



# Gruppo ELETTROGENO



**Power  
Generation**  
C55 DS5

SCHEDA TECNICA

**EDILNOLEGGI.it**

» Generator set data sheet

**Model:** C55 D5 (S3.8)  
**Frequency:** 50  
**Fuel Type:** Diesel

<b>Spec sheet:</b>	SS27-CPGK
<b>Noise data sheet (Open/enclosed):</b>	ND50-CS550
<b>Airflow data sheet:</b>	AF50-550
<b>Derate data sheet (Open/enclosed):</b>	TBD
<b>Transient data sheet:</b>	TD50-550

<b>Fuel consumption</b>	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	55 (44)				50 (40)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
gph	1.0	1.6	2.3	3.1	0.9	1.4	2.1	2.8
L/hr	4.40	7.20	10.60	14.30	4.00	6.50	9.50	12.80

<b>Engine</b>	Standby Rating	Prime Rating
Engine manufacturer	Cummins	
Engine model	S3.8 G6	
Configuration	Inline 4-Cylinder Diesel	
Aspiration	Turbocharged	
Gross engine power output, kWm	53.6	48.7
BMEP at set rated load, kPa	1139	1030
Bore, mm	97	
Stroke, mm	128	
Rated speed, rpm	1500	
Piston speed, m/s	6.4	
Compression ratio	17.5 : 1	
Lube oil capacity, L	9	
Overspeed limit, rpm	1650	
Regenerative power, kW	4.87	
Governor type	Mechanical as std	
Starting voltage	12V Volts DC	

<b>Fuel flow</b>	
Maximum fuel flow, L/hr	19.76
Maximum fuel inlet restriction, mm Hg	3.99
Maximum fuel inlet temperature (°C)	40

Air	Standby Rating	Prime Rating
Combustion air, m <sup>3</sup> /min	3.60	3.50
Maximum air cleaner restriction, kPa	6.2	

Exhaust		
Exhaust gas flow at set rated load, m <sup>3</sup> /min	4.1	4.0
Exhaust gas temperature, °C	546	504
Maximum exhaust back pressure, kPa	6.7	

Standard set-mounted radiator cooling		
Ambient design, °C	55	
Fan load, KW <sub>m</sub>	2 +/- 1	
Coolant capacity (with radiator), L	12.5	
Cooling system air flow, m <sup>3</sup> /sec @ 12.7mmH <sub>2</sub> O	1.92	
Total heat rejection, BTU/min	5143	4525
Maximum cooling air flow static restriction mmH <sub>2</sub> O	12.7	

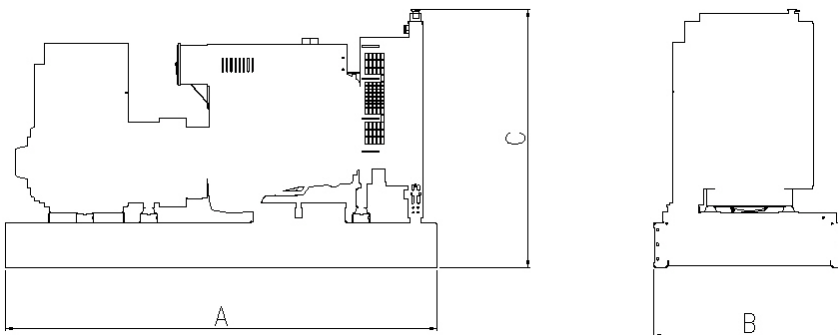
Weights*	Open	Enclosed
Unit dry weight kgs	955	1410
Unit wet weight kgs	11120	1540

\* Weights represent a set with standard features. See outline drawing for weights of other configurations

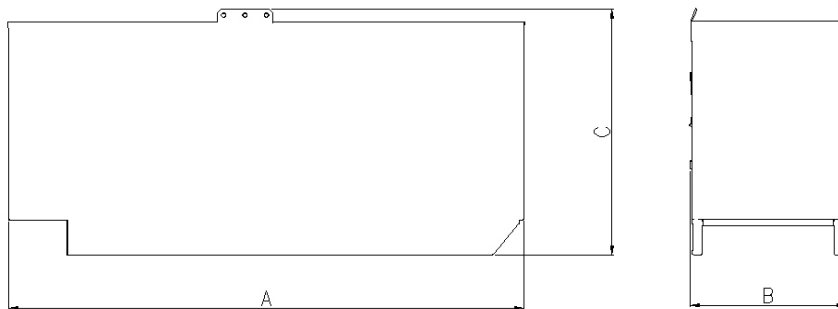
Dimensions	Length	Width	Height
Standard open set dimensions	2115	1044	1516
Enclosed set standard dimensions	2600	1115	1795

### Genset outline

#### Open set



#### Enclosed set



Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

## Alternator data

Connection <sup>1</sup>	Temp rise °C	Duty <sup>2</sup>	Alternator	Voltage
Wye -3 phase	163/125	S/P	UCI22 4D	380-415
Wye -3 phase	150/105	S/P	UCI22 4E	380-415

## Ratings definitions

Emergency Standby Power (ESP)	Limited-Time running Power (LTP):	Prime Power (PRP)	Base Load (Continuous) Power (COP)
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

## Formulas for calculating full load currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{\text{kW} \times \text{Single Phase Factor} \times 1000}{\text{Voltage}}$$