## **QSK38-G1**

# Emissions Compliance: EPA Tier 2 @ 50 Hz



## > Specification sheet



#### Our energy working for you.™

## **Description**

The QSK38 is a V 12 cylinder engine with a 38 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**

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/HE851 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.

#### **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
969/1300	875/1174	791/1061	933/1251	849/1139	765/1026	880	1100	800	1000	727	900

Our energy working for you.™



## **General Engine Data**

Туре	4 cycle, Turbocharged, After-cooled		
Bore mm	159		
Stroke mm	159		
Displacement Litre	37.7		
Cylinder Block	Cast iron, 12 cylinder		
Battery Charging Alternator	55A		
Starting Voltage	24V		
Fuel System	Direct injection Cummins MCRS		
Fuel Filter	Spin on fuel filters with water separator		
Lube Oil Filter Type(s)	Spin on full flow filter		
Lube Oil Capacity (I)	170		
Flywheel Dimensions	SAE 0		

## **Coolpac Performance Data**

Cooling System Design	2 pump - 2 loop		
Coolant Ratio	50% ethylene glycol; 50% water		
Coolant Capacity (I)			
Limiting Ambient Temp.**	Engine only – not applicable		
Fan Power	Engine only – not applicable		
Cooling System Air Flow (m <sup>3</sup> /s)**			
Air Cleaner Type	Dry replaceable element with restriction indicator		
** @ 13 mm H <sup>2</sup> 0			

### **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	
2081	1492	1866	4100	

## Fuel Consumption 1500 (50 Hz)

%	kWm	ВНР	L/ph	US gal/ph		
Standby Power						
100	969	1300	239	63.1		
Prime Power						
100	875	1174	215	56.9		
75	657	881	183	48.4		
50	438	587	131	34.6		
25	219	294	73	19.2		
Continuous Power						
100	791	1061	200	52.9		

#### **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





