**APD360C**

**POWER YOUR FUTURE**

**360 kVA / 288 kW POWERED by CUMMINS**

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**DIESEL GENERATING SET** 400/230 V - 50 Hz - 3 Phase

<table>
<thead>
<tr>
<th>MODEL</th>
<th>APD360C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>360 kVA</td>
</tr>
<tr>
<td>Pf. 0.8</td>
<td></td>
</tr>
<tr>
<td>Standby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>327 kW</td>
</tr>
<tr>
<td>Prime</td>
<td></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

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

www.aksapowergen.com
**ENGINE**

<table>
<thead>
<tr>
<th>CUMMINS</th>
<th>6LTTA9.5-G1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Engine Power Output at rated rpm</strong></td>
<td></td>
</tr>
<tr>
<td>kW/m</td>
<td>320</td>
</tr>
<tr>
<td>HP</td>
<td>429</td>
</tr>
<tr>
<td><strong>Aspiration and Cooling</strong></td>
<td>Turbocharged &amp; charge air cooled</td>
</tr>
<tr>
<td><strong>Total Displacement</strong></td>
<td>Litre</td>
</tr>
<tr>
<td></td>
<td>9.5</td>
</tr>
<tr>
<td><strong>No. of Cylinders and Build</strong></td>
<td>6- Inline</td>
</tr>
<tr>
<td><strong>Engine Speed</strong></td>
<td>rpm</td>
</tr>
<tr>
<td></td>
<td>1500</td>
</tr>
<tr>
<td><strong>Bore and Stroke</strong></td>
<td>mmxmm</td>
</tr>
<tr>
<td></td>
<td>116.5x148</td>
</tr>
<tr>
<td><strong>Compression Ratio</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.6:1</td>
</tr>
<tr>
<td><strong>Governor</strong></td>
<td>Electronic</td>
</tr>
<tr>
<td><strong>Fuel Consumption at full load</strong></td>
<td>L/hr</td>
</tr>
<tr>
<td></td>
<td>70</td>
</tr>
<tr>
<td><strong>Fuel Tank Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td></td>
<td>470</td>
</tr>
<tr>
<td><strong>Oil Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td></td>
<td>32.4</td>
</tr>
<tr>
<td><strong>Coolant Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td></td>
<td>65.1</td>
</tr>
<tr>
<td><strong>Radiator Cooling Air</strong></td>
<td>m³/min</td>
</tr>
<tr>
<td></td>
<td>708</td>
</tr>
<tr>
<td><strong>Air Intake – Engine</strong></td>
<td>m³/min</td>
</tr>
<tr>
<td></td>
<td>18.6</td>
</tr>
<tr>
<td><strong>Exhaust Gas Flow</strong></td>
<td>kg/min</td>
</tr>
<tr>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

- 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**

<table>
<thead>
<tr>
<th>Design</th>
<th>Brushless single bearing, revolving field</th>
</tr>
</thead>
<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>
<tr>
<td>Telephone Harmonic Factor (THF)</td>
<td>&lt;2%</td>
</tr>
</tbody>
</table>

- Brushless, single bearing system, flexible disc, 4 poles
- Impregnation with tropicalised epoxy varnish
- Insulation class H
- Solid state Automatic Voltage Regulator
- Standard degree of protection IP21 (*IP22/IP23 is available.*)
- Stator winding with 2/3 pitch for improved harmonics
- Self-exciting and self-regulating
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
         STOP/RESET - MANUAL – TEST - AUTO – MUTE ALARM – START

   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 1000 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>OPEN TYPE</th>
<th></th>
<th>SOUND ATTENUATED TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>mm</td>
<td>2840X1300X1845</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>kg</td>
<td>2740</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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