# **QSK19-G3**

Emissions Compliance: EPA Tier 2 @ 50 Hz EPA Tier 2 @ 60 Hz



## > Specification sheet



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#### **Description**

The QSK19 is an in-line 6 cylinder engine with a 19 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) HX83 turbo-charging utilizes exhaust energy with greater efficiency for improved emissions and fuel consumption.

Charge Air Cooling – QSK19 engine requires the use of an Air-to-Air heat exchanger or Charge-Air-Cooler (CAC) to reduce intake manifold temperature and to meet the lower emissions requirements

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	t Engine Out	put	Typical Generator Set Output			utput		
Standby Prime Base		Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)		
kWm/BHP				kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA
634/850	574/770	336/450	609/817	555/744	317/425	572	715	520	650	298	372

#### 1800 rpm (60 Hz Ratings)

Gross Engine Output			Net	Engine Out	e Output Typical Generator Set Output			utput			
Standby	Prime	Base	Standby	Prime	Base	e Standby (ESP)		Prime (PRP)		Base (COP)	
kWm/BHP				kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA
669/897	608/815	500/670	628/842	574/770	466/625	600	750	550	688	440	550

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#### **General Engine Data**

Туре	4 cycle, Turbocharged			
Bore mm	159			
Stroke mm	159			
Displacement Litre	19			
Cylinder Block	Cast iron, 6 cylinder			
Battery Charging Alternator	35A			
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)	84			
Flywheel Dimensions	SAE 0			

## **Coolpac Performance Data**

Cooling System Design	Air-air charge cooled			
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
1695	985	1723	1900

## Fuel Consumption 1500 (50 Hz)

%	kWm	ВНР	L/ph	US gal/ph					
Standby Power									
100	634	850	156	41.2					
Prime Pow	Prime Power								
100	574	770	143	37.8					
75	431	578	109	28.7					
50	287	385	77	20.3					
25	144	193	40	10.6					
Continuous Power									
100	336	450	88	23.2					

# Fuel Consumption 1800 (60 Hz)

%	% kWm		L/ph	US gal/ph					
Standby Power									
100	669	897	172	45.4					
Prime Powe	Prime Power								
100	608	815	155	41.0					
75	456	611	113	29.8					
50	304	408	80	21.2					
25	152	204	46	12.2					
Continuous Power									
100	500	670	125	32.9					

#### **Cummins G-Drive Engines**

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