

Generator Set Data Sheet	Model: C1400 D5 Frequency: 50Hz Fuel Type: Diesel
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Exhaust Emission Data Sheet:	EDS-223
Emissions Compliance Sheet:	I
Measured Sound Performance Data Sheet:	MSP-243
Measured Cooling Performance Data Sheet:	MCP-104
Prototype Test Summary Data Sheet:	PTS-240

Fuel Consumption	Standby				Prime			
	kW (kVA)				kW (kVA)			
Ratings	1120 (1400)				1000 (1250)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	22	40.4	58.4	77.4	20	36.6	52.5	69
L/hr	83	153	221	293	76	139	199	261

Engine	Standby Rating	Prime Rating
Engine Manufacturer	Cummins	
Engine Model	KTA50G3	
Configuration	Cast Iron, 60°V 16 cylinder	
Aspiration	Turbo After-Cooled	
Gross Engine Power Output, kWm (bhp)	1228kWm	1097kWm
BMEP at Set Rated Load, kPa (psi)	1930.5 (280)	1730.6 (251)
Bore, mm	159 mm	
Stroke, mm	159 mm	
Rated Speed, rpm	1500rpm	
Piston Speed, m/s (ft/min)	7.9 (1562)	
Compression Ratio	13.9:1	
Lube Oil Capacity, L (qt)	204 (216)	
Overspeed Limit, rpm	1850 ± 50	
Regenerative Power, kW	116	
Fuel Flow		
Maximum Fuel Flow, L/hr (US gph)	624 (125)	
Maximum Fuel Inlet Restriction, mm. Hg. (in. Hg)	101.6 (4)	
Air		
Combustion Air, m³/min (cfm (liters/sec))	3700 (1746)	3400 (1605)
Maximum Air Cleaner Restriction, kPa (in. H ₂ O)	6.2 (25)	
Alternator Cooling Air, m ³ /min (cfm)	158 (5600)	
Exhaust		
Exhaust Gas Flow at Set Rated Load, m ³ /min (cfm)	240.6 (8500)	223.6 (7900)
Exhaust Gas Temperature, °C (°F)	525.0 (977)	520 (968)
Maximum Exhaust Back Pressure, kPa (in. H ₂ O)	6.7 (27)	

Standard Set-Mounted Radiator Cooling	Standby Rating	Prime Rating
Ambient Design, °C (°F)	40 (104)	
Fan Load, KW _m (HP)	46.3 (62)	
Coolant Capacity (with Radiator), L (US Gal.)	386 (102)	
Cooling System Air Flow, m ³ /min (scfm)	1811 (64000)	
Total Heat Rejection, MJ/min (BTU/min)	59.9 (56160)	52.4 (49420)
Maximum Cooling Air Flow Static Restriction, kPa (in. H ₂ O)	0.12 (0.5)	
Maximum Fuel Return Line Restriction, mm Hg (in. Hg)	165 (6.5)	

Weights*	
Unit Dry Weight kgs (lbs.)	9099
Unit Wet Weight kgs (lbs.)	10075

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

Derating Factors (kW, kVA)					
Note: Standard genset options running at 400V, 150m above sea level.					
	27°C	40°C	45°C	50°C	55°C
Standby	1120 (1400)	1120 (1400)	1120 (1400)	1097 (1371)	1062 (1371)
Prime	1000 (1250)	1000 (1250)	1000 (1250)	1000 (1250)	957 (1196)
Ratings Definitions					
Standby:	Prime (Unlimited Running Time):		Base Load (Continuous):		
Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. This rating is applicable to installations served by a reliable normal utility source. This rating is only applicable to variable loads with an average load factor of 80 percent of the standby rating for a maximum of 200 hours of operation per year and a maximum of 25 hours per year at 100% of its standby rating. The standby rating is only applicable to emergency and standby applications where the generator set serves as the back up to the normal utility source. No sustained utility parallel operation is permitted with this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271 and BS5514). Nominally Rated.	Applicable for supplying power in lieu of commercially purchased power. Prime power is the maximum power available at a variable load for an unlimited number of hours. A 10% overload capability is available for limited time. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with ISO3046, AS2789, DIN6271, and BS5514). This rating is not applicable to all generator set models.		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 ISO8528, ISO3046, AS2789, DIN6271, and BS5514). This rating is not applicable to all generator set models.		

Alternator Data								
Voltage	Connection ¹	Temp Rise Degrees C	Duty ²	Single Phase Factor ³	Max Surge kVA ⁴	Winding No.	Alternator Data Sheet	Feature Code
380-440	WYE	105/80	S/P	NA				B321
380-440	WYE	105	P	NA				B629
400-415	WYE	125 /105	S/P	NA				B636
380-440	WYE	150 /125	S/P	NA				B667
380	WYE	80	S	NA				B674
400-440	WYE	80	S	NA				B711
380	WYE	125 -105	S/P	NA				B712

Notes:

- Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the Single Phase Factor³. All single phase ratings are at unity power factor.
- Standby (S), Prime (P) and (C) Continuous ratings.
- Factor for the *Single Phase Output from Three Phase Alternator* formula listed below
- Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

Formulas for calculating full load currents:

Three Phase Output	Single Phase Output
$\frac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$	$\frac{kW \times SingleP\ haseFactor \times 1000}{Voltage}$

See your distributor for more information.



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Important: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.