Generator set data sheet

Model: C1400 D5
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:	**SS16-CPGK**
Sound data sheet:	**MSP-2040**
Cooling data sheet:	**MCP 2072**

Fuel consumption

	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	1400 (1120)†				1250 (1000)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	22	40	58	77	20	37	53	69
L/hr	83	153	221	293	76	139	199	261

†DCC available at standby power subject to Cummins' site-specific assessment. Please contact your Cummins Distributor.

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	KTA50-G3	
Configuration	Cast iron, 60 ° V16 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kWm	1227	1097
BMEP at set rated load, kPa	1951	1744
Bore, mm	159	
Stroke, mm	159	
Rated speed, rpm	1500	
Piston speed, m/s	7.9	
Compression ratio	13.9:1	
Lube oil capacity, L	152	
Overspeed limit, rpm	1725 ±50	
Regenerative power, kW	116	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	625
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air	Standby rating	Prime rating
Combustion air, m^3/min	104.8	96.3
Maximum air cleaner restriction, kPa	3.7	

Exhaust		
Exhaust gas flow at set rated load, m^3/min	240.7	237.9
Exhaust gas temperature, °C	525	520
Maximum exhaust back pressure, kPa	6.8	

Standard set-mounted radiator cooling		
Ambient design, °C	40	
Fan load, kWm	46	
Coolant capacity (with radiator), L	424	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	27.6	
Total heat rejection, Btu/min	44000	38500
Maximum cooling air flow static restriction mm H_2O	12.7	

Optional set-mounted radiator cooling	
Ambient design, °C	50
Fan load, kWm	46
Coolant capacity (with radiator), L	424
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	27.6
Maximum cooling air flow static restriction mm H_2O	12.7

Optional set-mounted radiator cooling	
Ambient design, °C	55
Fan load, kWm	46
Coolant capacity (with radiator), L	424
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	27.6
Maximum cooling air flow static restriction mm H_2O	12.7

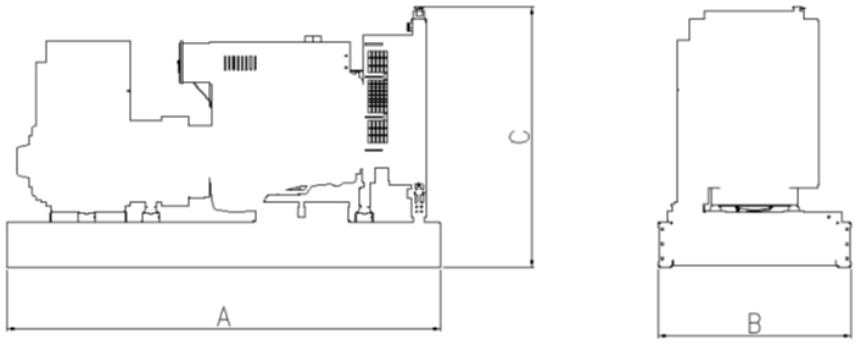
Weights*	Open
Unit dry weight kgs	9913
Unit wet weight kgs	10069

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

Dimensions	Length	Width	Height
Standard open set dimensions mm	5143	2000	2518

Genset outline

Open set



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	Alternator	Voltage
Wye, 3-phase	150/125	S/P	PI734B	380-440 V
Wye, 3-phase	150	S	S7L1D-C4	380 V
Wye, 3-phase	125	P	S6L1D-H4	380 V
Wye, 3-phase	125/105	S/P	S9H1D-A4	6300 V
Wye, 3-phase	125/105	S/P	S9H1D-A4	10.5 kV

**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 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 data shown above represents gross engine performance and capabilities as per 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, obtained and corrected in accordance with ISO 15550.	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

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

Single phase output

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