

Generator set data sheet



Model: C1875D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	S-6722
Sound data sheet:	MSP-4170
Airflow data sheet:	MCP-2249

Fuel consumption	Standby				Prime			
	kW (kVA)				kW (kVA)			
Ratings	1500 (1875)				1360 (1700)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	30.9	54.4	76.9	104.4	28.8	51.3	70.0	95.1
L/hr	117	206	291	395	109	194	265	360

Engine	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	KTA50-G23	
Configuration	Cast iron, 60° V16 cylinder	
Aspiration	Turbocharged and low temperature after-cooled	
Gross engine power output, kWm	1740	1567
BMEP at set rated load, kPa	2770	2493
Bore, mm	159	
Stroke, mm	159	
Rated speed, rpm	1500	
Piston speed, m/s	7.95	
Compression ratio	14.7:1	
Lube oil capacity, L	178	
Overspeed limit, rpm	1725	
Regenerative power, kW	116	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow	
Maximum fuel flow, L/hr	723
Maximum fuel inlet restriction, mm Hg	101.6
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m ³ /min	135	130
Maximum air cleaner restriction, kPa	3.73	

Exhaust

Exhaust gas flow at set rated load, m ³ /min	331	306
Exhaust gas temperature, °C	508	477
Maximum exhaust back pressure, kPa	6.77	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kWm	30	
Coolant capacity (with radiator), L	438	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	27.1	
Total heat rejection, Btu/min	55847	50296
Maximum cooling air flow static restriction mm H ₂ O	12.7	

Optional set-mounted radiator cooling

Ambient design, °C	50	
Fan load, kWm	47.5	
Coolant capacity (with radiator), L	438	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	29	
Total heat rejection, Btu/min	55847	50296
Maximum cooling air flow static restriction mm H ₂ O	12.7	

Weights*

	Open
Unit dry weight kgs	11126
Unit wet weight kgs	11752

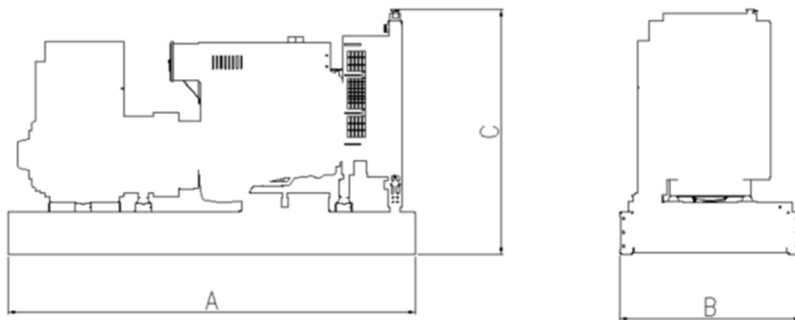
* Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions

	Length	Width	Height
Standard open set dimensions mm	5677	2193	2627

Genset outline

Open set



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

Connection	Temp rise °C	Duty	Alternator (40 Deg Ambient)	Voltage
Wye, 3-phase	150	S	S7L1D-F4	380-440
Wye, 3-phase	125	P	S7L1D-E4	380-440
Wye, 3-phase	105	P	S7L1D-F4	380-440

*Option available only through ETO (Engineering to Order)

Ratings definitions

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) Power (COP):
Applicable for supplying power continuously to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550).	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 3046-1.	Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). This rating is not applicable to all generator set models.

Formulas for calculating full load currents:

Three phase output

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

For more information contact your local Cummins distributor or visit power.cummins.com

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