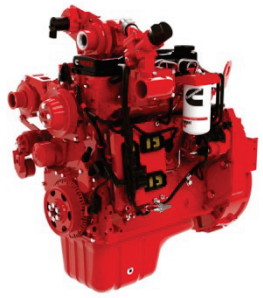
QSB5-G8

Emissions Compliance:
EU Stage IIIA at 50Hz and 60Hz
EPA Tier 4i at 50Hz and 60Hz



> Specification sheet

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Description

The QSB5 engine meets U.S. EPA Tier 4 Interim and EU Stage IIIA generator set emission standards with the proven 4.5-litre engine platform and a fully integrated system from air-intake to exhaust aftertreatment.

The exhaust aftertreatment consists of a Cummins Compact Catalyst that is maintenance free and space efficient. This catalyst only aftertreatment system simplifies operator interface and maximizes installation flexibility.

The four-cylinder QSB5 engine is ideally suited to both open and containerized applications in stationary or portable generator equipment. It can be matched to meet specific duty cycle and operating conditions of any generator.

CE — This engine has been built to comply with CE certification.

ISO 9001 — This engine has been designed in facilities certified to ISO9001 and manufactured in facilities certified to ISO9001 or ISO9002.

Features

Cummins Compact Catalyst – Very low PM emissions is achieved using the Cummins Compact Catalyst exhaust aftertreatment. The system is maintenance-free and offers a space-efficient installation profile. Cummins proven EGR system is utilized for NOx reduction.

Full-Authority Electronic Controls - Optimize engine operation and deliver critical information for controlling costs, reducing maintenance and seamless integration with other components.

Variable Flow Turbocharger – Electronic controlled single turbo for enhanced air management.

Direct Flow Air Filtration System - Provides up to 35% smaller, more flexible installation package and higher air filtration efficiency than radial air filters.

Integrated Design – Each component (Engine, Catalyst and Air Cleaner) has been specifically developed and rigorously tested for G-Drive products, 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 service network.

1500 rpm (50 Hz Ratings)

Gross Engine Output			Typical Generator Set Output					
Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)	
kWm/BHP			kWe	kVA	kWe	kVA	kWe	kVA
93/125	81/108	73/98	70	88	64	80	58	73

1800 rpm (60 Hz Ratings)

Gross Engine Output			Typical Generator Set Output					
Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)	
kWm/BHP			kWe	kVA	kWe	kVA	kWe	kVA
110/147	95/128	86/115	80	100	73	91	66	83

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S-1673 (7/12)

General Engine Data

Type	4-cycle, in-line, 4-cylinder diesel
Bore	107 mm (4.21 in.)
Stroke	124 mm (4.88 in.)
Displacement	4.5 litre (272 $in.^3$)
Cylinder Block	Cast iron, 4 cylinder
Battery Charging Alternator	100 amps
Starting Voltage	12 volt, negative ground
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	12.1 litre (12.8 qt)
Flywheel Dimensions	SAE3 / 11.5”

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

Engine Weight & Dimensions (excluding Air Cleaner & Catalyst)

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
865	720	941	371

Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	93	125	23	6.1
Prime Power				
100	81	108	20	5.3
75	60	81	16	4.1
50	40	54	11	3.0
25	20	27	6	1.7
Continuous Power				
100	73	98	18	4.9

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	110	147	27	7.2
Prime Power				
100	95	128	24	6.4
75	72	96	18	4.8
50	48	64	12	3.3
25	24	32	8	2.1
Continuous Power				
100	86	115	22	5.8

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S-1673 (7/12)