Generator set data sheet

Model: C1875D5E
Frequency: 50Hz
Fuel type: Diesel
kVA Rating: 1875kVA Standby
1700kVA Prime
Emissions level: U.S.EPA T2/China NRMM III

Spec sheet:	**EA_T_CC_27_EN**
Emission data sheet:	**EDS-3113**
Emission compliance sheet:	**EPA-2081**
Sound data sheet	
Cooling data sheet:	**MCP-2231**
Prototype test summary data sheet	**PTS-756**

Fuel consumption

	Standby				Prime			
	kVA(kW)				kVA(kW)			
Ratings	1875(1500)				1700(1360)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	33.3	55.2	77.1	99.8	32.5	51.0	71.0	91.4
L/h	126	209	292	378	123	193	269	346

Engine

	Standby	Prime
Engine manufacturer	Cummins	
Engine model	QSK50-G15	
Configuration	4-Cycle; 60° Vee; 16-Cylinder	
Aspiration	Turbocharged and Low Temperature Aftercooled	
Fuel system	Cummins XPI YZ	
Gross engine power output, kWm (bhp)	1649(2211)	1530(2052)
BMEP at set rated load, kPa (psi)	2586(375)	2329(338)
Bore, mm (in.)	159(6.26)	
Stroke, mm (in.)	159(6.26)	
Displacement, litre (in^3)	49.8(3039)	
Rated speed, rpm	1500	
Piston speed, m/s (ft/min)	7.95(1565)	
Compression ratio	14.7	
Lube oil capacity, L (US gal)	181(48)	
Overspeed limit, rpm	1725	
Regenerative power,kWm(HP)	115(155)	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr (US gph)	791(209)
Maximum fuel inlet restriction, kPa (in Hg)	26(7.7)
Maximum fuel inlet temperature, ℃ (℉)	70(158)
Maximum Allowable Head on Injector Return Line, kPa (in Hg)	33.9(10)

Air	Standby	Prime
Combustion air, scfm (m³/min)	4224(120)	4162(118)
Maximum air cleaner restriction, kPa (in H2O)	3.7-6.2(15-25)	

Exhaust

Exhaust flow at set rated load, CFM (m³/min)	11177(316)	10916(309)
Exhaust temperature, ℃ (℉)	506(943)	498(928)
Maximum back pressure, kPa (in H2O)	10.1(40.6)	

Radiator cooling

Ambient design, ℃ (℉)	50(122)	
Fan load, kWm (HP)	37(50)	
Coolant capacity (with radiator), L (US gal)	276(73)	
Cooling system air flow, m³/min (scfm)	1278(45127)	
Total heat radiated to room*, MJ/min (Btu/min)	14.31(13560)	
Total heat rejection**, MJ/min (Btu/min)	68.4(65911)	64.5(62271)
Maximum cooling air flow static restriction, in H2O	0.5	

*Total heat radiated to room includes engine radiated heat to ambient and alternator radiated heat to ambient,exclude exhaust radiated heat to ambient

**Total heat rejection includes jacket water circuit, aftercooler circuit and radiated heat to ambient(Engine ,alternator),exclude heat rejection to exhaust

Weights

Unit dry weight, kgs	11217
Unit wet weight, kgs	11617

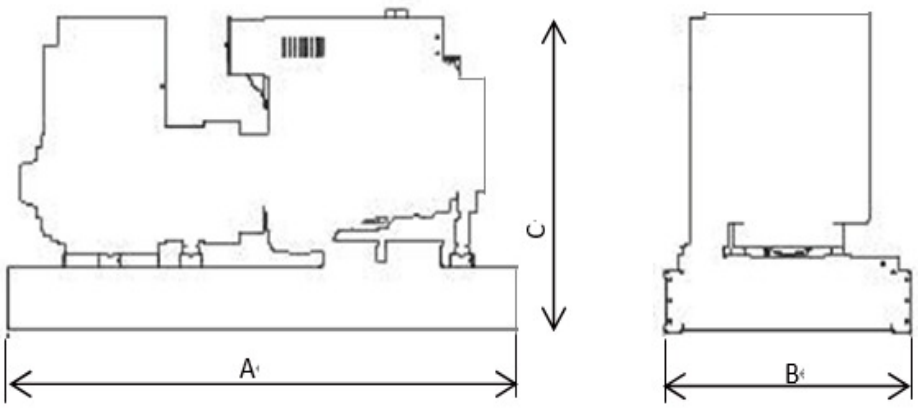
* Weights represent a set with LV standard features. See outline drawing for weights of other configurations.

Dimensions	Length(A)	Width(B)	Height(C)
Standard open set dimensions mm	5864	2248	2521

* Dimensions didn't including isolator. See outline drawing for detail.

Genset outline

Open Genset



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

Alternator data

Connection	Temp rise ºC	Duty*	Winding No.	Alternator	Voltage
Wye, 3-phase	150/125	S/P	312	S7L1D-F41	380-440V
Wye, 3-phase	150/125	S/P	83	S9H1D-A41	10500-11000V

* Standby (S) and Prime (P).

Ratings definitions

Emergency Standby Power (ESP):	Prime Power (PRP):
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 3046-1, obtained and corrected in accordance with ISO 15550.	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 ISO8528,ISO 3046-1 and corrected in accordance with ISO15550.

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

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

For more information contact your local Cummins distributor

Power Generation

EA_S_CC_58_EN(11/23)