

# Diesel Powered Generating Sets C150-D5



## Standard Genset Features

Cummins water cooled Diesel engine,  
Oil and fuel filter fitted, water separator,,  
Lube-oil drain valve fitted  
Electric starter & Charge alternator 12 v D.C.  
Electronic governor  
Normal duty air filter  
Single bearing alternator, class H/H  
Standard voltage 400/230 volts 50 Hz  
Exciter/Voltage reg - Torque Match as std  
PCC2100 without Bargraph as standard  
3 pole C/B  
Bolted steel base frame with A/V mounting,  
Fork lift pockets in baseframe  
Single skin plastic fuel tank  
Tank capacity of min 8 hours operation at  
70% standby load  
Loose 9 dB(A) silencer  
Set mounted starting batteries  
Engine & Alternator Munsell Jade Green  
Chassis, Controller box and radiator black  
Packing under shrunk plastic film  
Operation & Maintenance manual  
Standard set of labels

## Generator Set Performance

### Voltage Regulation

Maintains voltage output to within  $\pm 1.0\%$ .  
At any power factor between 0.8 and 1.0  
At any variations from No load to Full load.  
At any variations from Cold to Hot.  
At speed droop variations up to 4.5%.

### Frequency Regulation

Isochronous under varying loads from no  
load to 100% full load when electronic  
governor is fitted.

### Random Frequency Variation

Will not exceed  $\pm 0.25\%$  of its mean value for  
constant loads – no load to full load.

### Waveform

Total harmonic distortion open circuit voltage  
waveform in the order of 1.8%. Three-phase  
balanced load in the order of 5.0%.

### Telephone Influence Factor (TIF)

TIF better than 50.  
THF to BS 4999 Part 40 better than 2%.

### Alternator Temperature Rise

Class H insulation.

### Radio Interference

In compliance with BS 800 and VDE levels  
G and N.

## Generator Set Options

### Mechanical Options

Compliance - CE Certification (Guarding)

### Fuel options

Fuel Tank deletion  
Steel Fuel Tank replacing Plastic Fuel Tank

### Exhaust Options

Exhaust Silencer - Industrial (9 dB), In-Line  
Exhaust Bellows  
Exhaust Silencer - Residential (25 dB), In-Line  
Installation Kit - Industrial Silencer  
Installation Kit - Residential Silencer

### Warranty

Warranty - 5 Year Extended Standby Appln  
Warranty - 2 Year Extended Prime Appln

### Voltage Connections

254/440V  
240/416V  
230/400V  
220/380V  
127/220V  
115/200V  
110/190V

### Miscellaneous Options

Coolant heater -240V  
Battery Charger 240V,5A  
AUTO START - AMF Module (Loose)  
Packing - Export Box  
4 POLE MCCB

### Compliance Standards

To BS4999/5000 pt 99,  
VDE 0530, UTE5100,  
NEMA MG1-22, CEMA,  
IEC 34, CSA A22.2,  
AS1359, BSS 5514,  
ISO 3046 and ISO 8528

## Engine Specification

6BTA5.9G2  
In-line direct injection  
6-cylinder diesel engine.  
Type  
Water cooled, four cycle, turbocharged  
and after cooled.  
Construction  
Two valves per cylinder, forged steel  
crankshaft and connecting rods, cast iron  
block.  
Starting  
12 volt negative earth. Battery charging  
alternator 37 amp on engine. Cranking  
current 625 amps at 0°C.  
Fuel System  
12 volt fail safe actuator. Spin-on paper  
element fuel filters with Stanadyne fuel  
pump injection system with integral  
mechanical governor. Dual flexible fuel lines  
and connectors. Standard fuel water  
separator.  
Filters  
Air cleaner with dry element and restriction  
indicator. Spin-on full flow lube oil filter.  
Cooling  
50°C radiator as std  
Stone guard. Oil cooler. Drain Tap

## Alternator Specification

Type  
Brushless single bearing, revolving field,  
pole, drip proof, screen protected.  
Class H Insulation.  
IC 01 cooling system.  
Fully interconnected damper winding.  
AC exciter and rotating rectifier unit.  
Epoxy coated stator winding.  
Rotor and exciter impregnated with tropical  
grade insulating oil and acid resisting  
polyester resin. Dynamically balanced rotor  
BS 5625 grade 2.5.  
Sealed for life bearings.  
Layer wound mechanically wedged rotor.  
Exciter  
Triple dipped in moisture, oil and acid  
resisting polyester varnish and coated with  
anti-tracking varnish.

Output windings with 2/3 pitch for improved  
harmonics and paralleling ability.  
Close coupled engine/alternator for perfect  
alignment.

Model name	kVA		kWe	
	ESP	PRP	ESP	PRP
G150 D5	150	136	120	109