#### **Specification sheet**



**QSK38-G1** 

**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** - 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

# **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, 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 (m³/s)**			
Air cleaner type	Dry replaceable element with restriction indicator		

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

# Fuel consumption 1500 (50 Hz)

%	kWm	BHP	L/ph	g/kWh				
Standby P	Standby Power							
100	969	1300	239	63.1				
Prime Pow	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				

# Fuel consumption 1800 (60 Hz)

%	kWm	ВНР	L/ph	g/kWh				
Standby P	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
2081	1492	1866	4100

#### **Ratings definitions**

Emergency Standby Power (ESP):	Limited-Time Running Power (LTP):	Prime Power (PRP):	Base Load (Continuous) 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

