WESTIN POWER ®

TC220Z   50Hz   POWERED BY CUMMINS SERIES

TECHNICAL SPECIFICATIONS

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

Model		TC220Z
Power(ESP)	kVA/kw	215/172
Power(PRP)	kVA/kw	200/160
Rated Voltage	V	400
Rated Current	A	310
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	45
Fuel Tank Capacity	Litre	Open Type : 303 / Silent Type: 460
Noise level	dB(A)@7m	Silent Type: ≤76

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	2584mm*1008mm*1667.5mm	1887 Kg
Silent Type	3686mm*1256mm*2068mm	2544 Kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: SINOCOX ，SMF270G

Diesel Engine: CUMMINS , 6CTAA8.3-G2

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： CUMMINS

Model	6CTAA8.3-G2
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6 / L
Displacement	8.3 L
Bore and Stroke	114 mm ×135 mm
Compression ratio	18：1
Max. stand by power at rated RPM	203KW
Frequency regulation , steady state	≤1%
Governor : type	Electrical
Aspiration and Cooling	Turbocharged ＆ Charge Air Cooled

Exhaust System

Exhaust gas flow	547 L/s
Exhaust temperature	580 ℃
Max back pressure	10.1kPa

Fuel System

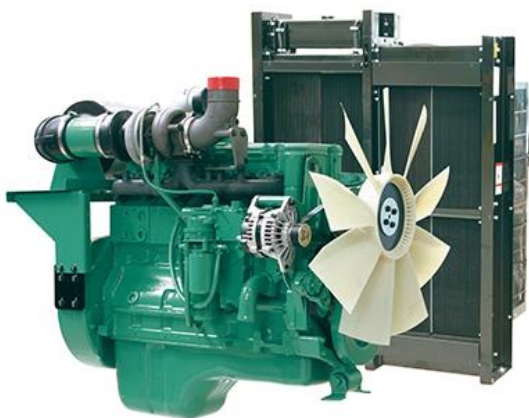|	
Fuel consumption100% (of the Prime Power)	45L / h
Fuel consumption75% (of the Prime Power)	34L / h
Fuel consumption50% (of the Prime Power)	23L / h
Fuel consumption110% (of the Prime Power)	51L / h

Oil system

Total oil capacity w/filters	23.8 L

Air intake

Engine air flow	191L/s

Coolant System

Engine capacity	12.3 L
Max water temperature	110 ℃
Thermostat	83-95 ℃

- Cummins engines with advanced design, reliable performance, durable operation.
- Alloy-steel and connecting steel-lever, high durability
- High combustion efficiency and low fuel consumption, work continuously
- P/T pump injection technology, low cost, completely combustion

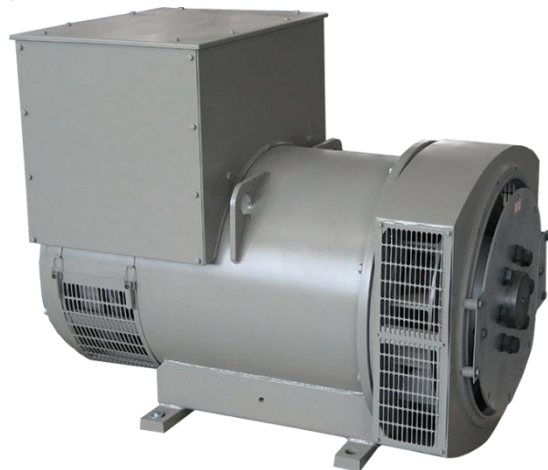Note: All data sheets are for reference only and subject to change without prior notice.

ALTERNATOR Specification

Manufacturer：SINOCOX

Type	SMF270G
Number of phase power	3
Factor (Cos Phi)	0.8
Pole	4
Bearing	1
Coupling	Direct
Exciter type	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 environment

• 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