### AC2250

2250kVA / 1800kW
POWERED by CUMMINS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Power Pf. 0.8</th>
<th></th>
<th>AC2250</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standby</td>
<td>kVA</td>
<td>2250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kW</td>
<td>1800</td>
</tr>
<tr>
<td></td>
<td>Prime</td>
<td>kVA</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kW</td>
<td>1600</td>
</tr>
</tbody>
</table>

Standby: Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance with ISO 3046.

Prime: Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. In accordance with ISO 8528, ISO 3046.

- High quality, reliable and complete power unit
- Compact design
- Easy start and maintenance possibility
- Every generating set is subject to a comprehensive test program which includes full load testing, checking and provision of all control and safety shut down functions testing
- Fully engineered with a wide range of options and accessories: Canopy, sound proof canopy and on-road trailer

Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.
**ENGINE**

<table>
<thead>
<tr>
<th>Design</th>
<th>Brushless single bearing, revolving field</th>
</tr>
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<tbody>
<tr>
<td>Stator</td>
<td>2/3 pitch</td>
</tr>
<tr>
<td>Rotor</td>
<td>Single bearing, flexible disc</td>
</tr>
<tr>
<td>Insulation System</td>
<td>Class H</td>
</tr>
<tr>
<td>Standard Temperature Rise</td>
<td>125 - 163°C Continuous</td>
</tr>
<tr>
<td>Exciter Type</td>
<td>Self Excited</td>
</tr>
<tr>
<td>Phase Rotation</td>
<td>A (U), B (V), C (W)</td>
</tr>
<tr>
<td>Alternator Cooling</td>
<td>Direct drive centrifugal blower fan</td>
</tr>
<tr>
<td>AC Waveform Total Harmonic Distortion</td>
<td>No load &lt; 1.5%. Non distorting balanced linear load &lt; 5%</td>
</tr>
<tr>
<td>Telephone Influence Factor (TIF)</td>
<td>&lt;50 per NEMA MG1-22.43</td>
</tr>
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<td>Telephone Harmonic Factor (THF)</td>
<td>&lt;2%</td>
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**CUMMINS**

<table>
<thead>
<tr>
<th>Model</th>
<th>QSK60G4</th>
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<tbody>
<tr>
<td>Engine Power Output at rated rpm</td>
<td>kWm 1915</td>
</tr>
<tr>
<td></td>
<td>HP 2567</td>
</tr>
<tr>
<td>Aspiration and Cooling</td>
<td>Turbocharged and Low Temperature Aftercooled (2 Pump / 2 Loop)</td>
</tr>
<tr>
<td>Total Displacement</td>
<td>Litre 60.2</td>
</tr>
<tr>
<td>No. of Cylinders and Build</td>
<td>16 V</td>
</tr>
<tr>
<td>Engine Speed</td>
<td>rpm 1500</td>
</tr>
<tr>
<td>Bore and Stroke</td>
<td>mmxmm 159x190</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>14.5:1</td>
</tr>
<tr>
<td>Governor</td>
<td>Electric</td>
</tr>
<tr>
<td>Fuel Consumption at full load</td>
<td>L/hr 394</td>
</tr>
<tr>
<td>Fuel Tank Capacity</td>
<td>Litre OPEN: N/A / CANOPY: 2000</td>
</tr>
<tr>
<td>Oil Capacity</td>
<td>Litre 280</td>
</tr>
<tr>
<td>Coolant Capacity</td>
<td>Litre 482</td>
</tr>
<tr>
<td>Radiator Cooling Air</td>
<td>m³/min 1991.4</td>
</tr>
<tr>
<td>Air Intake – Engine</td>
<td>m³/min 144.3</td>
</tr>
<tr>
<td>Exhaust Gas Flow</td>
<td>m³/min 336.6</td>
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- Heavy duty Cummins diesel engine
- Four stroke, water cooled, turbocharged & aftercooled
- Direct injection fuel system
- Electronic Governor system
- 12/24 V D.C. starter and charge alternator
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables
- Flexible fuel connection hoses and manual oil sump drain valve
- Industrial capacity exhaust silencer and steel bellows
- Jacket water heater(at automatic models)
- Operation manuals and circuit diagram documents

**ALTERNATOR**

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- Brushless, single bearing system, flexible disc, 4 poles
- Insulation class H
- Standard degree of protection IP21 (“IP22/IP23 is available.”)
- Self-exciting and self-regulating
- Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator
- Stator winding with 2/3 pitch for improved harmonics
CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

1. Auto Mains Failure Control Panel
   Panel equipments:
   - Control with AMF module
   - Static battery charger
   - Emergency stop push button

   a) Generating set control module DSE 7320 features:
      - The module is used to monitor a mains supply and starts and stops a standby generating set
      - Micro-processor based design
      - Automatic control of mains and generator contactors
      - Monitors engine performance and AC power output
      - LED alarm indication
      - Front panel configuration of timers and alarm trip points
      - Easy push button control

   b) Metering via LED display:
      - Generator Volts (L-L / L-N)
      - Engine oil pressure (PSI-Bar)
      - Generator Ampere (L1,L2,L3)
      - Engine temperature (°C & °F)
      - Generator Frequency (Hz)
      - Plant battery volts
      - Engine hours run
      - Mains Volts (Ph-Ph/Ph-N)
      - Generator kVA, kWh
      - Generator kW as % of rated kW setting
      - Generator Cos (σ)

   c) Alarms:
      - Over and Under Speed
      - Low and High Battery Volt.
      - Start and Stop Failure
      - Charge fail
      - Over Current
      - Under / Over Generator Voltage
      - Low Oil Pressure
      - Emergency stop
      - High engine temperature
      - kW overload
      - Unbalanced load
      - Independent earth fault trip

   d) LED indications
      Four configurable LED's like:
      - Mains available
      - Generator available
      - Mains on load
      - Generator on load

2. Power Outlet Terminal Board Mounted on the Genset Base Frame

OPTIONAL EQUIPMENTS

Diesel Engine
- Oil heater

Alternator
- 3/4 Pole Output Circuit Breaker
- Anti-condensation Heater

Panel
- Charge ammeter
- Transfer Switch 3 Pole
- Transfer Switch 4 Pole
- Earth Fault, single set

Accessories
- Bulk fuel tank
- Automatic filling system
- Fuel-water separator filter
- Low fuel level alarm
- Residential silencer
- Enclosure or sound proof canopy
- Trailer
- Manual oil drain pump
- Tool kit for maintenance
**CHASSIS**

- The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- Anti-vibration pads are fixed between the engine/alternator feet and the base frame
- Base frame design incorporates an integral fuel tank (Up to 750 kVA)
- The generating set can be lifted or carefully pushed/pulled by the base frame
- Dial type fuel gauge and drain plug on the fuel tank
- Forklift pockets within base frame (up to 500kVA)

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Type</th>
<th>Dimensions (LxWxH)</th>
<th>DRY WEIGHT</th>
</tr>
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<tbody>
<tr>
<td>OPEN TYPE</td>
<td>5960x2250x2541</td>
<td>14200 kg</td>
</tr>
<tr>
<td>SOUND ATTENUATED TYPE</td>
<td>9000x2800x4394</td>
<td>18000 kg</td>
</tr>
</tbody>
</table>

**CANOPY**

- All canopy parts are designed with modular principles
- Without welding assembly
- Doors on each side
- All metal canopy parts are painted by electrostatic polyester powder paint
- Exhaust silencer is protected against environment influences
- Thermally insulated engine exhaust system
- Emergency stop push button is installed outside of the canopy
- Easy lifting and moving
- Easy maintenance and operation

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