## **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

	Standby			Prime	Prime			
Fuel consumption	kVA (kW)			kVA (k	W)			
Ratings	1400 (1	1400 (1120)		1250 (1	1250 (1000)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	24	41	59	77	22	38	54	69
L/hr	91	158	224	291	84	144	203	263

Engine	Standby rating	Prime rating		
Engine manufacturer	Cummins	Cummins		
Engine model	KTA50-G3			
Configuration	Cast iron, 60 ° V16 cyli	nder		
Aspiration	Turbocharged and afte	r-cooled		
Gross engine power output, kWm	1227	1097		
BMEP at set rated load, kPa	1951	1744		
Bore, mm	159			
Stroke, mm	159	159		
Rated speed, rpm	1500	1500		
Piston speed, m/s	7.9	7.9		
Compression ratio	13.9:1			
Lube oil capacity, L	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, m <sup>3</sup> /min	104.8	96.3
Maximum air cleaner restriction, kPa	6.2	

Exhaust

Exhaust gas flow at set rated load, m <sup>3</sup> /min	240.7	223.6
Exhaust gas temperature, °C	525	520
Maximum exhaust back pressure, kPa	6.7	

## Standard set-mounted radiator cooling

<b>U</b>		
Ambient design, °C	40	
Fan load, kWm	46	
Coolant capacity (with radiator), L	424	
Cooling system air flow, m <sup>3</sup> /sec @ 12.7 mm H <sub>2</sub> O	27.6	
Total heat rejection, Btu/min	44000	38500
Maximum cooling air flow static restriction mm H <sub>2</sub> 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, m <sup>3</sup> /sec @ 12.7 mm H <sub>2</sub> O	27.6
Maximum cooling air flow static restriction mm H <sub>2</sub> 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, m <sup>3</sup> /sec @ 12.7 mm H <sub>2</sub> O	27.6
Maximum cooling air flow static restriction mm H <sub>2</sub> O	12.7

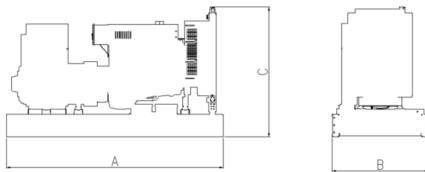
Weights*	Open	Enclosed
Unit dry weight kgs	9190	17002
Unit wet weight kgs	9613	17425

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

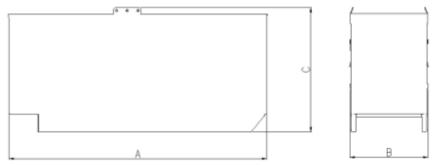
Dimensions	Length	Width	Height
Standard open set dimensions mm	5105	2000	2238
Enclosed set standard dimensions (with exhaust stack) mm	12192	2438	2896 (3233)

## **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 <sup>o</sup> C	Duty	Alternator	Voltage
Wye, 3-phase	150/125	S/P	PI734B	380-440 V
Wye, 3-phase	105*	Р	PI734B	380-440 V
Wye, 3-phase	125/105	S/P	HVSI804R	6300-6600 V
Wye, 3-phase	125/105	S/P	HVSI804R	10000 V
Wye, 3-phase	125/105	S/P	HVSI804R	10500-11000 V
Wye, 3-phase	125/105	S/P	MVSI804R	3300 V

\*Option available only through ETO (Engineering to Order)

# **Ratings definitions**

Emergency Standby	Limited-Time Running	Prime Power (PRP):	Base Load (Continuous)
Power (ESP):	Power (LTP):		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

Single phase output

kW x 1000

Voltage x 1.73 x 0.8

kW x SinglePhaseFactor x 1000

Voltage



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