

PPE650B

Prime Power:473KW/591KVA

Standby Power: 520KW/650KVA

Voltage: 400V

Powered by Perkins 2806C-E18TAG1A 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 $\leq 1S(Voltage \pm 3\%)$
- THF (Telephone Harmonic Factor) < 3
- TIF (Telephone Influence Factor) < 50
Comply to Standard NEMA MG1-22.43
- Standard equipped with ambient temperature $40^{\circ}C$
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
- $40^{\circ}C$ standard ambient temperature
($50^{\circ}C$ Optional)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

Diesel Engine

- Model: 2806C-E18TAG1A
- The Perkins 2800 Series is a family of well-proven 6 cylinder 16 and 18 litre inline diesel engines, designed to address today's uncompromising demands within the power generation industry with particular aim at the standby market sector. Developed from a proven heavy-duty industrial base, the engine offers superior performance and reliability;
- The 2806C-E18TAG1A is a turbocharged and air-to-air chargecooled, 6 cylinder diesel engine of 18 litres capacity. Its premium features provide economic and durable operation, low gaseous emissions and advanced overall performance and reliability;
- 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 also 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 $^{\circ}C$ 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 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

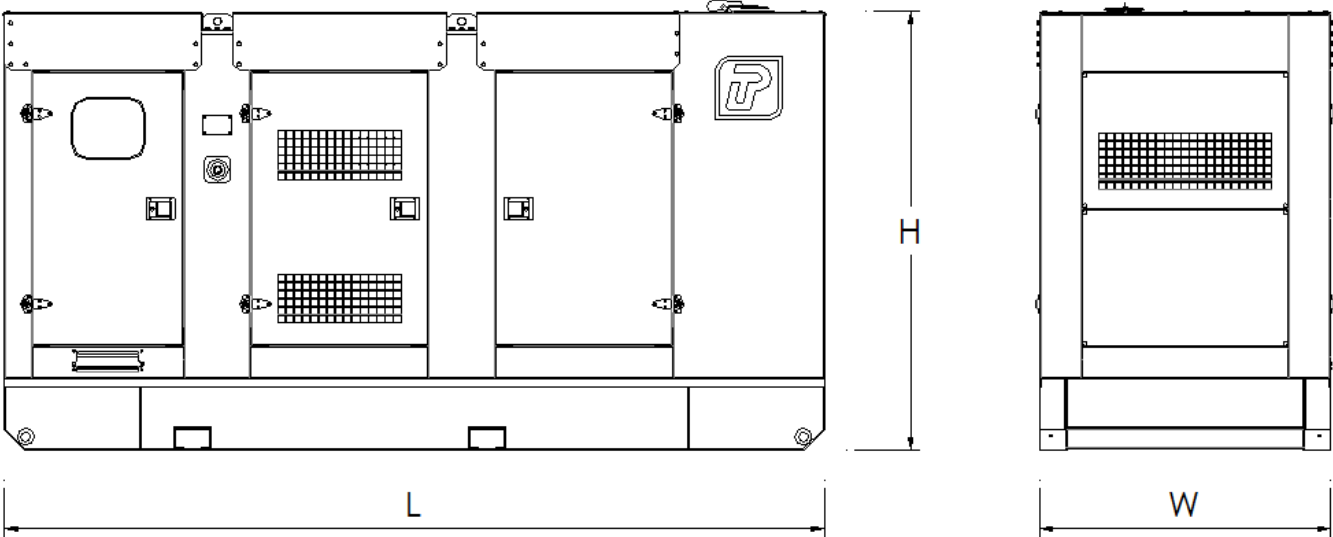
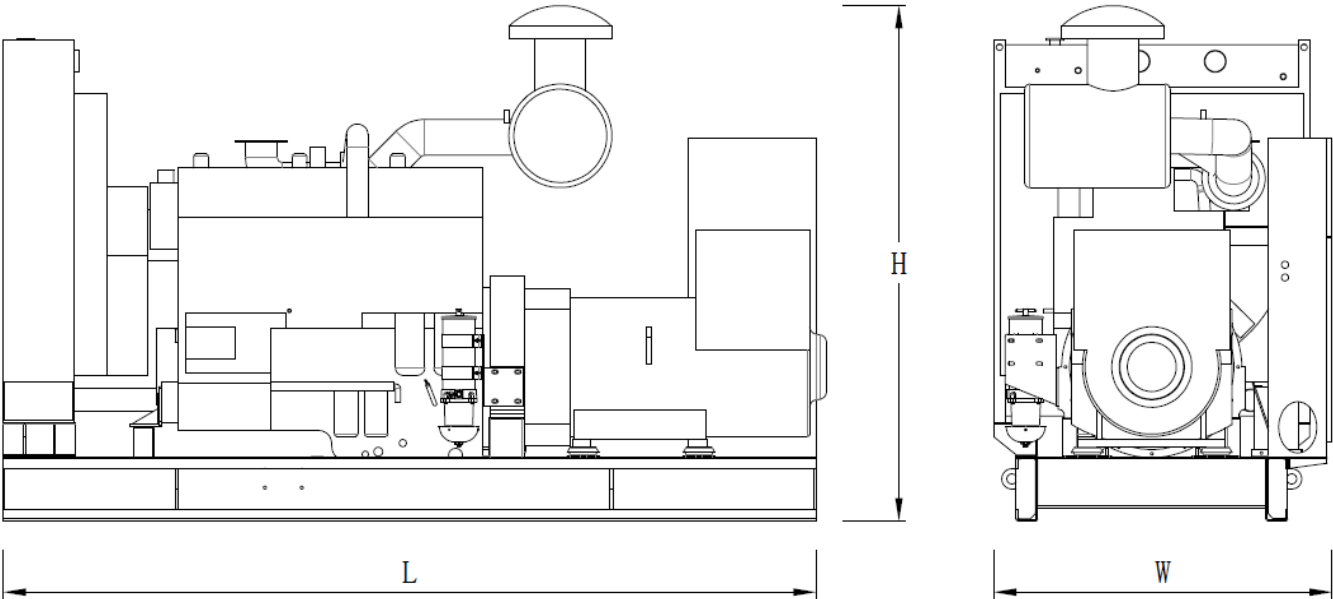
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PPE650B
Prime Rating (kw)	473
Standby Rating (kw)	520
Rate current(A)	853
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	2806C-E18TAG1A
Gross Engine output-Prime (kw)	522
Gross Engine output-Standby (kw)	574
Bore * stroke (mm)	145*183
Cylinders and structure	6 In line
Displacement(Liter)	18.13
Compression Ratio	14.5:1
Intake way	Turbocharged and air-to-air charge cooled
Max intake resistance (KPa)	6.35
Air intake (m3/h)	2400
Max exhaust back pressure (KPa)	6.9
Exhaust gas flow (m3/h)	6600
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	702
Coolant capacity (L)	61
Highest water temperature(°C)	103
Minimum air opening to room (m2)	3.15/2.6
Thermostat range (°C)	88-98
Max oil temperature (°C)	113
Lubrication system oil capacity (L)	62
Rate load fuel consumption(L/H)	129
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	4000*1500*2200	4300	-
Silent Type	4700*1700*2450	6250	1100

Contact Us

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