

# TP550T

50Hz POWERED BY PERKINS SERIES



## TECHNICAL SPECIFICATIONS

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

| Model                | TP550T     |                                  |
|----------------------|------------|----------------------------------|
| Power(ESP)           | kVA/kw     | 550/440                          |
| Power(PRP)           | kVA/kw     | 500/400                          |
| Rated Voltage        | V          | 400                              |
| Rated Current        | A          | 794                              |
| Rated rotation speed | r/min      | 1500                             |
| Power Factor         |            | 0.8                              |
| Fuel Consumption     | Litre/hour | 100                              |
| 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 | 3738 Kg |
| Silent Type | 4809mm*1506mm*2590mm | 5990 Kg |

## STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** STAMFORD, HCI544C

**Diesel Engine:** PERKINS , 2506A-E15TAG2

**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-E15TAG2   |
| 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    | 495KW           |
| Frequency regulation , steady state | ≤0.25%          |
| Governor : type                     | Electrical      |

## Exhaust System

|                     |         |
|---------------------|---------|
| Exhaust gas flow    | 98L/min |
| Exhaust temperature | 550°C   |
| Max back pressure   | 6.8kPa  |

## Fuel System

|                                           |          |
|-------------------------------------------|----------|
| Fuel consumption100% (of the Prime Power) | 100L / h |
| Fuel consumption75% (of the Prime Power)  | 76L / h  |
| Fuel consumption50% (of the Prime Power)  | 53L / h  |
| Fuel consumption25% (of the Prime Power)  |          |

## Oil system

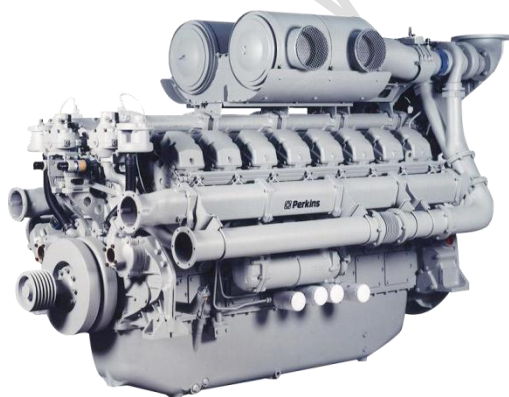
|                              |     |
|------------------------------|-----|
| Total oil capacity w/filters | 62L |
|------------------------------|-----|

## Air intake

|                 |           |
|-----------------|-----------|
| Engine air flow | 36.6L/min |
|-----------------|-----------|

## 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                                  | HCI 544C        |
| 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.