

# **TP2500T**

### 50Hz POWERED BY PERKINS SERIES





## TECHNICAL SPECIFICATIONS

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

Model	TP2500T		
Power(ESP)	kVA/kw	2500/2000	
Power(PRP)	kVA/kw	2250/1800	
Rated Voltage	V	400	
Rated Current	A	3609	
Rated rotation speed	r/min	1500	
Power Factor		0.8	
<b>Fuel Consumption</b>	Litre/hour	470	
Fuel Tank Capacity	Litre	N/A	
Noise level	dB(A)@1m	Silent Type: 85 ±2	

### WEIGHT AND DIMENSIONS

GEN-Set	Dimension ( L*W*H )	Weight
Open Type	6010mm*2200mm*2783.5mm	13621 Kg
Silent Type	12000mm*3200mm*3670mm	21201 Kg

### **STANDARDS:**

Genset: GB/T2820—2009,ISO8528 Alternator: STAMFORD, S7L1D-J41 Diesel Engine: PERKINS, 4016-61TRG3

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.

## **Serkins**











### **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: PERKINS				
Model	4016-61TRG3			
Engine speed Rated	1500 RPM			
Cylinder /Arrangement	16 /60° V			
Displacement	61.123L			
Bore and Stroke	160mm ×190mm			
Compression ratio	13: 1			
Max. stand by power at rated RPM	2183KW			
Frequency regulation, steady state	≤0.25%			
Governor : type	Electrical			
<b>Exhaust System</b>				
Exhaust gas flow	525L/min			
Exhaust temperature	560 ℃			
Max back pressure	3КРа			
Fuel System				
Fuel consumption 100% (of the Prime Power)	470L/h			
Fuel consumption75% (of the Prime Power)	344L/h			
Fuel consumption 50% (of the Prime Power)	234L/h			
Fuel consumption 110% (of the Prime Power)	529L/h			
Oil system				
Total oil capacity w/filters	213L			
Air intake				
Engine air flow	175L/min			
Coolant System				
Radiator & engine capacity	260L			
Max water temperature	98℃			
Thermostat	71-85 ℃			



- Perkins engines with fast and reliable cold boost.
- Advanced technology on burning Combustion optimization, low fuel consumption and low noise, emission meets German TALuft standard.
- Reasonable coupling creates best compounding function, provides reliable and high-performance power products.
- Integrated structure of generator with fuel tank and base frame and internal high-efficiency anti-vibration.

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





# **ALTERNATOR Specification**

Manufacturer: STAMFORD		
Туре	S7L1D-J41	
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	MX322	
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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# **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