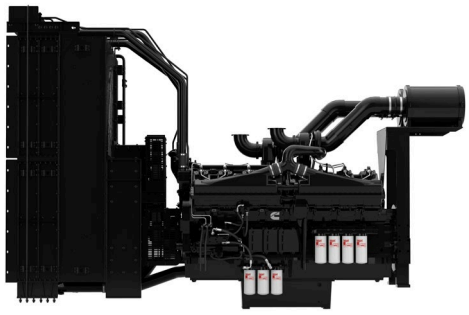
Specification Sheet

QSK50-G4

EPA Tier 2 and TA Luft Compliant



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.

ISO 9001 ISO 14001 ISO 45001	This product was manufactured in a facility whose quality management system is certified to ISO 9001 and its Health Safety Environmental Management Systems certified to ISO 14001 and ISO 45001.
RoHS	Consult factory for RoHS information.

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
1477/1981	1328/1781	1100/1475	1421/1906	1287/1726	1059/1420	1361	1702	1233	1541	1014	1268

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
1656/2221	1470/1971	1223/1640	1593/2136	1423/1908	1176/1577	1529	1911	1366	1708	1129	1411

General Engine Data

Fuel Rating	FR6878
Type	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 (l)	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 (l)	294
Limiting ambient temp.** (°C)	52 (50Hz); 50 (60Hz)
Fan power (kWm)	46 (50Hz); 46 (60Hz)
Cooling system air flow (m^3/s)**	35 (50Hz); 35 (60Hz)
Air cleaner type	Dry replaceable element with restriction indicator

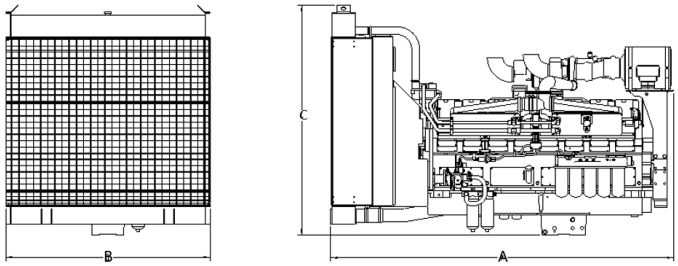
** @ 13 mm H_20

Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	1477	1980	352	93.0
Prime Power				
100	1328	1780	330	87
75	996	1335	254	67
50	664	890	177	47
25	332	445	96	25
Continuous Power				
100	1100	1475	275	73

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/hr	US Gal./hr
Standby Power				
100	1656	2220	410	108
Prime Power				
100	1470	1971	363	96
75	1103	1478	279	74
50	735	986	194	51
25	368	493	115	30
Continuous Power				
100	1223	1640	307	81



Drawing for illustration purposes only.

Weights and Dimensions

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 continuously to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550).	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 3046-1. Data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550.	Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550).

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

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