

PCC825B

Prime Power: 600KW/750KVA

Standby Power: 660KW/825KVA

Voltage: 400V

Powered by Cummins QSK38-G8 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
- Trailer
- 20GP or 40HQ container type canopy
- Design and construction of environmental protection engineering for the Genset room

Diesel Engine

- **Model: QSK38-G8**
- **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.。
- **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.。
- **The engine may be operated at :**
1500 RPM up to 7500 ft. (2300 m) and 104 ° F (40 °C) without power deration.
For sustained operation above these conditions, derate by 8.4% per 1,000 ft.(305 m), and 25.8% per 18 ° F (25.8% 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 2.5
- 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 °C display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- Active power PA
- Power factor PF
- Temperature °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	PCC825B
Prime Rating (kw)	600
Standby Rating (kw)	660
Rate voltage(V)	400
Rate current(A)	1083
Power factor	0.8
Frequency(Hz)	50

Engine

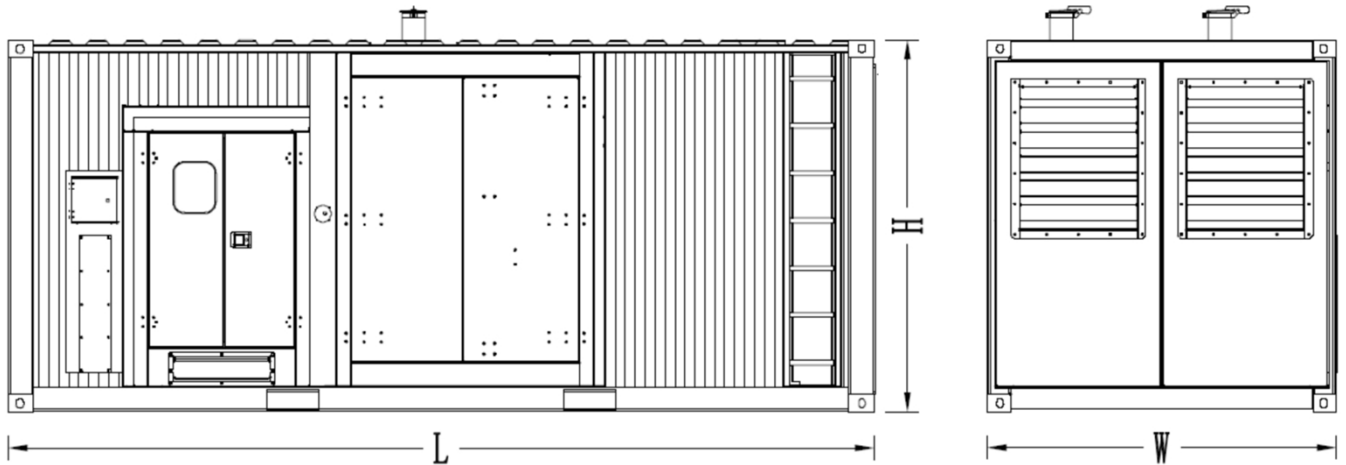
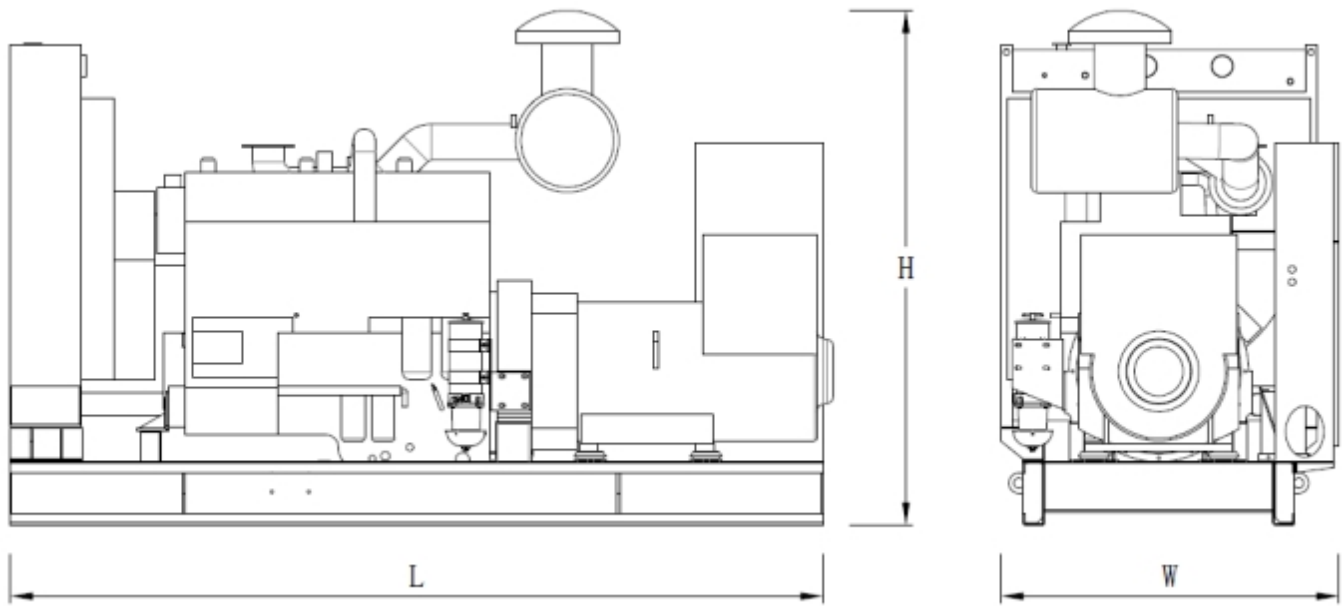
Engine Model	QSK38-G8
Gross Engine output-Prime (kw)	657
Gross Engine output-Standby (kw)	730
Bore * stroke (mm)	159*159
Cylinders and structure	12 Cylinder ; Vee
Displacement(Liter)	37.7
Compression Ratio	15.0:1
Intake way	Turbocharged and Low Temperature Aftercooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	3985
Max exhaust back pressure (KPa)	7
Exhaust gas flow (m3/h)	9291
Exhaust temp (°C)	440
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1140
Coolant capacity (L)	231.8
Highest water temperature(°C)	96
Minimum air opening to room (m2)	5.2/4.4
Thermostat range (°C)	82-94
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	170.3
Rate load fuel consumption(L/H)	168
Standard Governor/Class	CELECT
Emission Certification	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%
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	4870*2435*2259	7100	/
Silent Type	/	/	/

Contact Us

Powertec Generator System Inc.

Add: Danshui Yanna Industry Zone, Huiyang, Huizhou, Guangdong, China
Tel: +86 752-3911119 / 3911118
Fax: +86 752-3911110
Web: www.powertec.com.cn
Email: powertec@powertec.com.cn