#### **Specification sheet**



# QSK23-G9

**EPA Tier 2** 



### Description

The QSK23 is an in-line 6 cylinder engine with a 23 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**

The QSK23 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 turbo-charging** utilizes exhaust energy with greater efficiency for improved emissions and fuel consumption.

**Charge Air Cooling** - QSK23 engine requires the use of an Airto-Air heat exchanger or Charge-Air-Cooler (CAC) to reduce intake manifold temperature and to meet the lower emissions requirements

**CoolPac Integrated Design** - Products are supplied complete with cooling package and air cleaner kit for a complete power package. 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	
791/1060	716/960	537/720	765/1026	698/936	419/696	720	900	648	810	493	616

# 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**

Туре	4 cycle, turbocharged
Bore mm	170
Stroke mm	170
Displacement litre	23.1
Cylinder block	Cast iron, 6 cylinder
Battery charging alternator	35 amps
Starting voltage	24 volt, negative ground
Fuel system	Cummins direct injection HPI
Fuel filter	Spin-on fuel filters with water separator
Lube oil filter type(s)	Spin-on full flow filter
Lube oil capacity (I)	103
Flywheel dimensions	SAE 0

## **Coolpac performance data**

Cooling system design	Air-air charge cooled
Coolant ratio	50% ethylene glycol; 50% water
Coolant capacity (I)	110
Limiting ambient temp.** (°C)	41.8
Fan power (kWm)	14.4
Cooling system air flow (m <sup>3</sup> /s)**	13.5
Air cleaner type	Dry replaceable element with restriction indicator

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

# Fuel consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	g/kWh			
Standby Power							
100	791	1060	186	49.1			
Prime Pow	Prime Power						
100	716	960	163	43.0			
75	537	720	126	33.3			
50	358	480	89	23.4			
25	179	240	50	13.2			
Continuous Power							
100	537	720	126	33.3			

# Fuel consumption 1800 (60 Hz)

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

#### Weights and dimensions (Engine only)

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
2976	1656	1964	3245

## **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 power.cummins.com



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