

## TP88T

### 50Hz POWERED BY PERKINS SERIES





### TECHNICAL SPECIFICATIONS

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

Model	TP88T		
Power(ESP)	kVA/kw	88/70	
Power(PRP)	kVA/kw	80/64	
Rated Voltage	V	400	
Rated Current	A	127	
Rated rotation speed	r/min	1500	
Power Factor		0.8	
<b>Fuel Consumption</b>	Litre/hour	18.7	
Fuel Tank Capacity	Litre	Open Type :141 / Silent Type:315	
Noise level	dB(A)@7m	Silent Type: 76±2	

### WEIGHT AND DIMENSIONS

GEN-Set	Dimension ( L*W*H )	Weight
Open Type	1900mm*815mm*1295mm	1043 Kg
Silent Type	3146mm*1106mm*1700mm	1890 Kg

### **STANDARDS:**

Genset: GB/T2820-2009,ISO8528 Alternator: STAMFORD, UCI224G Diesel Engine: PERKINS, 1104A-44TG2

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.

### **Perkins**









### **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	1104A-44TG2		
Engine speed Rated	1500 RPM		
Cylinder /Arrangement	4/ L		
Displacement	4.4L		
Bore and Stroke	105 mm × 127 mm		
Compression ratio	17.25:1		
Max. stand by power at rated RPM	80.7KW		
Frequency regulation , steady state	≤0.75%		
Governor : type	Electrical		
<b>Exhaust System</b>			
Exhaust gas flow	13.3L/min		
Exhaust temperature	555°C		
Max back pressure	10kPa		
Fuel System			
Fuel consumption 100% (of the Prime Power)	18.7L/h		
Fuel consumption 75% (of the Prime Power)	14.0 L/h		
Fuel consumption 50% (of the Prime Power)	9.7L/h		
Fuel consumption25% (of the Prime Power)	5.2 L/h		
Oil system			
Total oil capacity w/filters	8.0 L		
Air intake			
Engine air flow	5.14L/min		
Coolant System			
Radiator & engine capacity	13.0 L		
Max water temperature	110°C		
Thermostat	82-93°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		
Туре	UCI 224G	
Number of phase power	3	
Factor (Cos Phi)	0.8	
Pole	4	
Bearing	1	
Coupling	Direct	
Exciter type	Brushless SHUNT	
Insulation : class , temperature rise	$\mathbf{H}/\mathbf{H}$	
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**

#### AUTOMATIC MAINS FAILURE CONTROLLER

InteliLite® controllers are equipped with a powerful graphic display. Icons, symbols and bar graphs for intuitive operation together with high functionality set new standards in gen-set control.

Special low temperature (IL-AMF 20-LTor IL-AMF 25-LT) version is also available, allowing the display to workup to -300C.



#### **KEY FEATURES**

- Support of engines equipped with Electronic Control Unit (J1939interface)
- Comprehensive diagnostic messages; SPN/FMI codes;
  KWP2000 support
- ➤ Automatic or manual start/stop of thegen-set
- > Push buttons for simple control, lamptest
- ➤ Graphic back-lit LCD display128x64 pixels
- ➤ 6 LED indicators
- Parameters adjustable via keyboardor PC
- Mains measurements (50/60 Hz):U1-U3, Hz
- Generator measurements (50/60 Hz):U1-U3, I1-I3, Hz, kW, kVAr, kWh
- > Selectable protections alarm/shutdown
- ➤ 3 phase Generator protections
  - Over-/under voltage
  - Over-/under frequency
  - Current/voltage asymmetry
  - Overcurrent/overload
- > 3 phase AMF function
  - Over-/under frequency

- Over-/under voltage
- Voltage asymmetry
- Configurable analog inputs
- ➤ Battery voltage, engine speed(pick-up) measurement
- ➤ Configurable programmable binaryinputs and outputs
- ➤ Warm-up and cooling functions
- Generator C.B. and Mains C.B.control with feedback and returntimer
- RS232 interface (AT-LINK CONV cable is necessary for IL-AMF 20)
- ➤ Modem communication support(IL-AMF 25 only)
- ➤ Dimensions 180x120 mm (front panel)
- ➤ Sealed to IP65

### **KEY BENEFITS**

- Less wiring and components
- > Integrated solution
- Less engineering and programming
- Perfect price/performance ratio