

# TC93T

50Hz POWERED BY CUMMINS SERIES



## TECHNICAL SPECIFICATIONS

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

Model	TC93T	
Power(ESP)	kVA/kw	93/75
Power(PRP)	kVA/kw	85/68
Rated Voltage	V	400
Rated Current	A	134
Rated rotation speed	r/min	1500
Power Factor		0.8
Fuel Consumption	Litre/hour	17
Fuel Tank Capacity	Litre	Open Type : 218 / Silent Type: 315
Noise level	dB(A)@7m	Silent Type: 76 ±2

## WEIGHT AND DIMENSIONS

GEN-Set	Dimension ( L*W*H )	Weight
Open Type	2185mm*880mm*1415mm	1184 Kg
Silent Type	3146mm*1056mm*1850mm	1669 Kg

## STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** STAMFORD UCI 224G

**Diesel Engine:** CUMMINS , 6BT5.9-G2

**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: CUMMINS**

Model	6BT5.9-G2
Engine speed Rated	1500 RPM
Cylinder /Arrangement	6 / L
Displacement	5.9 L
Bore and Stroke	102 mm×120 mm
Compression ratio	17.3 : 1
Max. stand by power at rated RPM	92KW
Frequency regulation , steady state	≤1%
Governor : type	Electrical
Aspiration and Cooling	Turbocharged

## Exhaust System

Exhaust gas flow	280 L/s
Exhaust temperature	565 ℃
Max back pressure	10.0kPa

## Fuel System

Fuel consumption100% (of the Prime Power)	22 L / h
Fuel consumption75% (of the Prime Power)	17 L / h
Fuel consumption50% (of the Prime Power)	11 L / h
Fuel consumption25% (of the Prime Power)	7 L / h

## Oil system

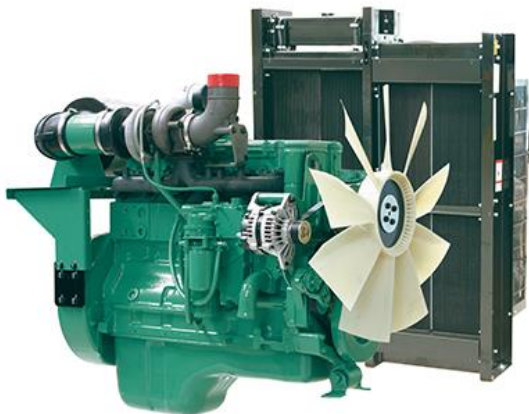
Total oil capacity w/filters	16.4 L
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## Air intake

Engine air flow	108L/s
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## Coolant System

Radiator & engine capacity	29.0 L
Max water temperature	104 ℃
Thermostat	82-95 ℃



- Cummins engines with advanced design, reliable performance, durable operation.
- Alloy-steel and connecting steel-lever, high durability
- High combustion efficiency and low fuel consumption, work continuously
- P/T pump injection technology, low cost, completely combustion

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



# ALTERNATOR Specification

**Manufacturer: STAMFORD**

Type	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	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

**Model: DSE 6020**

## AUTO START & AUTO MAINS FAILURE CONTROL MODULES

### DIMENSIONS

#### OVERALL

**216mm x 158mm x 42mm**  
(8.5" x 6.2" x 1.6")

#### PANEL CUTOUT

**182mm x 137mm**  
(7.2" x 5.4")

#### WEIGHT

**400g (0.4kg)**



#### KEY FEATURES

- Back-lit icon LCD display
- Front panel editing
- LED and LCD alarm indication
- Power Save mode
- CAN and Magnetic Pick-up/Alt. versions available (specify on ordering)
- PC and front panel configuration
- 4 Digital inputs
- 3 Analogue inputs
- 6 Outputs (4 configurable on Magnetic Pick-up/Alt., 6 configurable on CAN version)
- Configurable timers and alarms
- Alternative configuration
- Event Log (5)
- Remote Start input
- 3 Phase generator monitoring

- Current monitoring and protection
- Power monitoring(kW, kV A, kV Ar)
- 3 Phase Mains (Utility) monitoring (DSE6020 only)
- Test button (DSE6020 only)
- Battery Voltage monitoring
- Engine pre-heat
- Hours counter
- Comprehensive shutdown or warning on fault condition

#### KEY BENEFITS

- Automatically transfers between mains (utility) and generator power (DSE6020 only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button

- Multiple engine parameters are monitored simultaneously
- Module can be configured to suit individual applications
- Compatible with a wide range of CAN engines
- Uses DSE Configuration Suite PC software for simplified configuration
- IP65 rating (with optional gasket) offers increased resistance to water ingress
- Licence-free PC software.