

# TC275T

50Hz POWERED BY CUMMINS SERIES



## TECHNICAL SPECIFICATIONS

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

| Model                | TC275T     |                                    |
|----------------------|------------|------------------------------------|
| Power(ESP)           | kVA/kw     | 275/220                            |
| Power(PRP)           | kVA/kw     | 250/200                            |
| Rated Voltage        | V          | 400                                |
| Rated Current        | A          | 396                                |
| Rated rotation speed | r/min      | 1500                               |
| Power Factor         |            | 0.8                                |
| Fuel Consumption     | Litre/hour | 53                                 |
| Fuel Tank Capacity   | Litre      | Open Type : 303 / Silent Type: 460 |
| Noise level          | dB(A)@7m   | Silent Type: 76 ±2                 |

## WEIGHT AND DIMENSIONS

| GEN-Set     | Dimension ( L*W*H )  | Weight  |
|-------------|----------------------|---------|
| Open Type   | 2550mm*980mm*1585mm  | 2022 Kg |
| Silent Type | 3686mm*1256mm*2068mm | 2679 Kg |

## STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** STAMFORD UCDI 274K

**Diesel Engine:** CUMMINS , 6LTA A8.9-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                               | 6LTAA8.9-G2                 |
| Engine speed Rated                  | 1500 RPM                    |
| Cylinder /Arrangement               | 6 / L                       |
| Displacement                        | 8.9 L                       |
| Bore and Stroke                     | 114 mm×145 mm               |
| Compression ratio                   | 16.6 : 1                    |
| Max. stand by power at rated RPM    | 240KW                       |
| Frequency regulation , steady state | ≤1%                         |
| Governor : type                     | Electrical                  |
| Aspiration and Cooling              | Turbocharged & After-cooled |

## Exhaust System

|                     |         |
|---------------------|---------|
| Exhaust gas flow    | 634 L/s |
| Exhaust temperature | 470 ℃   |
| Max back pressure   | 10.0kPa |

## Fuel System

|   |         |
|---|---------|
| Fuel consumption100% (of the Prime Power) | 53L / h |
| Fuel consumption75% (of the Prime Power)  | 39L / h |
| Fuel consumption50% (of the Prime Power)  | 27L / h |
| Fuel consumption25% (of the Prime Power)  | 15L / h |

## Oil system

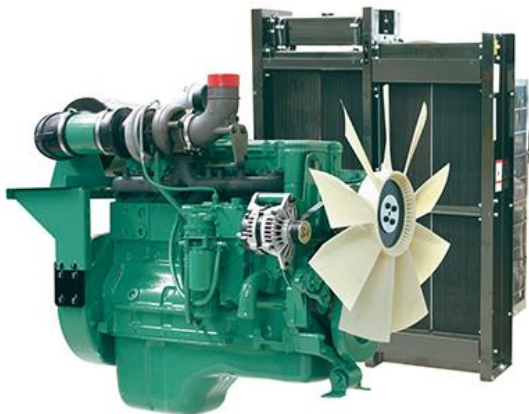
|                              |        |
|------------------------------|--------|
| Total oil capacity w/filters | 27.6 L |
|------------------------------|--------|

## Air intake

|                 |        |
|-----------------|--------|
| Engine air flow | 254L/s |
|-----------------|--------|

## Coolant System

|                            |         |
|----------------------------|---------|
| Radiator & engine capacity | 47.0 L  |
| Max water temperature      | 110 ℃   |
| Thermostat                 | 82-93 ℃ |



- 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                                  | UCDI 274K       |
| 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.