com/powerdensity;
- Tropical radiator is supplied as standard;
- Fuel consumption optimized prime power and continuous running applications. No additional fluids or additives are required which lowers operating costs;
- Hydraulic tappets, multi-vee belts and 500-hour oil change intervals enable low-cost maintenance;

## 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: 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;.



Gens	et			
Model	PPE275A			
Prime Rating (kw)	200			
Standby Rating (kw)	220			
Rate current(A)	361			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	1206A-E70TTAG3			
Gross Engine output-Prime (kw)	217.2			
Gross Engine output-Standby (kw)	238.3			
Bore * stroke (mm)	105*135			
Cylinders and structure	6 In line			
Displacement(Liter)	7.01			
Compression Ratio	15.8:1			
Intake way	Turbocharged aftercooled			
Max intake resistance (KPa)	8			
Air intake (m3/h)	810			
Max exhaust back pressure (KPa)	25			
Exhaust gas flow (m3/h)	1854			
Exhaust temp (°C)	515.8			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	265			
Coolant capacity (L)	25			
Highest water temperature(°C)	108			
Minimum air opening to room (m2)	2.0/1.8			
Thermostat range (℃)	82-93			
Max oil temperature (℃)	125			
Lubrication system oil capacity (L)	16			
Rate load fuel consumption(L/H)	56.9			
Standard Governor/Class	Electronic speed regulation			
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			
Contro	ller			
Brand	POWERTEC			

# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3000*1100*1590	2300	430
Silent Type	3500*1245*2052	3560	550

## 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