Generator set data sheet

Model:	**C700 D5**
Frequency:	**50 Hz**
Fuel type:	**Diesel**

Spec Sheet:	**SS15-CPGK**
Sound Data Sheet:	**MSP-2033**
Cooling System Data:	**MCP-1033**

Fuel consumption

	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	706 (565)				640 (512)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
US gph	11.6	21.1	30.6	40.8	11.3	19.3	27.5	37.0
L/hr	44	80	116	154	43	73	104	140

Engine

	Standby rating	Prime rating
Engine manufacturer	Cummins	
Engine model	VTA28-G5	
Configuration	Cast iron, 40º V12 cylinder	
Aspiration	Turbocharged and after-cooled	
Gross engine power output, kW_m	612	560
BMEP at set rated load, kPa	1751	1599
Bore, mm	140	
Stroke, mm	152	
Rated speed, rpm	1500	
Piston speed, m/s	7.6	
Compression ratio	13.1:1	
Lube oil capacity, L	83	
Overspeed limit, rpm	1725 ± 50	
Regenerative power, kW	56	
Governor type	Electronic	
Starting voltage	24 Volts DC	

Fuel flow

Maximum fuel flow, L/hr	337
Maximum fuel inlet restriction, mm Hg	203
Maximum fuel inlet temperature, °C	70

Air

Air	Standby rating	Prime rating
Combustion air, m^3/min	52.7	49.5
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust	Standby rating	Prime rating
Exhaust gas flow at set rated load, m^3/min	122.9	119.2
Exhaust gas temperature, °C	507	493
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling

Ambient design, °C	40	
Fan load, kW_m	19.6	
Coolant capacity (with radiator), L	182	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	14.5	
Total heat rejection, Btu/min	21610	19310
Maximum cooling air flow static restriction mm H_2O	12.7	

Optional set-mounted radiator cooling

|		
Ambient design, °C	50	
Fan load, kW_m	19.6	
Coolant capacity (with radiator), L	182	
Cooling system air flow, m^3/sec @ 12.7 mm H_2O	14.5	
Total heat rejection, Btu/min	21610	19310
Maximum cooling air flow static restriction mm H_2O	12.7	

Weights*

Weights*	Open
Unit dry weight kgs	5982
Unit wet weight kgs	6211

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

Dimensions

Dimensions	Length	Width	Height
Standard open set dimensions mm	3934	1468	2179

Genset outline

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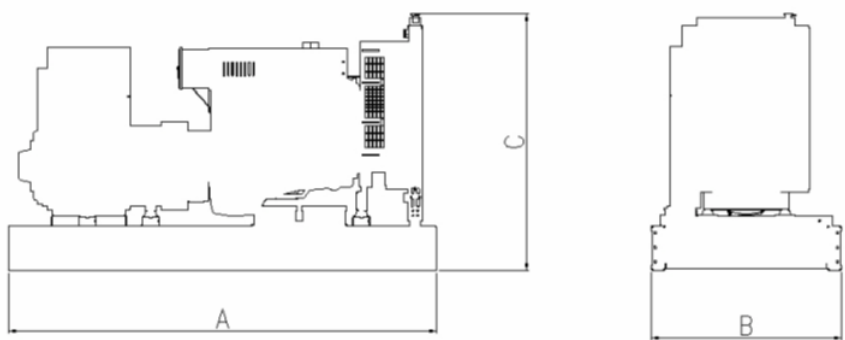
Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this mode

Alternator data

Connection	Temp rise ºC	Duty	Alternator	Voltage
Wye, 3-phase	150/125	S/P	HC5F	380-440

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 ISO 3046, AS 2789, DIN 6271 and BS 5514.	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, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Formulas for calculating full load currents:

Three phase output

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

Single phase output

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

See your distributor for more information.

Cummins Power Generation
Manston Park, Columbus Avenue
Manston, Ramsgate
Kent CT12 5BF, UK
Telephone: +44 (0) 1843 255000
Fax: +44 (0) 1843 255902
E-mail: cpg.uk@cummins.com
Web: power.cummins.com

Our energy working for you.™

power.cummins.com