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

	Standb	Standby			Prime	Prime		
Fuel consumption	kVA (k	kVA (kW)			kVA (k	W)		
Ratings	1400 (1120)† 1250 (1000)		1400 (1120)†					
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	Cummins		
Engine model	KTA50-G3			
Configuration	Cast iron, 60 ° V16 cyli	inder		
Aspiration	Turbocharged and afte	r-cooled		
Gross engine power output, kWm	1251	1075		
BMEP at set rated load, kPa	1951	1744		
Bore, mm	159	159		
Stroke, mm	159			
Rated speed, rpm	1500	1500		
Piston speed, m/s	7.9	7.9		
Compression ratio	13.9:1	13.9:1		
Lube oil capacity, L	152	152		
Overspeed limit, rpm	1725 ±50	1725 ±50		
Regenerative power, kW	116	116		
Governor type	Electronic	Electronic		
Starting voltage	24 Volts DC	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, m³/min	104.8	96.3
Maximum air cleaner restriction, kPa	3.7	

Exhaust

Exhaust gas flow at set rated load, m³/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, m³/sec @ 12.7 mm H ₂ O	27.6	
Total heat rejection, Btu/min	44000	38500
Maximum cooling air flow static restriction mm H ₂ O	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, m³/sec @ 12.7 mm H ₂ O	27.6
Maximum cooling air flow static restriction mm H ₂ O	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, m³/sec @ 12.7 mm H ₂ O	27.6
Maximum cooling air flow static restriction mm H ₂ O	12.7

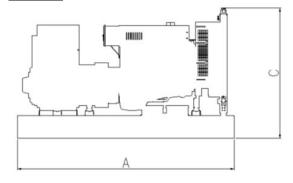
Weights*	Open	Enclosed
Unit dry weight kgs	9913	17419
Unit wet weight kgs	10069	17575

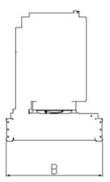
^{*} Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions	Length	Width	Height
Standard open set dimensions mm	5143	2000	2518
Enclosed set standard dimensions (with exhaust stack) mm	12192	2438	2896 (3233)

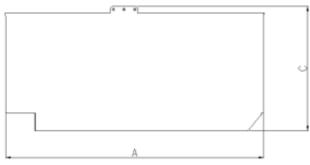
Genset outline

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	Temp rise °C	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	Р	S6L1D-H4	380 V
Wye, 3-phase	150/125	S/P	S9M1D-A4	3300 V
Wye, 3-phase	125/105	S/P	S9H1D-A4	6300 V
Wye, 3-phase	125/105	S/P	S9H1D-A4	10 – 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	Single phase output	
kW x 1000	kW x SinglePhaseFactor x 1000	
Voltage x 1.73 x 0.8	Voltage	

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

