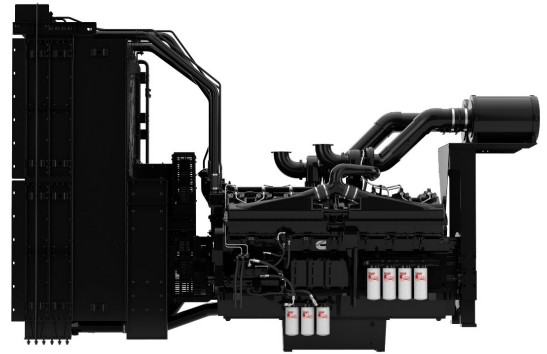




QSK50-G5

EPA Tier 2



Description

The QSK50 is a V 16-cylinder engine with a 50-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.

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 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.



This engine has been designed in facilities certified to ISO9001 and manufactured in facilities certified to ISO9001 or ISO9002.

This equipment has been designed and tested to meet EU product safety regulations. Material compliance declaration is available upon request

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 |
| - | - | - | - | - | - | - | - | - | - | - | - |

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 |
| 1655/2219 | 1470/1971 | 1323/1774 | 1592/2134 | 1423/1908 | 1276/1711 | 1528 | 1910 | 1366 | 1708 | 1225 | 1531 |

General Engine Data

| | |
|-----------------------------|---|
| Fuel Rating | FR6835 |
| Type | 4 cycle, turbocharged, After-cooled |
| Bore mm | 159 |
| Stroke mm | 159 |
| Displacement litre | 50.3 |
| Cylinder block | 16 cylinder |
| Battery charging alternator | 55 amps |
| Starting voltage | 24-volt |
| 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) | 234.7 |
| Flywheel dimensions | SAE 0 |

Coolpac Performance Data

| | |
|----------------------------------|--|
| Cooling system design | 2 pump - 2 loop |
| Coolant ratio | 50% ethylene glycol; 50% water |
| Coolant capacity (l) | 401 |
| Limiting ambient temp.** (°C) | 45.7 |
| Fan power (kWm) | 53.7 |
| Cooling system air flow (m³/s)** | 29.7 |
| Air cleaner type | Dry replaceable element with restriction indicator |

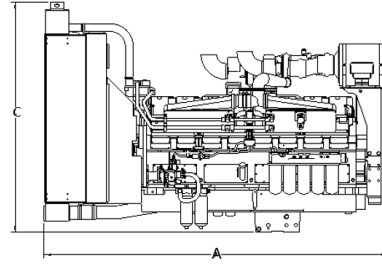
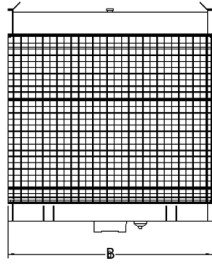
** @ 13 mm H₂O

Fuel Consumption 1500 (50 Hz)

| % | kWm | BHP | L/hr | US Gal./hr |
|-------------------------|-----|-----|------|------------|
| Standby Power | | | | |
| 100 | - | - | - | - |
| Prime Power | | | | |
| 100 | - | - | - | - |
| 75 | - | - | - | - |
| 50 | - | - | - | - |
| 25 | - | - | - | - |
| Continuous Power | | | | |
| 100 | - | - | - | - |

Fuel Consumption 1800 (60 Hz)

| % | kWm | BHP | L/hr | US Gal./hr |
|-------------------------|------|------|------|------------|
| Standby Power | | | | |
| 100 | 1655 | 2220 | 407 | 107.4 |
| Prime Power | | | | |
| 100 | 1470 | 1971 | 363 | 95.9 |
| 75 | 1102 | 1478 | 290 | 76.6 |
| 50 | 735 | 986 | 209 | 55.3 |
| 25 | 368 | 493 | 118 | 31.2 |
| Continuous Power | | | | |
| 100 | 1323 | 1774 | 331 | 87.4 |



*Drawing for illustration purposes only.

Weights and Dimensions

| Length mm | Width mm | Height mm | Weight (dry) kg |
|--------------|-------------|--------------|--------------------|
| 4674 | 2468 | 3100 | 7429 |

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 cummins.com

Our energy working for you.™

