# **QSK23-G9**

# **Emissions Compliance: EPA NSPS Stationary Emergency Tier 2**



# > Specification sheet

Curumins

# Our energy working for you.™

#### **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	
791/1060	716/960	537/720	765/1026	698/936	419/696	720	900	648	810	493	616

Our energy working for you.™



#### **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	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 (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)	57		
Limiting Ambient Temp (°C)**	41.5		
Fan Power (kWm)	17.3		
Cooling System Air Flow (m <sup>3</sup> /s)**	14.7		
Air Cleaner Type	Dry replaceable element with restriction indicator		
** @ 13 mm H <sup>2</sup> 0			

**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
2885	1656	2029	3185

# Fuel Consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	US gal/ph			
Standby Power							
100	791	1060	186	49.1			
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			

#### **Cummins G-Drive Engines**

Asia Pacific 10 Toh Guan Road #07-01 TT International Tradepark Singapore 608838 Phone 65 6417 2388 Fax 65 6417 2399 Europe, CIS, Middle East and Africa Manston Park Columbus Ave Manston Ramsgate Kent CT12 5BF. UK Phone 44 1843 255000 Fax 44 1843 255902

Latin America Rua Jati, 310, Cumbica Guarulhos, SP 07180-900 Brazil Phone 55 11 2186 4552 Fax 55 11 2186 4729 Mexico Cummins S. de R.L. de C.V. Eje 122 No. 200 Zona Industrial San Luis Potosí, S.L.P. 78090 Mexico Phone 52 444 870 6700 Fax 52 444 870 6811 North America 1400 73rd Avenue N.E. Minneapolis, MN 55432 USA Phone 1 763 574 5000 USA Toll-free 1 877 769 7669 Fax 1 763 574 5298







**Ratings Definitions**