

PPE220A

Prime Power: 160KW/200KVA Standby Power:176KW/220KVA Voltage: 400VAC

Powered by Perkins1206D-E70TTAG1 Engine

Genset Performance

- 230/400VAC, 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 deviatio $\leq +10\% \leq -15\%$
- 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
- 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

Diesel Engine

- Model: Perkins 1206D-E70TTAG1
- 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 °C

1500r/min engine--altitude less than 1000 m, ambient temperature less than 40 °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 satisfy 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.

Standard

- 3 phases voltage: U_a, U_b, U_c
- Frequency $F1$
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature $^{\circ}C$ display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- Active power PA
- Power factor PF
- Temperature $^{\circ}C$ display
- $KPa/Psi/Bar$ display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



Standard Protection

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	PPE220A
Prime Rating (kw)	160
Standby Rating (kw)	176
Rate voltage(V)	400
Rate current(A)	288
Power factor	0.8
Frequency(Hz)	50

Engine

Engine Model	1206D-E70TTAG1
Gross Engine output-Prime (kw)	176.8
Gross Engine output-Standby (kw)	195.2
Bore * stroke (mm)	105*135
Cylinders and structure	6 In line
Displacement(Liter)	7.01
Compression Ratio	15.8:1
Intake way	Supercharge / Air to air intercooled
Max intake resistance (KPa)	8
Air intake (m3/h)	648
Max exhaust back pressure (KPa)	25
Exhaust gas flow (m3/h)	1454
Exhaust temp (°C)	454.3
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)	1.8/1.6
Thermostat range (°C)	82-93
Max oil temperature (°C)	125
Lubrication system oil capacity (L)	16
Rate load fuel consumption(L/H)	45.8
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	H

Controller

Brand	POWERTEC GC6110
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2700*1100*1590	2030	250
Silent Type	3500*1245*2052	3290	550

Contact Us

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