Generator set data sheet

PM POWER
GENERATOR SOLUTIONS

Cummins

Model:	**C55 D5e (B3.3)**
Frequency:	**50 Hz**
Fuel type:	**Diesel**

Spec sheet:	S-6282-EN
Noise data sheet (open):	MSP-3026
Airflow data sheet:	MCP-2022

Fuel consumption

	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**
US gph	1.1	1.9	2.7	3.5	1.0	1.7	2.5	3.2
L/hr	4.0	7.2	10.2	13.2	3.8	6.4	9.4	12.0

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	4BTAA3.3-G14	
Configuration	In-line; 4 cylinder diesel	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	62.6	58
BMEP at set rated load, kPa	1538	1428
Bore, mm	95	
Stroke, mm	115	
Rated speed, rpm	1500	
Piston speed, m/s	5.75	
Compression ratio	19:1	
Lube oil capacity, L	8	
Overspeed limit, rpm	1650	
Regenerative power, kW	N/A	
Governor type	Mechanical as standard	
Starting voltage	12 V DC	

Fuel flow

Maximum fuel flow, L/hr	45
Maximum fuel inlet restriction, mm Hg (clean filter)	101.6
Maximum fuel inlet temperature, °C	70

Air

Air	Standby rating	Prime rating
Combustion air, m³/min	4.92	4.47
Maximum air cleaner restriction, kPa	2.5	

Exhaust

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m³/min	13.02	11.63
Exhaust gas temperature, °C	540	492
Maximum exhaust back pressure, kPa	10	

Standard set-mounted radiator cooling

Ambient design, °C @12.7mm H_2O	55	
Fan load, kW_m	2 +/- 1	
Coolant capacity (with radiator), L	10.7	
Cooling system air flow, m³/sec @ 12.7 mm H_2O	1.611	
Total heat rejection, Btu/min	1877	1734
Maximum cooling air flow static restriction, mm H_2O	25.4	

Weights

Weights	Open	Enclosed
Unit dry weight, kg (Standard skid)	922	1236 / 1230[**]
Unit wet weight, kg (Standard skid)	1010	1414 / 1340[**]
Unit dry weight, kg (optional skid)	1140	1543
Unit wet weight, kg (optional skid)	1228	1631

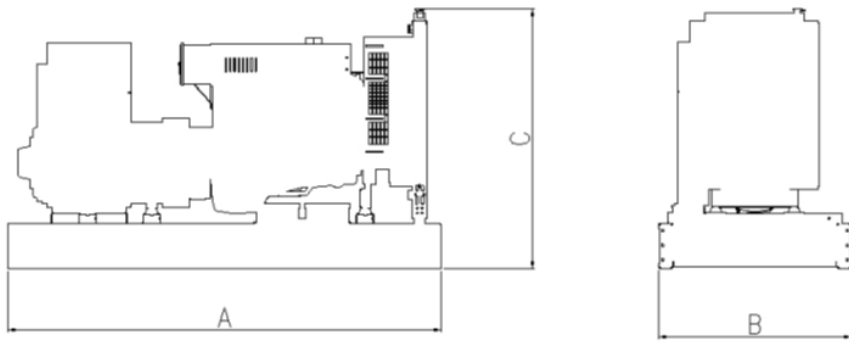[**]Note: Weights and dimensions are for Chassis lifting arrangement option.

Dimensions

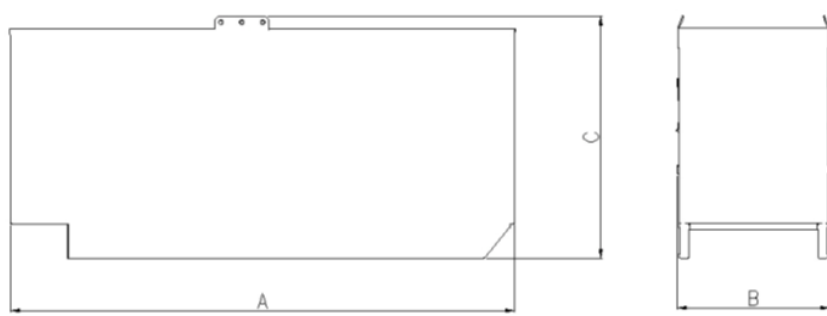| Dimensions	Length	Width	Height
Open set dimensions (standard skid)	2050	967	1510
Enclosed set dimensions (standard skid)	2270 / 2276[**]	975 / 973[**]	1920 / 1793[**]
Open set dimensions (optional skid)	2270	967	1720
Enclosed set dimensions (optional skid)	2270	975	2115

[**]Note: Weights and dimensions are for Chassis lifting arrangement option.

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[1]	Temp rise ⁰C	Duty[2]	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 and DIN 6271.	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 and DIN 6271.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789 and DIN 6271.

Formulas for calculating full load currents:

Three phase output

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

Single phase output

$$\frac{kW \times SinglePhaseFactor \times 1000}{Voltage}$$

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