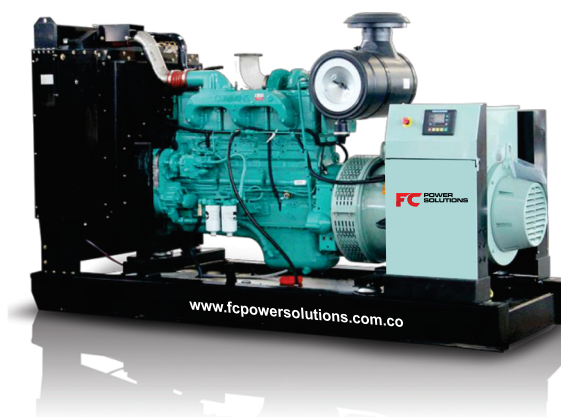


## TC310LS

60Hz POWERED BY CUMMINS SERIES



### TECHNICAL SPECIFICATIONS

#### DIESEL GENERATING SET 40/254V-60Hz-3Phase

| Model                | TC310LS  |                                    |
|----------------------|----------|------------------------------------|
| Power(ESP)           | kVA/kW   | 308/246                            |
| Power(PRP)           | kVA/kW   | 280/224                            |
| Starter Voltage      | V        | 24                                 |
| Rated Current        | A        | 404                                |
| Rated rotation speed | r/min    | 1800                               |
| Power Factor         |          | 0.8                                |
| Fuel Consumption     | L/hour   | 62L / h                            |
| Fuel Tank Capacity   | L        | Open Type : 303 / Silent Type: 491 |
| Noise level          | dB(A)@7m | Silent Type: ≤80                   |

### WEIGHT AND DIMENSIONS

| GEN-Set     | Dimension ( L*W*H )    | Weight |
|-------------|------------------------|--------|
| Open Type   | 2576mm×1012mm×1668.5mm | 1929Kg |
| Silent Type | 3856mm×1256mm×2068mm   | 2879Kg |

### STANDARDS:

**Genset:** GB/T2820—2009,ISO8528

**Alternator:** LEROY SOMER, TAL-A46-D

**Diesel Engine:** CUMMINS , 6LTAA8.9-G3

**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).



Una compañía de servicio a su servicio

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# ENGINE Specification

**Manufacturer: CUMMINS**

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Model                               | 6LTAA8.9-G3                        |
| Engine speed Rated                  | 1800 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    | 282KW                              |
| Frequency regulation , steady state |                                    |
| Governor : type                     | Electrical                         |
| Aspiration and Cooling              | Turbocharged and Charge Air Cooled |

## Exhaust System

|                     |          |
|---------------------|----------|
| Exhaust gas flow    | 838L/sec |
| Exhaust temperature | 520°C    |
| Max back pressure   | 10kpa    |

## Fuel System

|                                           |         |
|-------------------------------------------|---------|
| Fuel consumption100% (of the Prime Power) | 62L / h |
| Fuel consumption75% (of the Prime Power)  | 46L / h |
| Fuel consumption50% (of the Prime Power)  | 31L / h |
| Fuel consumption110% (of the Prime Power) | 70L / h |

## Oil system

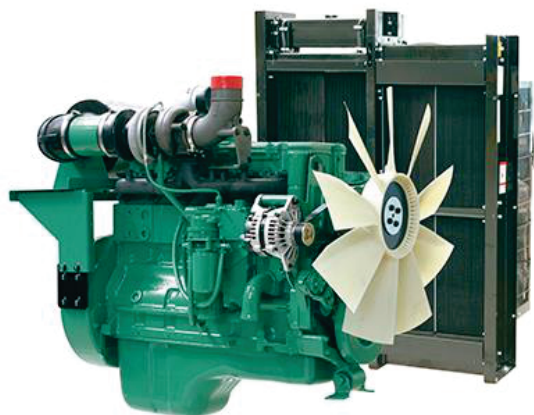
|                              |       |
|------------------------------|-------|
| Total oil capacity w/filters | 27.6L |
|------------------------------|-------|

## Air intake

|                 |          |
|-----------------|----------|
| Engine air flow | 315L/sec |
|-----------------|----------|

## Coolant System

|                            |         |
|----------------------------|---------|
| Radiator & engine capacity | 11.1L   |
| Max water temperature      | 104°C   |
| Thermostat                 | 82-95°C |



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: LEROY SOMER**

|                                       |           |
|---------------------------------------|-----------|
| Type                                  | TAL-A46-D |
| Number of phase power                 | 3         |
| Factor (Cos Phi)                      | 0.8       |
| Pole                                  | 4         |
| Bearing                               | 1         |
| Coupling                              | Direct    |
| Exciter type                          | SHUNT     |
| Insulation : class , temperature rise | H / H     |
| Degree of protection                  | IP23      |
| AVR model                             | R150      |
| Altitude                              | ≤1000m    |
| Winding Pitch                         | 2/3       |
| Winding Leads                         | 12        |

## FEATURES

- Tight control of procedures right from the initial sales offering through to delivery to the customer, including the design process, manufacturing start-up and production.
- A total quality policy based on making continuous progress in improving operational procedures, involving all departments in the company in order to give customer satisfaction as regards delivery times, conformity and cost.
- Indicators used to monitor process performance.
- Corrective actions and advancements with tools such as FMECA, QFD, MAVP,
- MSP/MSQ and Hoshin type improvement workshops on flows, process re-engineering, plus Lean Manufacturing and Lean Office.
- Annual surveys, opinion polls and regular visits to customers in order to ascertain and detect their expectations.

## STANDARDS

IEC 60034, NEMA MG 1.32 - 33, ISO 8528/3, CSA, UL 1446, UL 1004  
on request and depending on voltages, marine.

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



# Control Panel

**Model: DSE 6120**

## AUTO START & AUTO MAINS FAILURE CONTROL MODULES

### DIMENSIONS

#### OVERALL

**215mm x 158mm x 42mm**  
**(8.5" x 6.2" x 1.6")**

#### PANEL CUTOUT

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

#### MAXIMUM PANEL THICKNESS

**8 mm**  
**0.3"**



### KEY FEATURES

Back-lit text 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  
6 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 (10)  
Remote Start input

3 Phase generator monitoring  
Current Monitoring and protection  
3 Phase Mains (Utility) monitoring (DSE6120 only)  
Test button (DSE6120 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 (DSE6120 only)  
Hours counter provides accurate information for monitoring and maintenance periods

User-friendly set-up and button layout  
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