



QSK50-G7

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.



This equipment has been built to comply with CE certification requirement subject to EU RoHS exclusion per EU 2011/65.



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

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 - Two-pump 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.

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
1581/2120	1421/1905	1253/1680	1531/2053	1387/1860	1219/1635	1460	1825	1320	1650	1188	1485

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

Type	4 cycle, turbocharged, After-cooled
Bore mm	159
Stroke mm	159
Displacement litre	50.3
Cylinder block	Cast iron, 16 cylinder
Battery charging alternator	55 amps
Starting voltage	24 volt, negative ground
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 (l)	235
Flywheel dimensions	SAE 0

Coolpac performance data

Cooling system design	2 pump - 2 loop
Coolant ratio	50% ethylene glycol; 50% water
Coolant capacity (l)	294
Limiting ambient temp. ** (°C)	50
Fan power (kWm)	40
Cooling system air flow (m³/s)**	35
Air cleaner type	Dry replaceable element with restriction indicator

** @ 13 mm H₂O

Fuel consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	g/kWh
Standby Power				
100	1581	2120	394	104.1
Prime Power				
100	1421	1905	349	92.0
75	1066	1429	265	70.0
50	711	953	189	50.0
25	356	476	101	26.6
Continuous Power				
100	1253	1680	310	81.8

Fuel consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	g/kWh
Standby Power				
100	-	-	-	-
Prime Power				
100	-	-	-	-
75	-	-	-	-
50	-	-	-	-
25	-	-	-	-
Continuous Power				
100	-	-	-	-

Weights and dimensions (Engine only)

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

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 cummins.com

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