

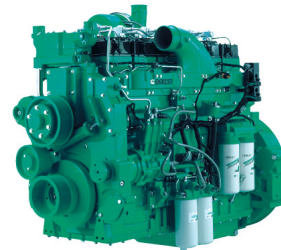
QSK19-G4

Emissions Compliance:

EPA Tier 2 @ 50 Hz

EPA Tier 2 @ 60 Hz

سارنگ نوین رسانی (سهامی خاص)



> Specification sheet

Our energy working for you.™



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 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
634/850	574/770	500/670	609/817	555/744	481/645	572	715	520	650	451	564

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
634/850	559/750	459/615	593/795	526/705	425/570	550	688	500	625	400	500

General Engine Data

Type	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 MCRC
Fuel Filter	Spin on fuel filters with water separator
Lube Oil Filter Type(s)	Spin on full flow filter
Lube Oil Capacity (l)	84
Flywheel Dimensions	SAE 0

Coolpac Performance Data

Cooling System Design	Air-air charge cooled
Coolant Ratio	50% ethylene glycol; 50% water
Coolant Capacity (l)	Engine only – not applicable
Limiting Ambient Temp.**	
Fan Power	
Cooling System Air Flow (m ³ /s)**	
Air Cleaner Type	Dry replaceable element with restriction indicator

** @ 13 mm H₂O

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	BHP	L/ph	US gal/ph
Standby Power				
100	634	850	161	42.6
Prime Power				
100	574	770	147	38.8
75	431	578	111	29.3
50	287	385	78	20.6
25	144	193	40	10.6
Continuous Power				
100	500	670	128	33.9

Fuel Consumption 1800 (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	634	850	165	43.5
Prime Power				
100	559	750	143	37.8
75	420	563	109	28.7
50	280	375	77	20.3
25	140	188	43	11.3
Continuous Power				
100	459	615	118	31.2

Cummins G-Drive Engines

Asia Pacific

10 Toh Guan Road
#07-01
TT International Tradepark
Singapore 608838
Phone 65 6417 2388
Fax 65 6417 2399

Europe, CIS, Middle

East and Africa
Manston Park Columbus Ave
Manston Ramsgate
Kent CT12 5BF. UK
Phone 44 1843 255000
Fax 44 1843 255902

Latin America

Rua Jati, 310, Cumbica
Guarulhos, SP 07180-900
Brazil
Phone 55 11 2186 4552
Fax 55 11 2186 4729

Mexico

Cummins S. de R.L. de C.V.
Eje 122 No. 200 Zona Industrial
San Luis Potosí, S.L.P. 78090
Mexico
Phone 52 444 870 6700
Fax 52 444 870 6811

North America

1400 73rd Avenue N.E.
Minneapolis, MN 55432
USA
Phone 1 763 574 5000
USA Toll-free 1 877 769 7669
Fax 1 763 574 5298