



## PCC875B

Prime Power: 650KW/813KVA Standby Power: 700KW/875KVA Voltage: 400V

Powered by Cummins KTA38-G2E 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</p>

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)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

## **Optional Items**

- Starting batteries
- Fuel tank
- Circuit Breaker
- 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

1 / 5 PGS: PCC875B 12/2023

# **Equipment Instruction**



## **Diesel Engine**

- Model: KTA38-G2E
- Construction: replaceable wet type cylinder block has excellent radiation. Mature standard spare parts commonly apply to other engine in this series. Cylinder block and head will have no fault with the designment of internal oil passage and compact structure
- Cooling system: Adopt gear centrifugal water pump to cool down water temperature. With large flow channel designmeng, it has good cooling performance;
- Fuel system: Cummins patented technology (PT) fuel system optimizes combustion and reduces emission;
  - The engine may be operated at : 1800 RPM up to 5000 ft. (1500 m) and 104° F (40  $^{\circ}$ C) without power deration. 1500 RPM up to 5000 ft. (1500 m) and 104  $^{\circ}$  F (40  $^{\circ}$ C) without power deration. For sustained operation above these conditions, derate by 4% per 1,000 ft.(300 m), and 1% per 10  $^{\circ}$  F (2% per 11  $^{\circ}$ 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.



2 / 5 PGS: PCC875B 12/2023

# **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 °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;

3 / 5 PGS: PCC875B 12/2023

# **Data sheet of Genset**

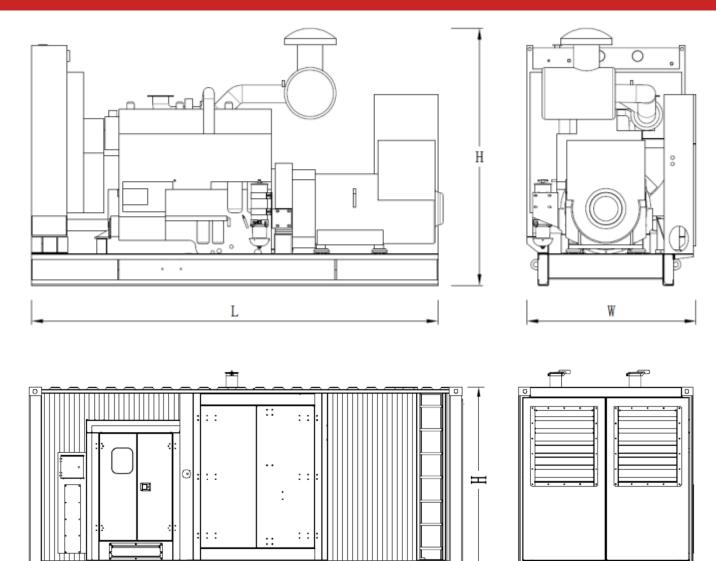


Model	PCC875B			
Prime Rating (kw)	650			
Standby Rating (kw)	700			
Rate voltage(V)	400			
Rate current(A)	1773			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	KTA38-G2E			
Gross Engine output-Prime (kw)	715			
Gross Engine output-Standby (kw)	770			
Bore * stroke (mm)	159*159			
Cylinders and structure	12 Cylinder ; Vee			
Displacement(Liter)	38			
Compression Ratio	14.7:1			
Intake way	Turbocharged/Water-Air intercooler			
Max intake resistance (KPa)	6.23			
Air intake (m3/h)	3487			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	3602			
Exhaust temp (°C)	447			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	1140			
Coolant capacity (L)	303			
Highest water temperature ( $^{\circ}$ C)	96			
Minimum air opening to room (m2)	5.2/4.3			
Thermostat range (℃)	82-93			
Max oil temperature (°C)	121			
Lubrication system oil capacity (L)	135			
Rate load fuel consumption(L/H)	179.6			
Standard Governor/Class	Provide non-road China III emission reports			
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	se 3			
Protection class	IP21-23			
Insulation class	Н			
Controller				
Brand	POWERTEC			

4 / 5 PGS: PCC875B\_12/2023

# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4481*1752*2468	6800	-
Silent Type	6058*2438*2591	10600	1500

# **Contact Us**

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5 / 5 PGS: PCC875B\_12/2023