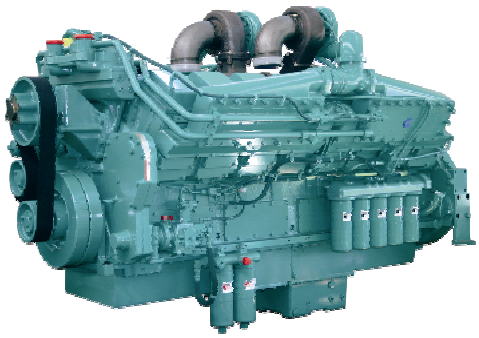
KTA50-G3



> Specification sheet

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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.

Recognised 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.

CE

This engine has been built to comply with CE certification.

ISO 9001

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

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 aftercoolers result in cooler, denser intake air for more efficient combustion and reduced internal stresses for longer life.

Cooling System – Gear driven centrifugal water pump. Large volume water passages provide even flow of coolant around cylinder liners, valves and injectors.

Pistons – Aluminium alloy, cam ground and barrel shaped to compensate for thermal expansion assures precise fit at operating temperatures. Grooved skirt finish provides superior lubrication. Oil cooled for rapid heat dissipation.

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
1227/1645	1097/1470	900/1206	1192/1598	1074/1440	877/1176	1120	1400	1020	1275	842	1052

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
1380/1850	1220/1635	1000/1340	1328/1781	1182/1585	962/1290	1250	1610	1135	1418	924	1154

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General Engine Data

Type	4 cycle, In line, Turbocharged and After-cooled
Bore mm	158.8
Stroke mm	158.8
Displacement Litre	50
Cylinder Block	16-cylinder,direct injection, 4-cycle diesel engine
Battery Charging Alternator	55A
Starting Voltage	24V
Fuel System	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 (l)	177
Flywheel Dimensions	SAE 0

Coolpac Performance Data

Cooling System Design	Jacket Water After Cooled	
Coolant Ratio	50% ethylene glycol; 50% water	
Coolant Capacity (l)	152.0	
Limiting Ambient Temp (°C)**	55.6 (50Hz)	51.0 (60Hz)
Fan Power (kWm)	21.0 (50Hz)	36.0 (60Hz)
Cooling System Air Flow (m^3/s)**	30.3 (50Hz)	34.6 (60Hz)
Air Cleaner Type	Dry replaceable element with restriction indicator	

** @ 13 mm $H^2$0

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
3275	2000	2200	5900

Fuel Consumption 1500 rpm (50 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	1227	1645	293	77.4
Prime Power				
100	1097	1470	261	69.0
75	822	1102	199	52.5
50	548	735	139	36.6
25	275	368	76	20.0
Continuous Power				
100	900	1206	216	57.1

Fuel Consumption 1800 rpm (60 Hz)

%	kWm	BHP	L/ph	US gal/ph
Standby Power				
100	1380	1850	330	87.3
Prime Power				
100	1220	1635	291	76.9
75	915	1226	222	58.7
50	610	818	157	41.6
25	305	409	89	23.6
Continuous Power				
100	1000	1340	242	63.8

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