

TC690LS

60Hz POWERED BY CUMMINS SERIES



TECHNICAL SPECIFICATIONS

DIESEL GENERATING SET 208/120V-60Hz-3Phase

Model	TC690LS	
Power(ESP)	kVA/kW	670/536
Power(PRP)	kVA/kW	588/470
Starter Voltage	V	24
Rated Current	A	1860
Rated rotation speed	r/min	1800
Power Factor		0.8
Fuel Consumption	L/hour	133.7L / h
Fuel Tank Capacity	L	
Noise level	dB(A)@1m	Silent Type:

WEIGHT AND DIMENSIONS

GEN-Set	Dimension (L*W*H)	Weight
Open Type	3580mm×1555mm×2150mm	5150kg
Silent Type	5456mm×2156mm×2313mm	6775kg

STANDARDS:

Genset: GB/T2820—2009,ISO8528**Alternator:** LEROY SOMER, TAL-A473-D**Diesel Engine:** CUMMINS , KTA19-G5**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).

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ENGINE Specification

Manufacturer: CUMMINS

Model	KTAA19-G5
Engine speed Rated	1800 RPM
Cylinder /Arrangement	6 / L
Displacement	19L
Bore and Stroke	159mm×159 mm
Compression ratio	13.9: 1
Max. stand by power at rated RPM	605KW
Frequency regulation , steady state	± 0.25%
Governor : type	Electrical
Aspiration and Cooling	Turbocharged and Air-to-air Cooled

Exhaust System

Exhaust gas flow	2171L/s
Exhaust temperature	458°C
Max back pressure	10kPa

Fuel System

Fuel consumption100% (of the Prime Power)	133.7L / h
Fuel consumption75% (of the Prime Power)	100L / h
Fuel consumption50% (of the Prime Power)	71.1L / h
Fuel consumption110% (of the Prime Power)	147L / h

Oil system

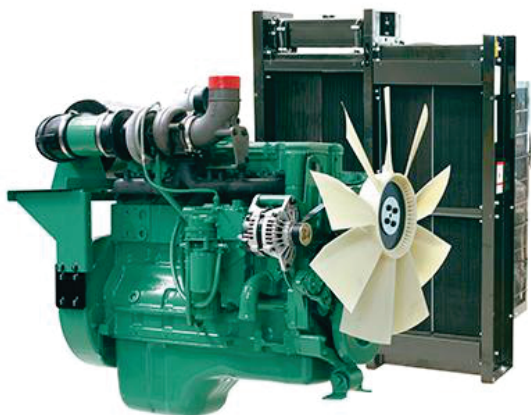
Total oil capacity w/filters	50L
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Air intake

Engine air flow	798L/s
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Coolant System

Radiator & engine capacity	96L
Max water temperature	104°C
Thermostat	82-93°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-A473-D
Number of phase power	3
Factor (Cos Phi)	0.8
Pole	4
Bearing	1
Coupling	Direct
Exciter type	AREP
Insulation : class , temperature rise	H / H
Degree of protection	IP23
AVR model	R180
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.

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Control Panel

Model: DSE 8610 MKII

SYNCHRONISING AUTO START

LOAD SHARE CONTROL MODULE

DIMENSIONS

OVERALL

245mm x 184mm x 51mm
(9.6" x 7.2" x 2.0")

PANEL CUTOUT

220mm x 160mm
(8.7" x 6.3")



KEY FEATURES

Comprehensive synchronising & loadsharing capabilities
Built in governor and AVR control
Base load (kW export) control
Mains (Utility) decoupling protection
4-Line back-lit LCD text display
Multiple Display Languages
LCD alarm indication
Heated display option available
Customisable power-up text and images
DSENet expansion compatibility
Data logging & trending facility
Internal PLC editor
Protections disable feature
Fully configurable via PC using USB, RS232, RS485 & Ethernet Communication
Front panel configuration with PIN protection
Power save mode
3 phase generator sensing and Protection
Generator current and power monitoring (kW, kvar, kVA, pf)
kW and kvar overload alarms
Reverse power alarms
Over current protection
Unbalanced load protection

Independent earth fault protection
Fuel and start outputs configurable when using CAN
8 configurable DC outputs
2 configurable volt-free relay outputs
4 configurable analogue/digital Inputs
Built in sensors to support 0 V to 10 V & 4 mA to 20 mA
12 configurable digital inputs
Configurable 5 stage dummy load and load shedding outputs
CAN, MPU and alternator frequency speed sensing in one variant
Real time clock
Manual and automatic fuel pump Control
Remote SCADA monitoring via various DSE software applications
MODBUS RTU & TCP support with configurable MODBUS pages for integration into building management systems (BMS)
Advanced SMS messaging (additional external modem required)
Start & stop capability via SMS

messaging
3 configurable maintenance alarms
Compatible with a wide range of CAN engines, including tier 4 engine support
Uses DSE Configuration Suite PC Software for simplified configuration
KEY BENEFITS
Compatible in load share systems containing DSE5500, DSE7500, DSE8000 and DSE8600 MKII series.
Contact DSE for further details
132 x 64 pixel ratio display for clarity
Ethernet communication, provides built in advanced remote monitoring.
Increased input and output expansion capability via DSENet®
Licence-free PC software
IP65 rating (with supplied gasket) offers increased resistance to water ingress
Advanced Internal PLC editor allows user configurable functions to meet specific application requirements.



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