

## PCC415B

Prime Power: 300KW/375KVA

Standby Power: 330KW/413KVA

Voltage: 400V

Powered by Cummins M15-G5 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  $\leq +10\% \leq -15\%$
- 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

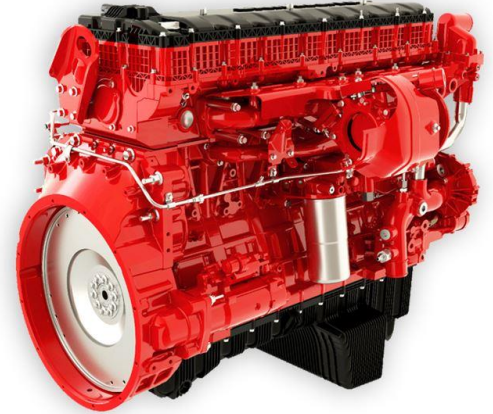
- Cummins Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40°C standard ambient temperature (50°C Optional)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

### 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
- Design and construction of environmental protection engineering for the Genset room

## Diesel Engine

- Model: **M15-G5**
- The cylinder block and cylinder head adopt high-strength integrated design, which reduces the failure rate, is durable and has an excellent reputation; the integral all-steel piston design, the cylinder block and crankshaft made of high-strength materials, and the rigorous component testing and verification make the engine stronger; block integration, compact structure, low failure rate, low vibration, and low noise.
- Fuel system: The new Cummins high-pressure common rail fuel system is used, with ultra-high fuel injection pressure, which can accurately control the injection time and amount, and the thermal efficiency can reach 48%. The three-stage fuel filter ensures a balanced particle dispersion level, protects the main components of the fuel system, and maximizes the engine life.
- Easy maintenance: INSITE?, an engine monitoring and diagnostic software based on Windows operating system, provides users with a friendly interface and great freedom, and supports rapid diagnosis of engine faults. Overall modular design, block integration, compact structure, detachable parts, high reusability. More than 80% of common parts reduce user operation and maintenance costs. The industry's top NanoNet nano fuel filter and oil filter; wide adaptability of engine oil (CH4) and fuel, meeting the 500-hour maintenance cycle.
- The engine may be operated at:  
1500 RPM up to 3000 ft. (1000 m) and 104 ° F (40 °C) without power deration.  
For sustained operation above these conditions, derate by 8.6% per 1,000 ft.(305 m), and N/A% per 18 °F (N/A%% per 10 °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.



## Standard

- 3 phases voltage:  $U_a, U_b, U_c$
- Frequency  $F_1$
- 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	PCC415B
Prime Rating (kw)	300
Standby Rating (kw)	330
Rate voltage(V)	400
Rate current(A)	541
Power factor	0.8
Frequency(Hz)	50

## Engine

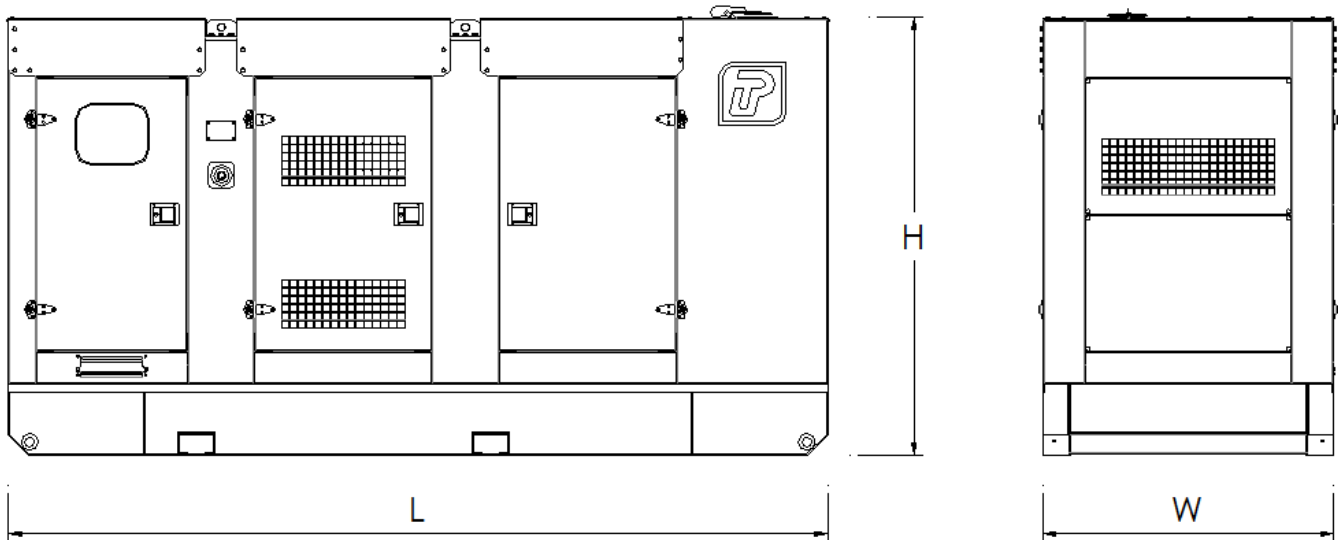
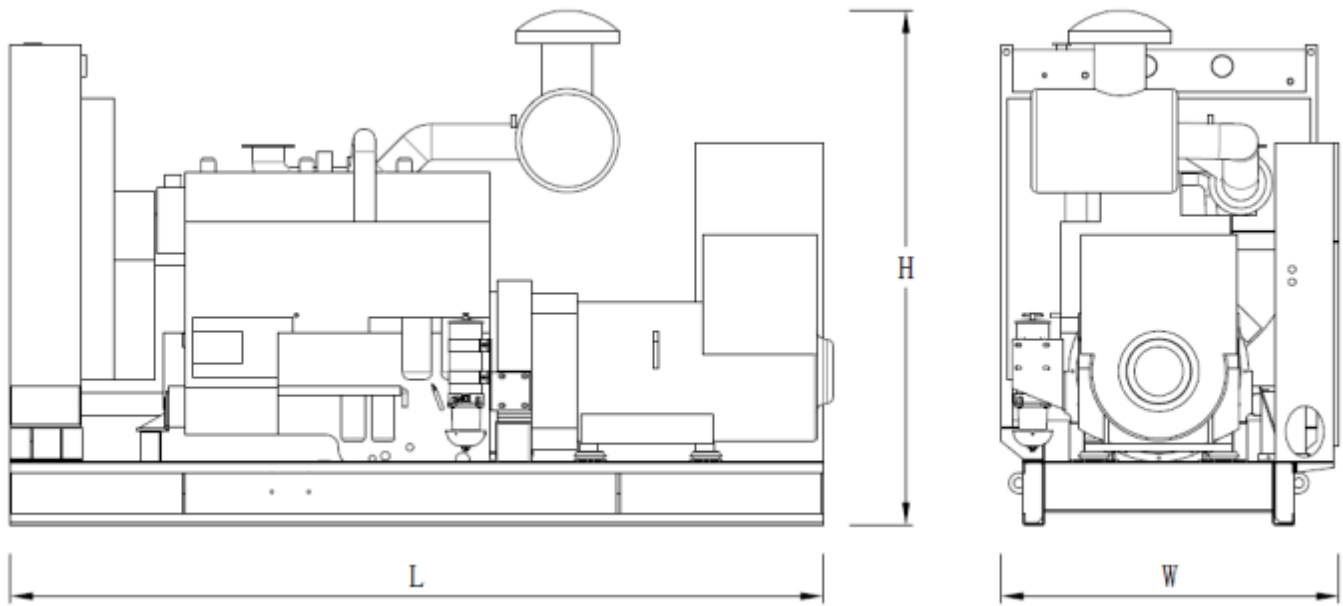
Engine Model	M15-G5
Gross Engine output-Prime (kw)	343
Gross Engine output-Standby (kw)	377
Bore * stroke (mm)	135*169
Cylinders and structure	6 In line
Displacement(Liter)	14.5
Compression Ratio	23:1
Intake way	Turbocharged and Charge Air Cooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	1685
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	3258
Exhaust temp (°C)	343
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	736
Coolant capacity (L)	66
Highest water temperature(°C)	104
Minimum air opening to room (m2)	1.9/1.6
Thermostat range (°C)	80-97.2
Max oil temperature (°C)	135
Lubrication system oil capacity (L)	52
Rate load fuel consumption(L/H)	73
Standard Governor/Class	Common Rail

## 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
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3255*1391*1710	3000	-
Silent Type	3950*1400*2115	4400	750

**Contact Us**

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