



50Hz POWERED BY PERKINS SERIES





TECHNICAL SPECIFICATIONS

DIESEL GENERATING SET 400/230V-50Hz-3Phase

Model	TY550Z	
Power(ESP)	kVA/kw	550/440
Power(PRP)	kVA/kw	500/400
Starter Voltage	V	24
Rated Current	A	794
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	L/h	113.8
Fuel Tank Capacity	L	Open Type: 607 / Silent Type:
Noise level	dB(A)@7m	

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type		
Silent Type		

STANDARDS:

Genset: GB/T2820-2009,ISO8528 Alternator: SINOCOX, SMF355C

Diesel Engine: YUCHAI, YC6T660-D31

Standby Power: Continues running at variable load for duration of an emergency. No overload is permitted on these ratings.

Prime Power: Continues running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period.











CONFIGURATION:

Standard: Engine, alternator, cooling system, Base frame (excluding fuel tank), shock absorber, air inlet system, control box (including mains floating charge), plastic fan blades (when the engine and water tank do not bring).

Optional: Base frame (including fuel tank), water jacket heater, fuel water separator, fuel heater, fuel level sensor (only supporting underframe tank), switch box (with switch), power switch, the water level sensor, motor anti condensation heater, automatic fueling system (only supporting base frame including fuel tank), battery frame.

Accessories: Silencer, bellow, exhaust silencing system accessories (with the matching engine), regular battery, starting cord assembly, data of gen-set, random tool (with the matching engine.



ENGINE Specification

Manufacturer: YUCHAI	
Model	YC6T660-D31
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6/ L
Displacement	16.35 L
Bore and Stroke	145mm×165 mm
Compression ratio	15: 1
Max. stand by power at rated RPM	485KW
Frequency regulation , steady state	≤0.5%
Governor: type	Electronic unit pump
Aspiration and Cooling	Turbocharged & air- air intercooled
Exhaust System	
Exhaust gas flow	83m3/min
Exhaust temperature	570 ℃
Max back pressure	10kPa
Fuel System	
Fuel consumption 100% (of the Prime Power)	113.8L/h
Fuel consumption 75% (of the Prime Power)	86.5L/h
Fuel consumption 50% (of the Prime Power)	59.7 L/h
Fuel consumption 110% (of the Prime Power)	126.5 L/h
Oil system	
Total oil capacity w/filters	56L
Air intake	
Engine air flow	32m ³min
Coolant System	
Radiator & engine capacity	88 L
Max water temperature	99 ℃



Thermostat

Four-valve structure, turbocharged & intercooled, electronic unit pump technologies are adopted for realizing sufficient air intake, full combustion and low fuel consumption, fast and high-quality loading.

75-85 ℃

It is characterized by good universality of parts, high serialization degree, structure of one head for one cylinder, and low comprehensive maintenance cost.

Support dual energy start.

Note: All data sheets are for reference only and subject to change without prior notice.



ALTERNATOR Specification

Manufacturer: SINOCOX

Туре	SMF355C	
Number of phase power	3	
Factor (Cos Phi)	0.8	
Pole	4	
Bearing	1	
Coupling	Direct	
Exciter type	Brushless SHUNT	
Insulation : class , temperature rise	H/H	
Degree of protection	IP23	
Altitude	≤1000m	
Winding Pitch	2/3	
Winding Leads	12	

FEATURES

- Class H insulation system
- selectable winding,To meet the demand of the bad
- 12 Lead Reconnect, able for different voltage, meet the demand of different countries and regions
- 2/3 pitch windings restrain the content of harmonious
- Different Excitation Systems for different load demand
- Ip23 standard protection,IP44 for option
- Provide single bearing or double bearing

STANDARDS

-IEC60034,NEMA MG1-32,ISO8528,CSA C22.2-100,VDE 0530,GB755

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Control Panel

Model: SGC 420

SINGLE GENSET CONTROLLERS.

DIMENSIONS

OVERALL

233mm x 173mm x 38.5mm

PANEL CUTOUT

219mm x 158mm



KEY FEATURES

- Auto, manual and remote start/stop modes with night restriction option
- ➤ 17 inputs, configurable
- > 5 resistive
- ➤ 2 analogue I/V
- ➤ 1 differential
- 9 digital
- > 7 digital outputs, configurable
- ➤ Modbus over RS-485
- Manually configurable from the controller front buttons or from a PC using DEIF Smart Connect utility software
- Backlit full graphics LCD with power saving feature for extended battery lifetime
- > Supports the battery charging alternator I/O interface
- Supports Auto mode (site battery monitoring, AMF, remote start/stop, auto exercise and cyclic) and manual running modes
- Magnetic Pickup Unit (MPU) interface for engine speed measurement
- Auto exercise mode (2 events) to start and stop the genset for a preconfigured time
- ➤ Monitors 1-phase/3-phase voltage, frequency, load current and power factor for generator

- ➤ Monitors engine safety parameters like lube oil pressure, engine temperature, fuel level and more
- Monitors telecom site battery backup level and shelter temperature to reduce engine running and fuel consumption at telecom tower sites
- Controls start relay, fuel relay, alarm horn and more as digital outputs
- Event log for 100 events with real time clock (RTC) stamps and engine running hours information
- Counters for engine starts, engine trips, engine running hours, genset and Mains kWh, kVAh, kvarh
- Measures mains kW, kVA
- ➤ CANbus for engine communication with support for Stage 5/Tier 4 Final

KEY FUNCTIONS

- LCD display
- > True RMS voltage and current monitoring
- ➤ RS-485 base communication
- Monitoring of engine and alternator parameters
- Fully configurable inputs and outputs for a wide range of functions