

Specification sheet



6CTAA8.3-G7



Description

C-Series engines have established an unrivalled reputation for reliability. Engines in this series incorporate features to reduce maintenance and enhance performance in order to meet the most demanding requirements of generator set operation.

This, combined with high power to weight ratio and a small footprint makes the C-Series engine the obvious choice for Power Generation applications.

Features

Coolpac Integrated Design - Products are supplied complete with cooling package and air cleaner kit for a complete power package. Each component has been specifically developed and rigorously tested for G-Drive products, ensuring high performance, durability and reliability. A heavy duty air cleaner is offered as an option.

Electronic governing - Provides excellent load response and superior performance.

Cylinder Block - 'Unitized' block design designed to deliver excellent reliability and durability, with removable and easy to replace wet liners, ensuring low maintenance costs.

Fuel System - In-line fuel pumps and higher injection pressures help the C8.3 get more energy out of every drop of fuel, with less waste.

Extended Service Intervals - Contributes to reduced downtime, less maintenance requirements and therefore lower operating costs.

Service and Support - G-Drive products are backed by an uncompromising level of technical support and after sales service, delivered through a world class service network.

Codes and standards



This engine has been built to comply with CE certification.



This engine has been designed in facilities certified to ISO9001 and manufactured in facilities certified to ISO9001 or ISO9002.

1500 rpm (50 Hz Ratings)

Gross Engine Output			Net Engine Output			Typical Generator Set Output					
Standby	Prime	Base	Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)	
kWm/BHP			kWm/BHP			kWe	kVA	kWe	kVA	kWe	kVA
203/272	183/245	149/200	192/257	172/230	139/232	176	220	160	200	120	150

1800 rpm (60 Hz Ratings)

Gross Engine Output			Net Engine Output			Typical Generator Set Output					
Standby	Prime	Base	Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)	
kWm/BHP			kWm/BHP			kWe	kVA	kWe	kVA	kWe	kVA
237/318	213/285	175/235	221/296	200/268	162/217	200	250	180	225	144	180

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General Engine Data

Type	4 cycle, in line, turbo charged, air-air cooled
Bore, mm	114
Stroke, mm	135
Displacement, Litre	8.3
Cylinder Block	Cast iron, 6 cylinder
Battery Charging Alternator	40A
Starting Voltage	24V
Fuel System	Direct injection
Fuel Filter	Spin on fuel filters with water separator
Lube Oil Filter Type(s)	Spin on full flow filter
Lube Oil Capacity (l)	23.8
Flywheel Dimensions	SAE 2/11.5

Coolpac Performance Data

Cooling System Design	Charge air cooled	
Coolant Ratio	50% ethylene glycol; 50% water	
	50 Hz	60 Hz
Coolant Capacity (l)	53.3	53.3
Limiting Ambient Temp. ** (°C)	50	50
Fan Power (kWm)	9	12
Cooling System Air Flow (m3/s)**	4.27	5.38
Air Cleaner Type	Dry replaceable element with restriction indicator	

** @ 13 mm H²O

Weight and Dimensions

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
1674	868	1288	815

Fuel Consumption 1500 rpm (50 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	203	272	50	13.2
Prime Power				
100	183	245	45	11.9
75	137	184	34	9.0
50	91	122	23	6.1
25	46	62	13	3.4
Continuous Power				
100	149	200	36	9.5

Fuel Consumption 1800 rpm (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	237	318	60	15.9
Prime Power				
100	213	286	53	14.0
75	160	214	39	10.3
50	107	143	27	7.1
25	53	71	15	4.0
Continuous Power				
100	175	235	43	11.4

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Ratings Definitions

Emergency Standby Power (ESP):

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.

Limited-Time Running Power (LTP):

Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.

Prime Power (PRP):

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.

Base Load (Continuous) Power (COP):

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.