

TB1650T 50Hz POWERED BY PERKINS SERIES



TECHNICAL SPECIFICATIONS

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

Model	TB1650T	
Power(ESP)	kVA/kw	1650/1320
Power(PRP)	kVA/kw	1500/1200
Starter Voltage	v	24
Rated Current	А	2382
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	L/h	324L/h
Fuel Tank Capacity	L	
Noise level	dB(A)@1m	

WEIGHT AND DIMENSIONS

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

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: STAMFORD, S7L1D-C41

Diesel Engine: BAUDOUIN, 12M33G1650/5

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: BAUDOUIN	
Model	12M33G1650/5
Engine speed Rated	1500 RPM
Cylinder /Arrangement	12/V
Displacement	39.2L
Bore and Stroke	150mm×185mm
Compression ratio	15:1
Max. stand by power at rated RPM	1450KW
Frequency regulation , steady state	<u>≤±0.5%</u>
Governor : type	Electronic
Aspiration and Cooling	Turbocharged and Aftercooled
Exhaust System	
Exhaust gas flow	334.9m3/min
Exhaust temperature before turbocharger	≤ 700 °C
Max back pressure	75mBar
Fuel System	
Fuel consumption100% (of the Prime Power)	324L/h
Fuel consumption75% (of the Prime Power)	234.2L/h
Fuel consumption50% (of the Prime Power)	156.1L/h
Fuel consumption110% (of the Prime Power)	354.2L/h
Oil system	
Total oil capacity w/filters	160L
Air intake	
Engine air flow	101.1m ≯ min
Coolant System	
Engine capacity	83 L
Max water temperature	103 °C
Thermostat	76-88 °C



- Core-technology of self-developed ECU which guarantee information safety.
- High reliability, super-long overhaul period for 32000h, superior starting performance
- Professional application & integration capabilities for gen-sets, satisfying high-end users such as data cente.
- Have kinds of domestic product certification

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





ALTERNATOR Specification

Manufacturer: STAMFORD		
Туре	S7L1D-C41	
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	

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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STAMFORD



Excellent Power Solution



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

