#### **Specification sheet**



# QSK38-G5

**EPA Tier 2** 



#### Description

The QSK38 is a V12 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 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**

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 - Twopump 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	Standb	y (ESP)	Prime	(PRP)	Base	(COP)
kWm/BHP			kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA	
1224/1641	1107/1484	932/1250	1186/1590	1081/1450	906/1215	1120	1400	1020	1275	854	1067

# 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	
1279/1715	1063/1425	891/1195	1230/1650	1027/1377	855/1147	1160	1450	965	1206	800	1000

# **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	55 amps
Starting voltage	24 volt, negative ground
Fuel system	Cummins direct injection 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.** (°C)	
Fan power (kWm)	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<sub>2</sub>0

# Fuel consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	g/kWh			
Standby Power							
100	1224	1641	301	79.4			
Prime Pow	Prime Power						
100	1107	1484	274	72.5			
75	830	1113	206	54.5			
50	553	742	154	40.8			
25	277	371	81	21.3			
Continuous Power							
100	932	1250	230	60.8			

# Fuel consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	g/kWh			
Standby Power							
100	1279	1715	315	83.3			
Prime Pow	/er						
100	1063	1425	262	69.3			
75	797	1069	202	53.4			
50	532	713	153	40.3			
25	265	356	90	23.7			
Continuous Power							
100	891	1195	223	59.0			

#### Weights and dimensions (Engine only)

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
2081	1492	1866	4100

#### **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.

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