

TC1110T

50Hz POWERED BY CUMMINS SERIES





TECHNICAL SPECIFICATIONS

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

Model	TC1110T	
Power(ESP)	kVA/kw	1109/887
Power(PRP)	kVA/kw	1008/806
Rated Voltage	V	400
Rated Current	A	1601
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	212
Fuel Tank Capacity	Litre	Open Type: / Silent Type:
Noise level	dB(A)@1m	Silent Type:

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	4726mm*2200mm*2728mm	8011Kg
Silent Type	6058mm *2438mm *2591mm	11189 K g

STANDARDS:

Genset: GB/T2820-2009,ISO8528 Alternator: STAMFORD, S6L1D-E41 Diesel Engine: CUMMINS, QSK38-G1

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	QSK38-G1
Engine speed Rated	1500 RPM
Cylinder /Arrangement	12 / V
Displacement	37.7 L
Bore and Stroke	159 mm×159 mm
Compression ratio	15:1
Max. stand by power at rated RPM	970KW
Frequency regulation , steady state	±0.25%
Governor: type	Electrical
Aspiration and Cooling	Turbocharged & After-cooled
Exhaust System	
Exhaust gas flow	3218 L/s
Exhaust temperature	460 °C
Max back pressure	7kPa
Fuel System	
Fuel consumption100% (of the Prime Power)	212 L/h
Fuel consumption 75% (of the Prime Power)	168 L/h
Fuel consumption 50% (of the Prime Power)	117 L/h
Fuel consumption 110% (of the Prime Power)	232 L/h
Oil system	
Total oil capacity w/filters	170.3 L
Air intake	
Engine air flow	1368L/s
Coolant System	7
Engine capacity	128.7 L
Max water temperature	104 °C



Thermostat

• Cummins engines with advanced design, reliable performance, durable operation.

82-94 ℃

- 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: STAMFOR	D	
Туре	S6L1D-E41	
Number of phase power	3	
Factor (Cos Phi)	0.8	
Pole	4	
Bearing	1	
Coupling	Direct	
Exciter type	PMG	
Insulation : class , temperature rise	H/H	
Degree of protection	IP23	
AVR model	MX321	
Altitude	≤1000m	
Winding Pitch	2/3	
Winding Leads	6/12	

FEATURES

- Utilising wire-wound* (random-wound) technology
- Environment alternators are the industry benchmark for all generator set configurations.
- Brushless excitation with AVR
- IP21, IP22, IP23, IP44 enclosure protection.
- The ideal solution for marine/offshore, UPS, telecoms, basic and advanced protection, construction and other continuous or standby power applications.

STANDARDS

- -GB755, BS5000 part three, VDE0530, NEMA MG1-22, IEC-34, CSA C22-100 and AS1359
- -All alternators are manufactured in ISO 9001 and ISO 14001 environments.

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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