#### **Specification Sheet**



# QSK50-G6 EPA Tier 2

#### Description

The QSK50 is a V 16-cylinder engine with a 50-litre displacement. This Quantum series utilizes sophisticated electronics and premium engineering to provide outstanding performance levels, reliability, and versatility for Standby, Prime and Continuous Power applications.

#### Features

High pressure fuel pump, Modular Common Rail Fuel System (MCRS) and state of the art integrated electronic control system provide superior performance, efficiency, and diagnostics. The electronic fuel pumps deliver up to 1600 bar injection pressure and eliminate mechanical linkage adjustments. The new MCRS utilizes an electric priming pump which is integrated with the off-engine stage-1 fuel filter head and is controlled and powered by the engine ECM. The stage-2 fuel filters are mounted on-engine.

**CTT (Cummins Turbo Technologies) HX82/HX83 turbocharging** utilizes exhaust energy with greater efficiency for improved emissions and fuel consumption.

Low Temperature After-cooling - Twopump Two-loop (2P2L)

**Ferrous Cast Ductile Iron (FCD) Pistons** -High strength design delivers superior durability.

**G-Drive Integrated Design** - Each component 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.



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	
-	-	-	-	-	-	-	-	-	-	-	-

# 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
1750/2346	1575/2112	1365/1830	1681/2254	1523/2042	1313/1760	1614	2017	1462	1828	1261	1576

# **General Engine Data**

Fuel Rating	FR6836
Туре	4 cycle, turbocharged, After-cooled
Bore mm	159
Stroke mm	159
Displacement litre	50.3
Cylinder block	16 cylinder
Battery charging alternator	55 amps
Starting voltage	24-volt
Fuel system	Cummins direct injection MCRS
Fuel filter	Spin-on fuel filters with water separator
Lube oil filter type(s)	Spin-on full flow filter
Lube oil capacity (I)	234.7
Flywheel dimensions	SAE 0

### **Coolpac Performance Data**

Cooling system design	2 pump - 2 loop
Coolant ratio	50% ethylene glycol; 50% water
Coolant capacity (I)	294
Limiting ambient temp.** (°C)	50
Fan power (kWm)	50
Cooling system air flow (m <sup>3</sup> /s)**	35
Air cleaner type	Dry replaceable element with restriction indicator

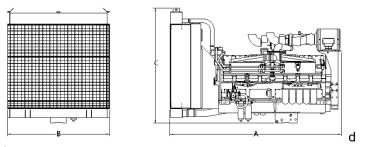
\*\* @ 13 mm H<sub>2</sub>0

# Fuel Consumption 1500 (50 Hz)

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

# Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/hr	US Gal./hr			
Standby Power							
100	1750	2346	431	113.8			
Prime Power							
100	1575	2111	392	103.5			
75	1181	1583	303	80.0			
50	787	1056	224	59.1			
25	394	528	126	33.1			
Continuous Power							
100	1365	1830	344	90.9			



\*Drawing for illustration purposes only.

#### **Weights and Dimensions**

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
4674	2468	3100	7429

#### **Ratings Definitions**

Emergency Standby	Limited-Time Running	Prime Power (PRP):	Base Load (Continuous)
Power (ESP):	Power (LTP):		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 cummins.com



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