KTA38-G3



Typical picture

> Specification sheet

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Description

The KTA38-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 KTA38-Series is widely acknowledged as the most robust and cost-effective diesel engine in its power range for the generator set market.



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

Aftercooler – Large capacity after cooler results in cooler, denser intake air for more efficient combustion and reduced internal stresses for longer life.

Fuel System - Cummins exclusive low pressure PT™ system with wear compensating pump and integral dual flyweight governor. Camshaft actuated fuel injectors give accurate metering and timing. Fuel lines are internal drilled passages in cylinder heads. Spin-on fuel filter.

Cooling System – Gear driven centrifugal water pump. Large volume water passages provide even flow of coolant around cylinder liners, valves and injectors. Bypass thermostats regulate coolant temperature. Spin-on corrosion resistors check rust and corrosion, control acidity and remove Impurities.

Cylinder Block – Alloy cast iron with removable wet liners. Cross bolt support to main bearing cap provides extra strength and stability.

Turbocharger — Cummins Turbo Technologies (CTT) exhaust gas driven turbocharger mounted at top of engine provides more power, improved fuel economy, altitude compensation, and lower smoke and noise levels.

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 Out	put	Typical Generator Set Output					
Standby	tandby Prime Base Standby Prime Base Standby (ESP)		Prime (PRP) Base (COP)		(COP)						
	kWm/BHP			kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA
895/1200	806/1080	656/880	863/1157	783/1050	633/849	800	1000	728	910	600	750

1800 rpm (60 Hz Ratings)

Gross Engine Output			Net	Engine Out	Engine Output Typical Generator Se			erator Set Ou	Output		
Standby	Prime	Base	Standby	Prime	Base	Standby (ESP)		Prime (PRP)		Base (COP)	
	kWm/BHP			kWm/BHP		kWe	kVA	kWe	kVA	kWe	kVA
1000/1340	910/1220	776/1040	952/1276	872/1169	738/989	900	1125	820	1025	700	875

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General Engine Data

Туре	4 cycle, Turbocharged and After-cooled			
Bore mm	159			
Stroke mm	159			
Displacement Liter	38			
Cylinder Block	12-cylinder, direct injection, 4-cycle diesel engine			
Battery Charging Alternator	35A			
Starting Voltage	24V			
Fuel System	Direct injection, EFC (Electric Fuel control) governor			
Fuel Filter	Dual spin on paper element fuel filters			
Lube Oil Filter Type(s)	Spin on full flow filter			
Lube Oil Capacity (I)	140			
Flywheel Dimensions	SAE 0			

Coolpac Performance Data

Cooling System Design	JWAC				
Coolant Ratio	50% ethylene glycol; 50% water				
Total Coolant Capacity (I)	218.5				
Limiting Ambient Temp (°C)**	50 (50Hz)	56 (60Hz)			
Fan Power (kWm)	20 (50Hz) 35 (60Hz)				
Cooling System Air Flow (m ³ /s)**	18.7 (50Hz) 24.4 (60Hz)				
Air Cleaner Type	Dry replaceable element with restriction indicator				

^{** @ 13} mm H₂0

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	
3172	1752	2004	4990	

Note: Weights represent CoolPac with Light Duty Air Cleaner. See Outline drawings for weights and dimensions for Heavy Duty Air Cleaner configuration.

Fuel Consumption 1500 rpm (50 Hz)

%	kWm	BHP	L/ph	US gal/ph				
Standby Power								
100	895	1200	221	58.3				
Prime Pow	Prime Power							
100	806	1080	198	52.3				
75	604	810	151	39.9				
50	403	540	104	27.3				
25	201	270	54	14.3				
Continuous Power								
100	656	880	164	43.3				

Fuel Consumption 1800 rpm (60 Hz)

%	kWm	BHP	L/ph	US gal/ph				
Standby Power								
100	1000	1340	238	62.9				
Prime Powe	Prime Power							
100	910	1220	217	57.2				
75	683	915	168	44.3				
50	455	610	119	31.4				
25	228	305	73	19.4				
Continuous Power								
100	776	1040	190	50.1				

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



