**APD275P**

**POWER YOUR FUTURE**

275kVA / 220 kW POWERED by PERKINS

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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>APD275P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>kVA 275</td>
</tr>
<tr>
<td>Standby</td>
<td>kW 220</td>
</tr>
<tr>
<td>Prime</td>
<td>kVA 250</td>
</tr>
<tr>
<td></td>
<td>kW 200</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.

[www.aksapowergen.com](http://www.aksapowergen.com)
### ENGINE

<table>
<thead>
<tr>
<th>PERKINS</th>
<th>1206A-E70TTAG3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Engine Power Output</strong></td>
<td>kWm</td>
</tr>
<tr>
<td><strong>at rated rpm</strong></td>
<td>HP</td>
</tr>
<tr>
<td><strong>Aspiration and Cooling</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Displacement</strong></td>
<td>Litre</td>
</tr>
<tr>
<td><strong>No. of Cylinders and Build</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Engine Speed</strong></td>
<td>rpm</td>
</tr>
<tr>
<td><strong>Bore and Stroke</strong></td>
<td>mm×mm</td>
</tr>
<tr>
<td><strong>Compression Ratio</strong></td>
<td></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><strong>Fuel Tank Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td><strong>Oil Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td><strong>Coolant Capacity</strong></td>
<td>Litre</td>
</tr>
<tr>
<td><strong>Radiator Cooling Air</strong></td>
<td>m³/min</td>
</tr>
<tr>
<td><strong>Air Intake – Engine</strong></td>
<td>m³/min</td>
</tr>
<tr>
<td><strong>Exhaust Gas Flow</strong></td>
<td>m³/min</td>
</tr>
</tbody>
</table>

- Heavy duty Perkins diesel engine
- Four stroke, water cooled, turbocharged
- 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>Brushless single bearing, revolving field</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
</tr>
<tr>
<td><strong>Stator</strong></td>
</tr>
<tr>
<td><strong>Rotor</strong></td>
</tr>
<tr>
<td><strong>Insulation System</strong></td>
</tr>
<tr>
<td><strong>Standard Temperature Rise</strong></td>
</tr>
<tr>
<td><strong>Exciter Type</strong></td>
</tr>
<tr>
<td><strong>Phase Rotation</strong></td>
</tr>
<tr>
<td><strong>Alternator Cooling</strong></td>
</tr>
<tr>
<td><strong>AC Waveform Total Harmonic Distortion</strong></td>
</tr>
<tr>
<td><strong>Telephone Influence Factor (TIF)</strong></td>
</tr>
<tr>
<td><strong>Telephone Harmonic Factor (THF)</strong></td>
</tr>
</tbody>
</table>

- 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

STOP/RESET - MANUAL –TEST- AUTO – MUTE ALARM – START

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

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)

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 500 kVA)

DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>OPEN TYPE</th>
<th>SOUND ATTENUATED TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>mm  2750x1300x1772</td>
<td>mm 3963x1356x2171</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>kg  2350</td>
<td>kg  3100</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