



## PCC350B

Prime Power: 275KW/344KVA Standby Power: 300KW/375KVA Voltage: 400V

**Powered by Cummins M15-G4 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  $\leq \pm 1\%$
- The transient frequency deviation ≤+10% ≤-15%
- 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</li>
   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

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## **Equipment Instruction**



## **Diesel Engine**

- Model: M15-G4
- 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 satify tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.
- Sealed with advanced lubricating grease to prolong life of bearing.



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## **Intelligent Control System**



## Standard

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature <sup>°</sup>C display
- Oil pressure OP
- Engine speed

- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature <sup>°</sup>C display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



#### **Standard Protection**

#### **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;

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## **Data sheet of Genset**



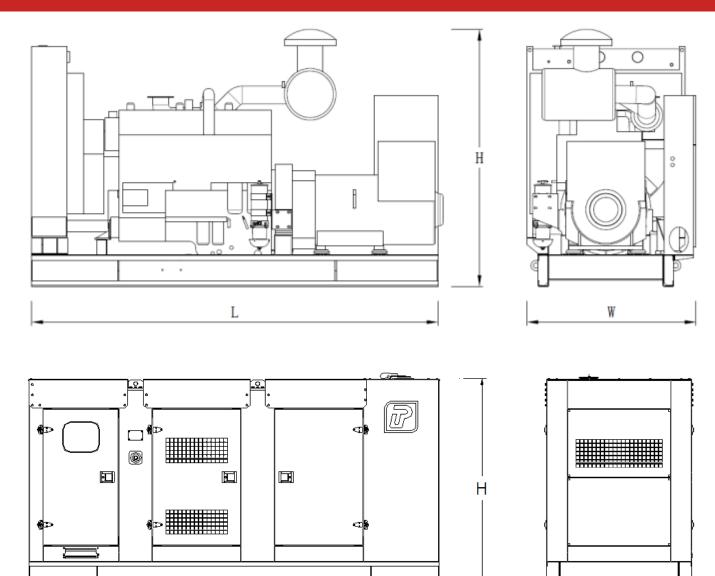
Model	PCC375B			
Prime Rating (kw)	275			
Standby Rating (kw)	300			
	400			
Rate voltage(V)	496			
Rate current(A)				
Power factor	0.8			
Frequency(Hz) 50				
Engine Engine M15-G4				
Engine Model Gross Engine output-Prime (kw)	325			
Gross Engine output-Filme (kw)  Gross Engine output-Standby (kw)	358			
Bore * stroke (mm)				
Cylinders and structure	135*169			
·	6 In line			
Displacement(Liter)  Compression Ratio	14.5			
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Intake way	Turbocharged and Charge Air Cooled			
Max intake resistance (KPa)	6.2			
Air intake (m3/h)	1609			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	3071			
Exhaust temp (°C)	339			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	708			
Coolant capacity (L)	85			
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)	69			
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	Н			
Controller				
Brand	POWERTEC			

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# **Dimension and Weight**



W



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3207*1349*1774	2779	_
Silent Type	3950*1400*2115	4179	750

## **Contact Us**

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