

PCC635B

Prime Power: 420KW/525KVA

Standby Power: 505KW/632KVA

Voltage: 400V

Powered by Cummins KTAA19-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

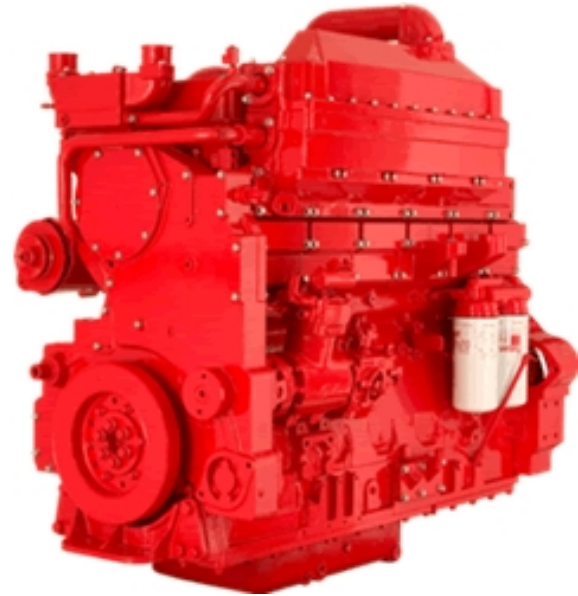
Optional Items

- 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



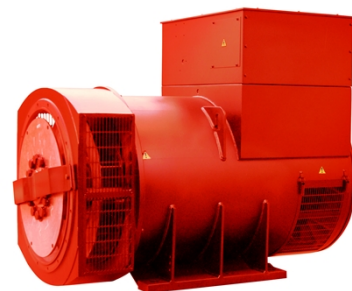
Diesel Engine

- ◆ **Model: Cummins KTAA19-G5**
- ◆ **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:** Cummins patented PT fuel system optimizes ombustion and provides surging power; The STC distributed timing system ensures better combustion under all working conditions; it adopts a low-pressure fuel supply system and is equipped with a one-way fuel circuit, which is safe and reliable.
- ◆ **Lubrication system:** all moving parts are forced lubrication; large-capacity gear pump provides pressure lubricant Lubricate bearings and cool pistons; oil coolers, full-flow filters, and bypass filters maintain good oil condition.
- ◆ The engine may be operated at :
1800 RPM up to 5000 ft. (1500 m) and 104° F (40 °C) without power deration.
1500 RPM up to 5000 ft. (1500 m) and 104 ° F (40 °C) without power deration.
For sustained operation above these conditions, derate by 4% per 1,000 ft.(300 m), and 1% per 10 ° F (2% per 11 °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	PCC635B
Prime Rating (kw)	420
Standby Rating (kw)	505
Rate voltage(V)	400
Rate current(A)	758
Power factor	0.8
Frequency(Hz)	50

Engine

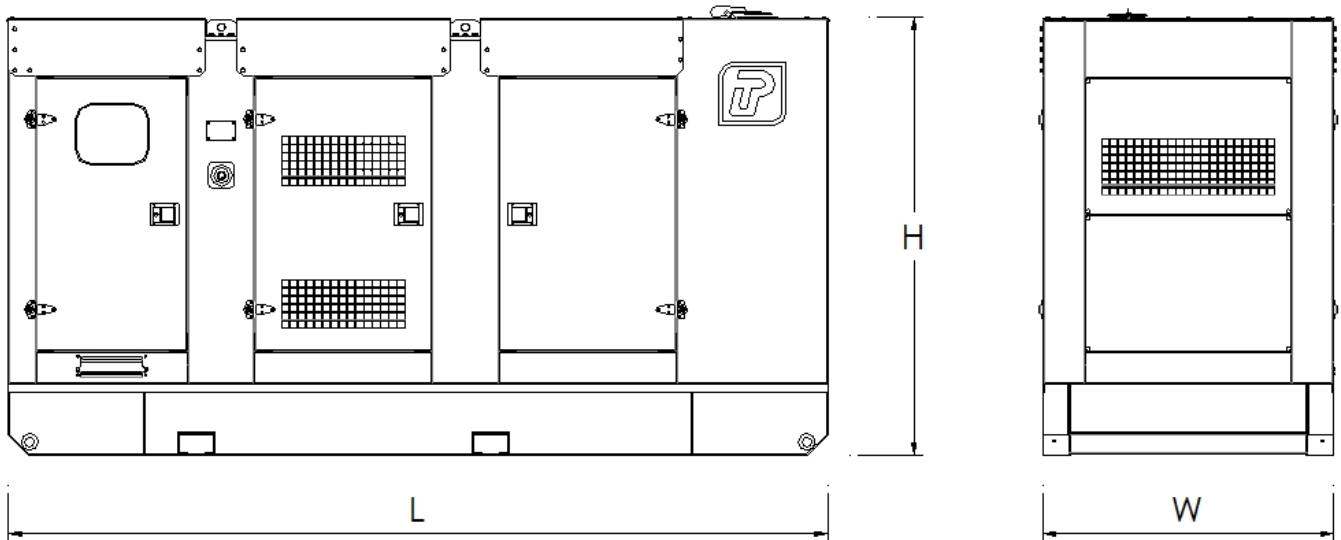
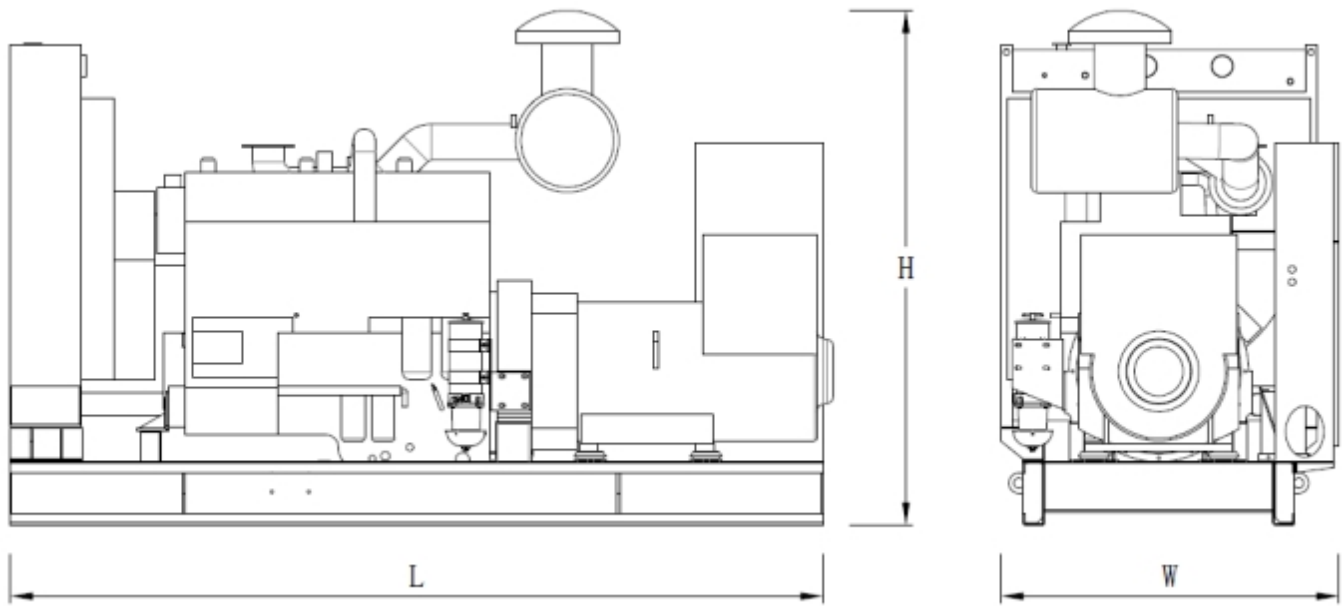
Engine Model	KTAA19-G5
Gross Engine output-Prime (kw)	470
Gross Engine output-Standby (kw)	555
Bore * stroke (mm)	159*159
Cylinders and structure	6 In line
Displacement(Liter)	19
Compression Ratio	13.9:1
Intake way	Turbocharged/Air-to-Air Cooled
Max intake resistance (KPa)	6.23
Air intake (m3/h)	1998.5
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	6390
Exhaust temp (°C)	420
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	960
Coolant capacity (L)	117.7
Highest water temperature(°C)	96
Minimum air opening to room (m2)	3.0/2.5
Thermostat range (°C)	82-93
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	50
Rate load fuel consumption(L/H)	115
Standard Governor/Class	Electronic

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	3318*1550*2096	4000	-
Silent Type	4700*1700*2450	5950	1100

Contact Us

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