### **Specification sheet**

# **KTA50-G8**

#### **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		Base	(COP)	
	kWm/BHP		kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA	
1429/1915	1200/1608	1100/1475	1397/1872	1168/1566	1068/1432	1340	1675	1120	1400	1025	1282

# **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
-	-	-	-	-	-	-	-	-	-	-	-

## **General engine data**

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. <sup>3</sup> )
Cylinder block	Cast iron, 16 cylinder
Battery charging alternator	35 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)	177
Flywheel dimensions	SAE 0

# **Coolpac performance data**

Cooling system design	2 pump – 2 loop		
Coolant ratio	50% ethylene glycol; 50% water		
Coolant capacity (I)	496		
Limiting ambient temp.** (°C)	48		
Fan power (kWm)	32		
Cooling system air flow (m³/s)**	28.8		
Air cleaner type	Dry replaceable element with restriction indicator		

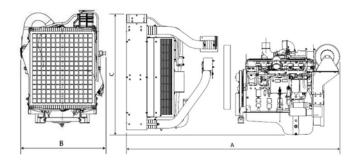
<sup>\*\* @ 13</sup> mm H<sub>2</sub>0

# Fuel consumption 1500 (50 Hz)

%	kWm	ВНР	L/ph	g/kWh				
Standby P	Standby Power							
100	1429	1915	345	91.2				
Prime Pow	Prime Power							
100	1200	1608	289	76.3				
75	900	1206	222	58.7				
50	600	804	155	40.9				
25	300	402	82	21.7				
Continuous Power								
100	1100	1475	266	70.4				

# Fuel consumption 1800 (60 Hz)

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



# Weights and dimensions

Length	Width	Height	Weight (dry)
mm	mm	mm	kg
3725	2000	2516	6580

# **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

