

## PCC825B

**Prime Power: 600KW/750KVA**

**Standby Power: 660KW/825KVA**

**Voltage: 400V**

**Powered by Cummins QSK19-G33 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
- Lubricate-water separator
- Sensor for low coolant level, low fuel/oil level
- City power monitoring & controlling system
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- 20HQ Container Type Soundproof canopy
- Trailer Type
- Environmentally design and construction of Genset room engineering for the Genset room

## Diesel Engine

- **Model: QSK19-G33**
- **Structure:** Replaceable wet cylinder liner, good heat dissipation effect, easy to replace; all model parts have strong versatility, high degree of serialization, and easy maintenance; both the cylinder block and cylinder head adopt built-in pressure lubrication oil passages, with compact structure and easy to troubleshoot Low rate.
- **Intake and exhaust:** The efficient Holset exhaust gas supercharger further improves combustion; the pressure-type pulse exhaust pipe can make full use of exhaust gas energy and improve engine efficiency; intercooling technology ensures better fuel economy and emissions.
- **Cooling system:** forced water cooling by gear centrifugal water pump, large flow water channel design, good cooling effect; spin-on water filter and special DCA additive can effectively prevent rust and cavitation, control coolant acidity and remove impurities.
- **Fuel system:** Using the world's leading high-pressure common rail fuel system and fully electronic control module, ultra-high fuel injection pressure.
- **Lubricating oil system:** pre-lubrication system, Centriguard centrifugal filter and CENTINEL continuous oil renewal system, two-stage combined Fleetguard oil filter, which can obtain a longer maintenance cycle and reduce the engine startup failure rate.
- **Emissions compliance:**  
The improved combustion chamber shape allows the engine to achieve excellent emission levels without the need for post-processing, and has passed China's non-road stage three emission certification.



## 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  $F1$
- 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

- Program alarm and status input
- 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               | PCC825B |
| Prime Rating (kw)   | 600     |
| Standby Rating (kw) | 660     |
| Rate current(A)     | 1083    |
| Power factor        | 0.8     |
| Frequency(Hz)       | 50      |

## Engine

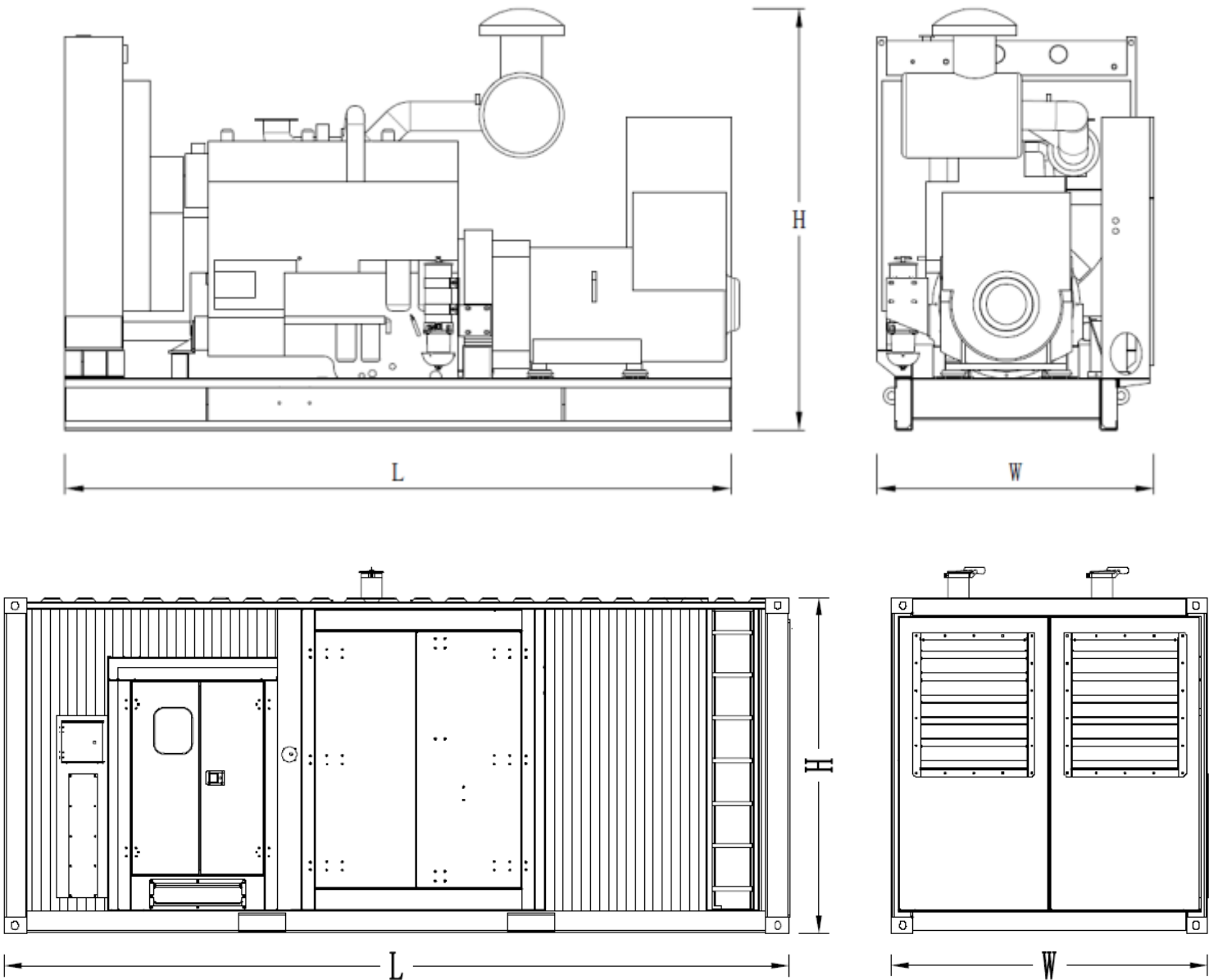
|                                     |                                    |
|-------------------------------------|------------------------------------|
| Engine Model                        | QSK19-G33                          |
| Gross Engine output-Prime (kw)      | 668                                |
| Gross Engine output-Standby (kw)    | 739                                |
| Bore * stroke (mm)                  | 159*159                            |
| Cylinders and structure             | 6 In line                          |
| Displacement(Liter)                 | 18.9                               |
| Compression Ratio                   | 14.2:1                             |
| Intake way                          | Turbocharged and Charge Air Cooled |
| Max intake resistance (KPa)         | 6.2                                |
| Air intake (m3/h)                   | 3496                               |
| Max exhaust back pressure (KPa)     | 10.1                               |
| Exhaust gas flow (m3/h)             | 7524                               |
| Exhaust temp (°C)                   | 391                                |
| Cooling way                         | Water Radiator & Fan               |
| Fan exhaust flow (m3/min)           | 1055                               |
| Coolant capacity (L)                | 130                                |
| Highest water temperature(°C)       | 104                                |
| Minimum air opening to room (m2)    | 5.4/4.5                            |
| Thermostat range (°C)               | 83-95                              |
| Max oil temperature (°C)            | 121                                |
| Lubrication system oil capacity (L) | 83                                 |
| Rate load fuel consumption(L/H)     | 158.9                              |
| Standard Governor/Class             | Programmed Fuel Injection          |
| Emission                            | China Tier 3                       |

## 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%                     |
| Protection class       | IP21-23                 |
| Insulation class       | H                       |

## Controller

|       |          |
|-------|----------|
| Brand | POWERTEC |
|-------|----------|



| Type        | Dimension (mm) (L*W*H) | Weight (kg) | Fuel Tank Capacity (L) |
|-------------|------------------------|-------------|------------------------|
| Open Type   | 3975*1893*2379         | 4800        | —                      |
| Silent Type | 6058*2438*2896         | 9000        | 1500                   |

Contact Us

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