



QSZ13-G10

Fuel Optimized



Description

Evolved from the proven and successful base engine platform of an automotive engine, the QSZ13 engine utilizes the Cummins High Pressure Injection (XPI) fuel system and is widely accepted for its high levels of in-service reliability and performance.

The QSZ13 engine was developed using Cummins unique in-house capability, adapting core technologies in electronics, fuel systems, turbo charging, filtration. The QSZ13 engine has low derating thresholds for temperature and altitude, which coupled with 50 °C ambient capable cooling system, makes these engines top performers in the harshest conditions.

Robust, clean, resilient, and capable of matching the duty cycle and operating conditions of many applications, the QSZ13 engine is suitable for both open and enclosed installations as well as stationary or mobile applications.



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

Features

Coolpac Integrated Design - Products are supplied complete with cooling package and air cleaner kit for a complete power package. A Heavy-duty air cleaner is offered as an option.

Full Authority Electronic Engine - Advanced engine monitoring, diagnostics, protection, and control, coupled with the XPI fuel system, capable of delivering extreme fuel injection pressures with multiple injection events, improved fuel efficiency, lower noise, and enhanced engine performance.

Fuel Filtration System – Three-stage fuel filtration system provides high levels of protection against fuel becoming contaminated with dust, dirt, or water.

Controls - Fitted with a Power Generation Interface (PGI) to improve emissions, the widely accepted SAE J1939 industry standard CAN based communication network provides advanced engine protection, ensuring faster connectivity along with a superior fault-finding capability.

Crankcase Breather – Cummins patented variable impactor breather design and coalescing filter removes emissions as required by regulations, with the added benefit of eliminating oil drips and mist while keeping the surroundings clean.

Reduced Operating Costs – Extended service intervals for the oil and filter changes.

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

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
509/682	463/621	412/553	488/654	448/600	397/532	454	568	416	520	369	461

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
-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-

General Engine Data

Fuel Rating	FR21288
Type	4 cycle, in-line, turbocharged, Charge Air cooled
Bore mm	130 mm (5.12 in.)
Stroke mm	163 mm (6.42in.)
Displacement litre	13 litre (793 in. ³)
Cylinder block	6 cylinder
Battery charging alternator	80 amps
Starting voltage	24-volt
Fuel system	Cummins XPI
Fuel filter	Spin-on fuel filters with water separator
Lube oil filter type(s)	Spin-on full flow filter
Lube oil capacity (l)	75.3
Flywheel dimensions	SAE1

Coolpac Performance Data

Cooling system design	Air-air charge cooled
Coolant ratio	50% ethylene glycol; 50% water
Coolant capacity (l)	77.1
Limiting ambient temp.** (°C)	50
Fan power (kWm)	14.2
Cooling system air flow (m ³ /s)**	10.3
Air cleaner type	Normal duty dry replaceable element with restriction indicator

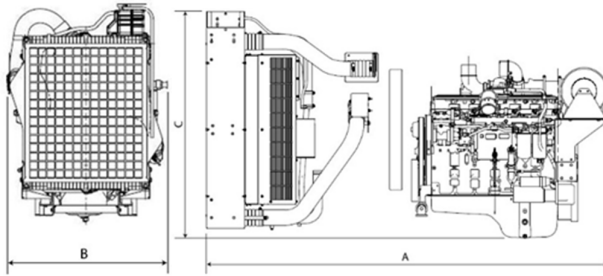
** @ 12.7 mm H₂O

Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	509	682	118	30.2
Prime Power				
100	463	621	107	27.4
75	347	466	80	20.5
50	232	311	54	13.9
25	116	155	29	7.4
Continuous Power				
100	412	553	95	24.4

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	-	-	-	-
Prime Power				
100	-	-	-	-
75	-	-	-	-
50	-	-	-	-
25	-	-	-	-
Continuous Power				
100	-	-	-	-



*Drawing for illustration purposes only.

Weights and Dimensions

Length mm	Width mm	Height mm	Weight (dry) kg
2437	1255	1841	1530

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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