

Generator set data sheet



Model: C1760 D5e
Frequency: 50 Hz
Fuel type: Diesel

Spec sheet:					SS17-CPGK			
Fuel consumption	Standby				Prime			
	kVA (kW)				kVA (kW)			
Ratings	1760 (1408)				1600 (1280)			
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
US gph	31.7	55.9	80.0	104	29.8	51.9	74.1	96.3
L/hr	120	212	303	395	113	197	281	365
Engine					Standby rating		Prime rating	
Engine manufacturer					Cummins			
Engine model					QSK60-GS3			
Configuration					Cast iron, 60° V16 cylinder			
Aspiration					Turbocharged and low temperature after-cooled			
Gross engine power output, kWm					1835		1620	
BMEP at set rated load, kPa					2434		2193	
Bore, mm					159			
Stroke, mm					190			
Rated speed, rpm					1500			
Piston speed, m/s					9.5			
Compression ratio					16.2:1			
Lube oil capacity, L					378			
Overspeed limit, rpm					1725 ±50			
Regenerative power, kW					146			
Governor type					Electronic			
Starting voltage					24 Volts DC			
Fuel flow								
Maximum fuel flow, L/hr					1630			
Maximum fuel inlet restriction, mm Hg					203			
Maximum fuel inlet temperature, °C					70			

Air	Standby rating	Prime rating
Combustion air, m ³ /min	139	125
Maximum air cleaner restriction, kPa	6.2	

Exhaust		
Exhaust gas flow at set rated load, m ³ /min	320	295
Exhaust gas temperature, °C	477	452
Maximum exhaust back pressure, kPa	6.7	

Standard set-mounted radiator cooling		
Ambient design, °C	27	
Fan load, kW _m	33	
Coolant capacity (with radiator), L	580	
Cooling system air flow, m ³ /sec @ 12.7 mm H ₂ O	40	
Total heat rejection, Btu/min		
Maximum cooling air flow static restriction mm H ₂ O	12.7	

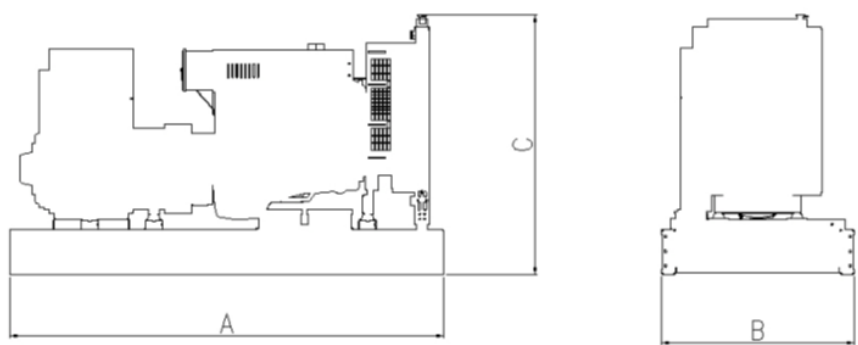
Weights*	Open	Enclosed
Unit dry weight kgs	14825	
Unit wet weight kgs	16040	

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

Dimensions	Length	Width	Height
Standard open set dimensions mm	6175	2494	3422
Enclosed set standard dimensions mm			

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 °C	Duty	Alternator	Voltage
Wye, 3-phase	163 / 125	S/P	PI734D	400 – 416 V
Wye, 3-phase	105*	P	PI734E	400 – 416 V

*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 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

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

Single phase output

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