

PYC40A

Prime Power: 30KW/38KVA

Standby Power: 32KW/40KVA

Voltage: 400V

Powered by Yuchai YC4V55Z-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 / ISO8528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4) YD/T 1051-2018

Optional Items

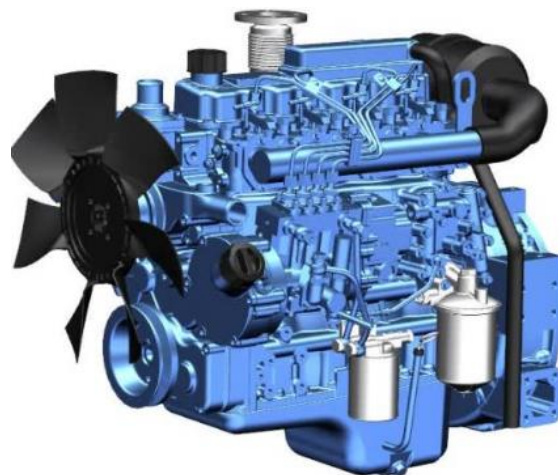
- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.

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: YC4V55Z-D20
- YC4V series engines are key control subsidiaries of Guangxi Yu chai Machinery Group Co., Ltd. The model produced by Guangxi Yu chai Ship Electric Power Co., Ltd. focuses on the research, development, production, sales and service of ship power, power generation power and other products, and the products are widely used in ships and marine engineering equipment, power generation, oil drilling and other fields; The annual production capacity of engines reaches 50,000 sets.
- The engine has a compact structure, small size, and low weight, allowing for maintenance on just one side.;
- Tunnel cylinder liner-less engine block has good rigidity and low engine fuel consumption (engine-fuel ratio is less than 0.1%).;
- Electronically controlled fuel supply system, low swirl ratio port, multi-hole small-aperture injector, strong power, excellent performance and good economy.;
- It supports relayed and remote monitoring, offering convenient operation; the engine filter and diesel filter are located on the same side, which facilitates maintenance.;
- Fuel pumps from internationally renowned brands are used.;
- NVH optimization: low noise and minimal vibration, reaching the advanced level of similar international models.;



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 $F1$
- 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 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

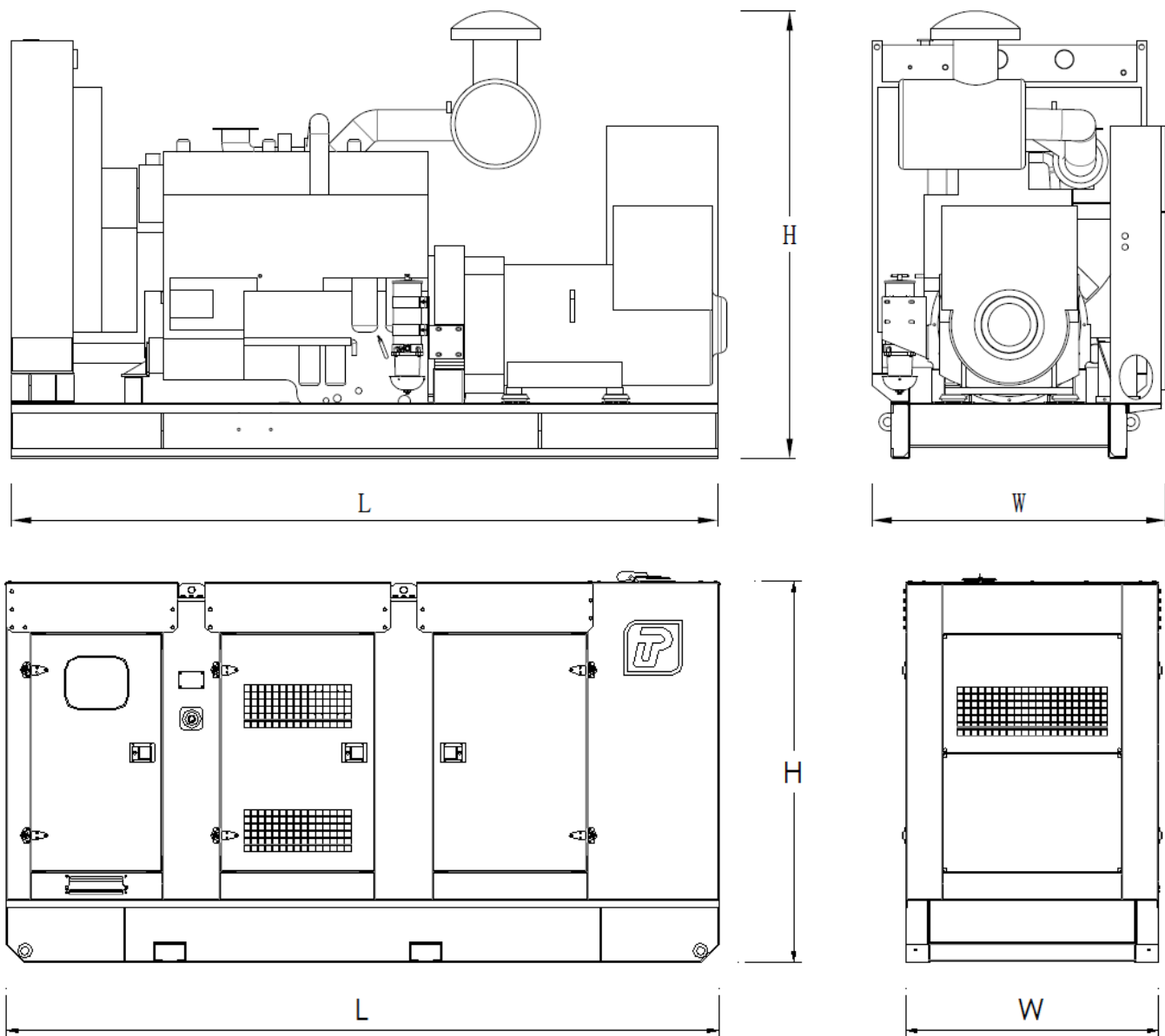
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PYC40A
Prime Rating (kw)	30
Standby Rating (kw)	32
Rate current(A)	54
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC4V55Z-D20
Gross Engine output-Prime (kw)	38
Gross Engine output-Standby (kw)	42
Bore * stroke (mm)	89*100
Cylinders and structure	4 In line
Displacement(Liter)	2.5
Compression Ratio	17.5:1
Intake way	Turbocharging
Max intake resistance (KPa)	5
Air intake (m3/h)	129
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	319
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	80
Coolant capacity (L)	13.5
Highest water temperature(°C)	98
Minimum air opening to room (m2)	0.7/0.6
Thermostat range (°C)	70-80
Max oil temperature (°C)	125
Lubrication system oil capacity (L)	6.5
Rate load fuel consumption(L/H)	10.2
Standard Governor/Class	Electronic/mechanical pump
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	1900*800*1200	750	110
Silent Type	2300*900*1550	1300	160

Contact Us

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