

KTA38-G3

Specification Sheet



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.

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 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
895/1200	806/1080	656/880	863/1157	783/1050	633/849	800	1000	728	910	600	750

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.

General Engine Data

Type	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 (l)	140
Flywheel Dimensions	SAE 0

Coolpac Performance Data

Cooling System Design	JWAC		
Coolant Ratio	50% ethylene glycol; 50% water		
Total Coolant Capacity (l)	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 H₂O

Weight & Dimensions

Length mm	Width mm	Height mm	Weight (dry) 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 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