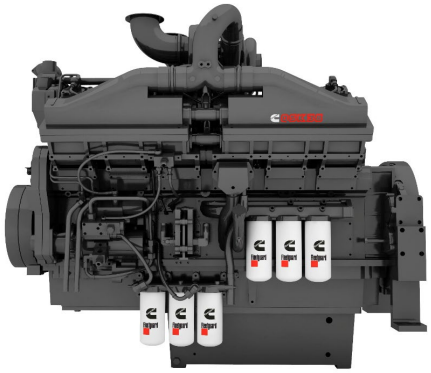
Specification Sheet

# QSK38-G4

**EPA Tier 2**



## 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.

| | |
|---|---|
| ISO 9001<br>ISO 14001<br>ISO 45001 | This product was manufactured in a facility whose quality management system is certified to ISO 9001 and its Health Safety Environmental Management Systems certified to ISO 14001 and ISO 45001. |
| RoHS | Consult factory for RoHS information. |

## 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 MCRS fuel system 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 turbocharging** 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.

## 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 |
| 1376/1845 | 1231/1651 | 1044/1400 | 1321/1771 | 1189/1594 | 1002/1344 | 1251 | 1563 | 1126 | 1408 | 949 | 1186 |

## General Engine Data

| | |
|---|---|
| Fuel Rating | FR6789 |
| Type | 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 (l) | 170 |
| Flywheel dimensions | SAE 0 |

## Coolpac Performance Data

| | |
|---|---|
| Cooling system design | 2 pump - 2 loop |
| Coolant ratio | 50% ethylene glycol; 50% water |
| Coolant capacity (l) | Engine only – not applicable |
| Limiting ambient temp.** (°C) | |
| Fan power (kWm) | |
| Cooling system air flow ($m^3/s$)** | |
| Air cleaner type | Dry replaceable element with restriction indicator |

## Fuel Consumption 1800 (60 Hz)

| % | kWm | BHP | L/hr | US Gal./hr |
|---|---|---|---|---|
| **Standby Power** | | | | |
| **100** | 1376 | 1845 | 333 | 87.9 |
| **Prime Power** | | | | |
| **100** | 1231 | 1650 | 298 | 78.7 |
| **75** | 923 | 1238 | 232 | 61.4 |
| **50** | 615 | 825 | 167 | 44.0 |
| **25** | 308 | 413 | 92 | 24.4 |
| **Continuous Power** | | | | |
| **100** | 1044 | 1400 | 253 | 66.7 |

## Weights and Dimensions (Engine only)

| Length mm | Width mm | Height mm | Weight (dry) kg |
|---|---|---|---|
| 2081 | 1492 | 1866 | 3825 |

## Ratings Definitions

| Emergency Standby Power (ESP): | Limited-Time Running Power (LTP): | Prime Power (PRP): | Base Load (Continuous) Power (COP): |
|---|---|---|---|
| Applicable for supplying power continuously to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). | 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 3046-1. Data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550. | Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). |

**For more information contact your local Cummins distributor or visit cummins.com**

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