Specification sheet

KTA50-G9

Fuel Optimized



Description

The KTA50-Series benefits from years of technical development and improvement to bring customers an innovative and future proof diesel engine that keeps pace with ever changing generator set requirements.

Recognized globally for its performance under even the most severe climatic conditions, the KTA50-Series is widely acknowledged as the most robust and cost-effective diesel engine in its power range for the generator set market.

Features

Coolpac Integrated Design - Products are supplied complete with cooling package and air cleaner kit for a complete power package. Each component has been specifically developed and rigorously tested for G-Drive products, ensuring high performance, durability and reliability.

Aftercooler – Large capacity integral aftercoolers are supplied with cooling water separate from the engine jacket. This provides cooler, denser intake air for more complete combustion and reduced engine stresses for longer life and low exhaust emissions.

Cooling System – A two pump, two loop system must be employed; i.e. the engine jacket is cooled by one radiator or heat exchanger and the aftercoolers are cooled by a separate radiator or heat exchanger.



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

Pistons – Pistons are dual Ni-resist, aluminium alloy, ground and shaped to compensate for thermal expansion, which assures a precise fit at all normal operating temperatures.

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	
-	-	-	-	-	-	-	-	-	-	-	-

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
1656/2220	1384/1855	1224/1640	1605/1252	1349/1809	1189/1594	1500	1875	1295	1619	1141	1427

General engine data

2 21121 011 211 3111 0 0 0 0 0	
Туре	4 cycle, 60 degree Vee, turbocharged, Low-temp aftercooled
Bore mm	159 mm (6.25 in.)
Stroke mm	159 mm (6.25 in.)
Displacement litre	50.3 litre (3067 in. ³)
Cylinder block	Cast iron, 16 cylinder
Battery charging alternator	55 amps
Starting voltage	24 volt, negative ground
Fuel system	Cummins PT™ direct injection
Fuel filter	Dual spin-on paper element fuel filters with standard water separator
Lube oil filter type(s)	Spin-on full flow filter
Lube oil capacity (I)	204
Flywheel dimensions	SAE 0

Coolpac performance data

Cooling system design	2 pump – 2 loop		
Coolant ratio	50% ethylene glycol; 50% water		
Coolant capacity (I)	240.0		
Limiting ambient temp.** (°C)	50.0		
Fan power (kWm)	33.0		
Cooling system air flow (m³/s)**	28.2		
Air cleaner type	Dry replaceable element with restriction indicator		

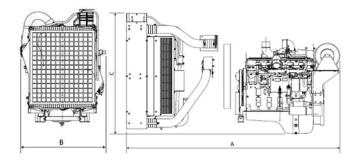
^{** @ 13} mm H₂0

Fuel consumption 1500 (50 Hz)

%	kWm	ВНР	L/ph	g/kWh				
Standby P	Standby Power							
100	-	=	=	-				
Prime Pow	Prime Power							
100	-	-	-	-				
75	-	-	-	-				
50	-	-	-	-				
25	-	-	-	-				
Continuous Power								
100	-	-	-	-				

Fuel consumption 1800 (60 Hz)

%	kWm	ВНР	L/ph	g/kWh				
Standby Power								
100	1656	2220	392	103.6				
Prime Pow	Prime Power							
100	1384	1855	330	87.3				
75	1038	1391	257	68				
50	692	928	180	47.6				
25	346	463	111	29.2				
Continuous Power								
100	1224	1640	299	79				



Weights and dimensions

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
3497	2000	2703	6565

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

