

# QSK23-G3



> Specification sheet

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## 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 engine has been built to comply with CE certification.



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 Air-to-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
768/1030	701/940	537/720	739/991	682/915	517/693	720	900	648	810	491	614

## 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
895/1200	809/1085	652/875	857/1149	776/1041	621/833	800	1000	727	909	583	729

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## General Engine Data

Type	4 cycle, Turbocharged		
Bore mm	170		
Stroke mm	170		
Displacement Litre	23.1		
Cylinder Block	Cast iron, 6 cylinder		
Battery Charging Alternator	35A		
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)	103		
Flywheel Dimensions	SAE 0		

## Coolpac Performance Data

Cooling System Design	Air-air charge cooled		
Coolant Ratio	50% ethylene glycol; 50% water		
Total Coolant Capacity (l)	110		
Limiting Ambient Temp (°C)**	50.9 (50Hz)	55.0 (60Hz)	
Fan Power (kWm)	14.4 (50Hz)	24.2 (60Hz)	
Cooling System Air Flow (m <sup>3</sup> /s)**	13.5 (50Hz)	16.6 (60Hz)	
Air Cleaner Type	Dry replaceable element with restriction indicator		

\*\* @ 13 mm H<sup>2</sup>O

## 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
2976	1656	1964	3245

## Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	US gal/ph
<b>Standby Power</b>				
100	768	1030	178	46.9
<b>Prime Power</b>				
100	701	940	161	42.5
75	526	705	121	32.0
50	351	470	85	22.4
25	175	235	46	12.2
<b>Continuous Power</b>				
100	537	720	125	33.1

## Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
<b>Standby Power</b>				
100	895	1200	212	56.1
<b>Prime Power</b>				
100	809	1085	189	49.8
75	607	814	139	36.7
50	405	543	97	25.7
25	202	271	56	14.7
<b>Continuous Power</b>				
100	653	875	149	39.4

## Cummins G-Drive Engines

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