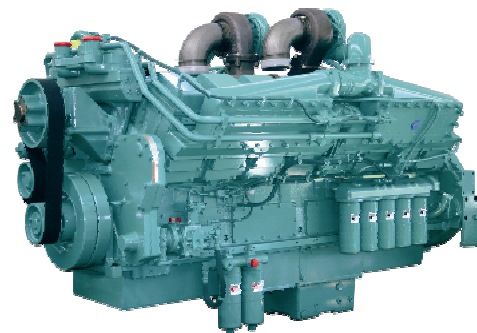


KTA50-G3



> 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.



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

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 H₂O

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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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.