

PYC550B

Prime Power: 400KW/500KVA

Standby Power: 440KW/550KVA

Voltage: 400V

Powered by Yuchai YC6T660L D20 Engine

Genset Performance

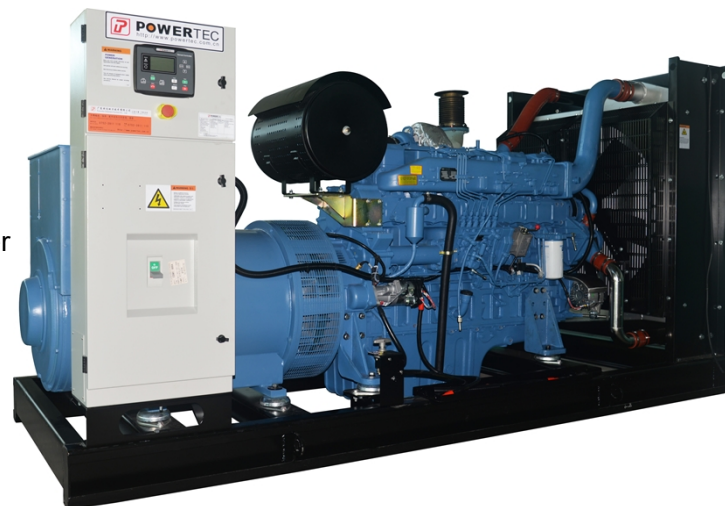
- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop $\leq 3\%$
- Voltage regulation $\leq 0.3\%$
- The steady state frequency $\leq 0.5\%$
- The steady state voltage deviation $\leq \pm 1\%$
- The transient frequency deviation $\leq +10\%$ $\leq -15\%$
- The transient voltage deviation $\leq +20\%$ $\leq -15\%$
- 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
- Standard equipped with ambient temperature 40°C
Connecting radiator
- Built-in vibration isolator with high performance on
shock absorption.
- Product standards: (1) GB/T 2820-2022 / IS08528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4) YD/T 1051-2018

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
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset

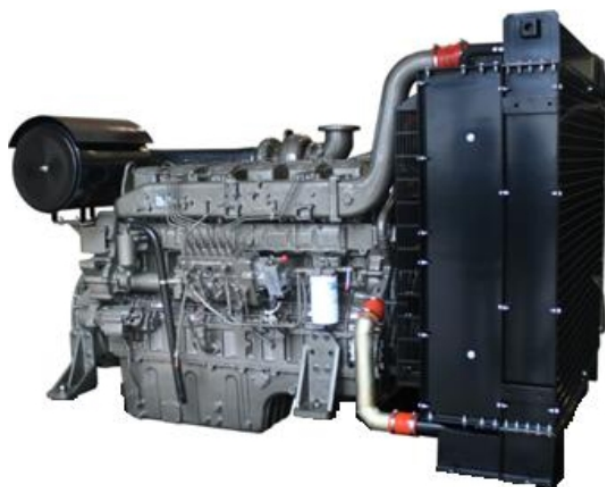
Standard Configuration

- Guangxi Yuchai 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
- Bottom fuel tank
- Manual book and files



Diesel Engine

- Model: YC6T660L-D20
- The YC6T660L-D20 series engine is a product independently developed by Yuchai by referring to the advanced technology for large engines both at home and abroad. With the configuration of four-valve, turbocharged & intercooled and electronic speed governing and after being optimized and verified by the advanced combustion development technology of Yuchai, the engine is featured in energy conservation, high efficiency, high reliability, strong loading capacity and easy maintenance;
- The technologies of four valves and turbocharged & intercooled are adopted for ensuring sufficient air intake, full combustion and low fuel consumption.
- Electronic governing technology is adopted for ensuring stable operation, good transient speed governing performance, and strong loading capability;
- The cylinder body is of mesh reinforcement structure, the cylinder cover is of double-layer water flow design, and the crankshaft connecting rod is made from high strength alloy, making the engine highly reliable.
- Gear-reduction starter is adopted, making the engine start quickly.
- It is characterized by good universality of parts, high serialization degree, structure of one head for one cylinder, and low comprehensive maintenance cost



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
- The stator winding is impregnated and the surface is covered with moisture-proof epoxy insulating paint.
- Rotor and exciter made with high temperature insulating resin, to satisfy tough environment.
- Rotor dynamic balancing complies for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Standard Meters

- 3 phases voltage: U_a, U_b, U_c
- Frequency F_1
- 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 Function

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

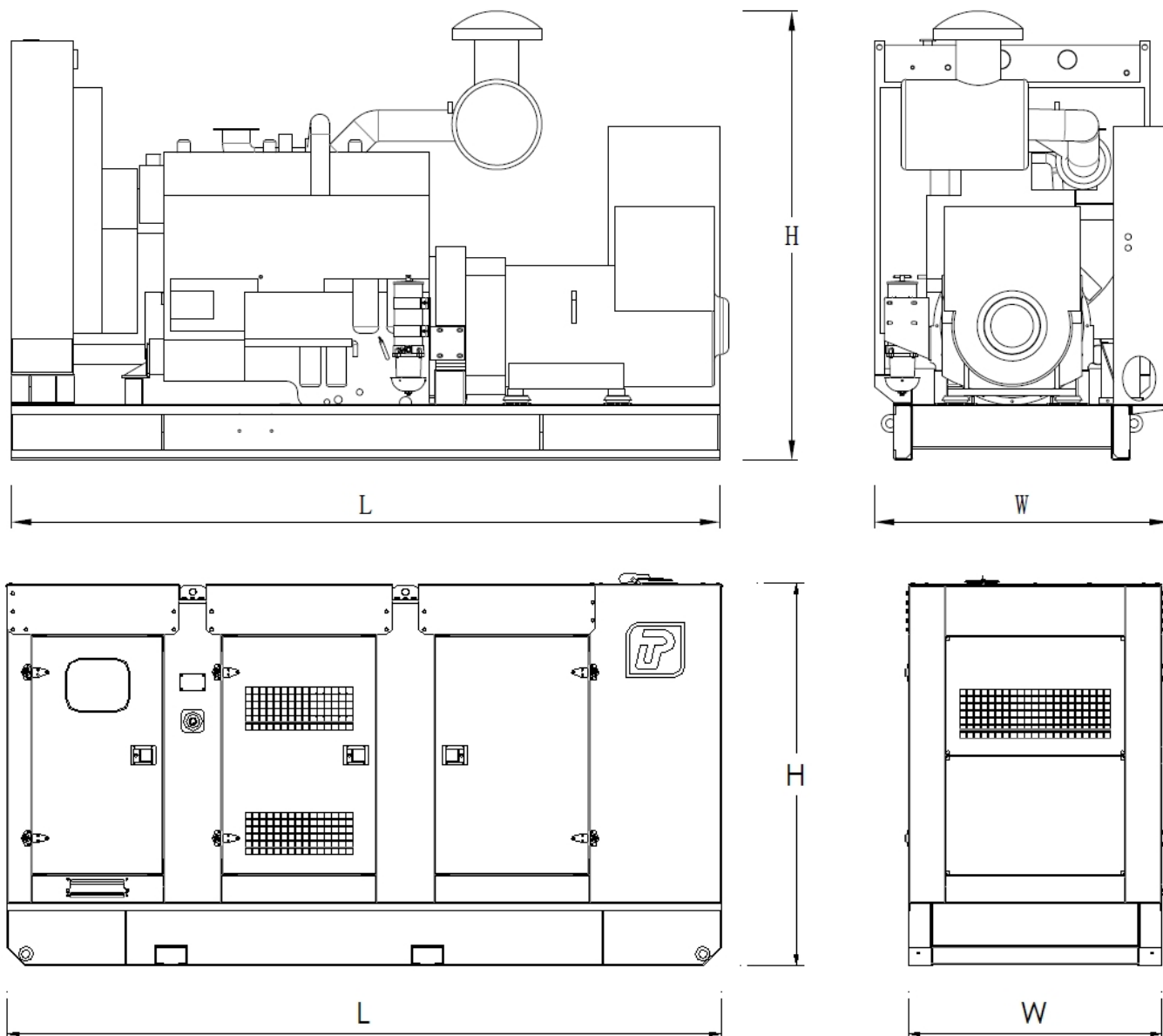
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PYC550B
Prime Rating (kw)	400
Standby Rating (kw)	440
Rate current(A)	722
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC6T660L-D20
Gross Engine output-Prime (kw)	441
Gross Engine output-Standby (kw)	485
Bore * stroke (mm)	145*165
Cylinders and structure	6 In line
Displacement(Liter)	16.35
Compression Ratio	15:1
Intake way	Turbocharged & Intercooled
Max intake resistance (KPa)	5
Air intake (m3/h)	1824
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	4776
Exhaust temp (°C)	580
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	628
Coolant capacity (L)	89
Highest water temperature(°C)	99
Minimum air opening to room (m2)	2.2/1.9
Thermostat range (°C)	75-85
Max oil temperature (°C)	110
Lubrication system oil capacity (L)	45
Rate load fuel consumption(L/H)	110.1
Standard Governor/Class	electronic
Emission	China Tier 2
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	3510*1470*1750	3500	-
Silent Type	4700*1700*2450	5450	1100

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