

TP500T

50Hz POWERED BY PERKINS SERIES


TECHNICAL SPECIFICATIONS

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

Model	TP500T	
Power(ESP)	kVA/kw	500/400
Power(PRP)	kVA/kw	454/360
Rated Voltage	V	400
Rated Current	A	722
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	95
Fuel Tank Capacity	Litre	Open Type :503 / Silent Type:919
Noise level	dB(A)@7m	Silent Type: 79±2

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	3440mm*1150mm*1990mm	3686 Kg
Silent Type	5306mm*1566mm*2585mm	4936 Kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528

Alternator: STAMFORD, S4L1D-G41

Diesel Engine: PERKINS , 2506A-E15TAG1

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: PERKINS

Model	2506A-E15TAG1
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6/ L
Displacement	15.2L
Bore and Stroke	137 mm × 171 mm
Compression ratio	16: 1
Max. stand by power at rated RPM	451KW
Frequency regulation , steady state	≤0.25%
Governor : type	Electrical

Exhaust System

Exhaust gas flow	81L/min
Exhaust temperature	550°C
Max back pressure	6.8kPa

Fuel System

Fuel consumption100% (of the Prime Power)	95L / h
Fuel consumption75% (of the Prime Power)	72L / h
Fuel consumption50% (of the Prime Power)	50L / h
Fuel consumption25% (of the Prime Power)	

Oil system

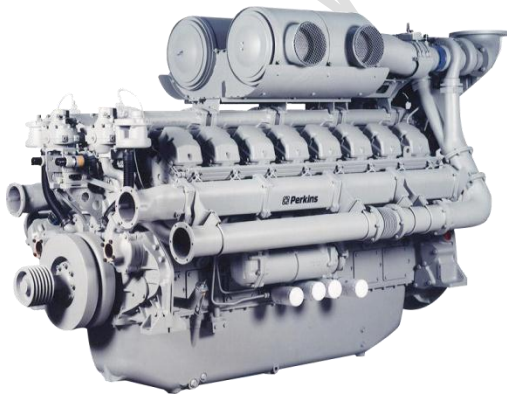
Total oil capacity w/filters	62L
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Air intake

Engine air flow	30.5L/min
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Coolant System

Radiator & engine capacity	58 L
Max water temperature	107°C
Thermostat	88-98°C



- 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

Type	S4L1D-G41
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
AVR model	AS440
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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STAMFORD



Control Panel

AUTO START & AUTO MAINS FAILURE CONTROL MODULES



OVERALL

240mm x 181mm x 42mm
(9.4" x 7.1" x 1.6")

PANEL CUTOUT

220mm x 160mm
(8.7" x 6.3")

WEIGHT

400g (0.4kg)

KEY FEATURES

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Tier 4 CAN engine support
- Integral PLC editor
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- kW & kV Ar protection

- Reverse power (kW & kV Ar) protection
- LED and LCD alarm indication
- Power monitoring (kW h, kV Ar, kVA h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Unbalanced load protection
- Independent Earth Fault trip
- True dual mutual standby with load balancing timer (DSE7310 only)
- USB connectivity
- Backed up real time clock
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software
- User selectable RS232 and RS485 communications
- Configurable Gencomm pages
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to

- help with modem diagnostics
- Idle control for starting & stopping.
- DSENet® expansion compatible

KEY BENEFITS

- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Multiple date and time scheduler
- Set maintenance periods can be configured to maintain optimum engine performance
- Ethernet communications (via DSE860/865 modules), provides advanced remote monitoring at low cost
- Modules can be integrated into building management systems(BMS)
- Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements.