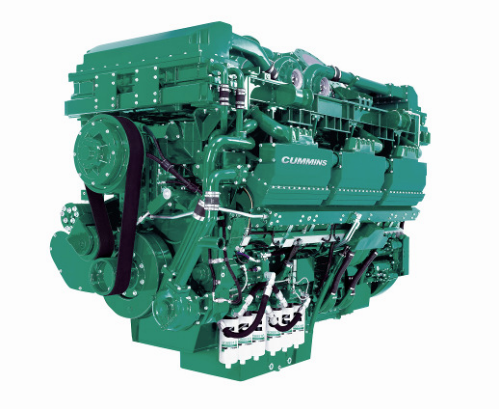
QSK78-G7

Emissions Compliance: EPA Tier 1 a@ 60 Hz



> Specification sheet

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Description

The QSK78 is a V 18 cylinder engine with a 78 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

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

The new 4-turbo design architecture QSK78 uses the Cummins High Pressure Injection (HPI) PT full authority electronic fuel system. The HPI PT fuel system is managed by a G-Drive Governor Control System (GCS) controller, which is provided for off-engine mounting in the genset control panel. The Quantum Control has a specific fuel system board to interface with the HPI-PT fuel system and provides an Engine Protection package giving greater customer flexibility and cost effective alternatives in the control design and the benefits of Full Authority electronic control.

CTT (Cummins Turbo Technologies) HX82/HX83 turbo-charging 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.

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
2763/3705	2502/3355	2259/3030	2693/3611	2460/3299	2217/2973	2500	3125	2275	2844	2100	2625

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General Engine Data

Type	4 cycle, Turbocharged, After-cooled
Bore mm	170
Stroke mm	190
Displacement Litre	77.6
Cylinder Block	Cast iron, 18 cylinder
Battery Charging Alternator	55A
Starting Voltage	24V
Fuel System	Direct injection Cummins HPI
Fuel Filter	Spin on fuel filters with water separator
Lube Oil Filter Type(s)	Spin on full flow filter
Lube Oil Capacity (l)	465
Flywheel Dimensions	SAE 00

Coolpac Performance Data

Cooling System Design	2 pump - 2 loop
Coolant Ratio	50% ethylene glycol; 50% water
Coolant Capacity (l)	Engine only – not applicable
Limiting Ambient Temp.**	
Fan Power	
Cooling System Air Flow (m^3/s)**	
Air Cleaner Type	Dry replaceable element with restriction indicator

** @ 13 mm H^20

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.

Weight & Dimensions

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
3062	1570	2031	9180

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	2763	3705	672	177.6
Prime Power				
100	2502	3355	611	161.4
75	1876	2516	475	125.6
50	1251	1678	345	91.2
25	626	839	201	53.2
Continuous Power				
100	2259	3030	558	147.4

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