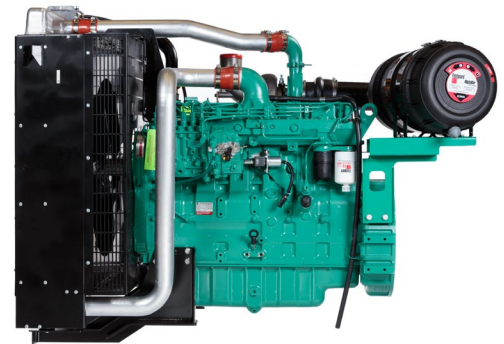




6CTAA8.3-G7

Fuel Optimized



Description

The Cummins® 6CTAA8.3 engine has a mechanical fuel system which is designed to deliver robust performance in the most extreme conditions. It also has electronic governor controls for superior engine speed stability and transient response. The cylinder head has 24-valves and bigger flow injector design which provides one of the highest power-to-weight ratios in its class.

At the same time, the 6CTAA8.3 engine delivers better fuel economy and less smoke emission than similar engines.

Features

Fuel System - BYC P7100 type mechanical fuel injection pumps have high injection pressure, optimize engine performance and establish an unrivalled reputation for reliability.

Electronic Governor Control Unit - Provides excellent steady state and transient load response and superior performance.

Cummins Holset Turbocharger – Cummins optimized turbocharger delivers increased power, fuel economy, low smoke and lower noise levels.

Electronic Fuel Shut Off Valve – Robust design for safety for mechanical fuel system engine.

Integrated Block Design - Integrated fluid circuits replace hoses and eliminate potential leaks.

24-valve Cylinder Head - Four valves per cylinder for increased power with faster response and improved fuel economy.

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 Cummins G-Drive standards, ensuring high performance, durability and reliability.

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



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

This equipment has been designed and tested to meet EU product safety regulations. Material compliance declaration is available upon request

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	191/256	173/232	139/186	176	220	160	200	128	160

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	213/286	175/235	224/327	203/272	165/221	204	255	184	230	150	187

General Engine Data

Fuel Rating	FR94433
Type	4 cycle, in-line, turbocharged, air-cooled
Bore mm	114 mm (4.49 in.)
Stroke mm	135 mm (5.31 in.)
Displacement litre	8.3 litre (506 in. ³)
Cylinder block	Cast iron, 6 cylinder
Battery charging alternator	70 amps
Starting voltage	24-volt
Fuel system	BYC P7100
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

Coolpac Performance Data

Cooling system design	Air-air charge cooled
Coolant ratio	50% ethylene glycol; 50% water
Coolant capacity (l)	51.3
Limiting ambient temp.** (°C)	50 (50 Hz); 50 (60 Hz)
Fan power (kWm)	9 (50 Hz); 12 (60 Hz)
Cooling system air flow (m ³ /s)**	4.27 (50 Hz); 5.38 (60 Hz)
Air cleaner type	Normal duty dry replaceable element with restriction indicator

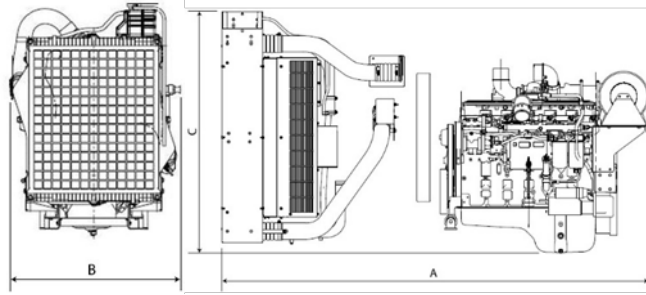
** @ 13 mm H₂O

Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	203	272	50	13.2
Prime Power				
100	183	245	45	11.9
75	137	184	34	9.0
50	92	123	23	6.1
25	46	61	13	3.4
Continuous Power				
100	149	200	36	9.5

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	237	318	60	15.9
Prime Power				
100	213	285	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



*Drawing for illustration purposes only.

Weights and Dimensions

Length mm	Width mm	Height mm	Weight (dry) kg
1674	868	1288	820

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) in accordance with ISO 8528, ISO 3046, AS 2789, DIN6271 and BS 5514.

For more information contact your local Cummins distributor or visit power.cummins.com

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