POWER YOUR FUTURE

APD888C

888kVA / 710.4 kW
POWERED by CUMMINS

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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>APD888C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Pf. 0.8</td>
<td></td>
</tr>
<tr>
<td>Standby</td>
<td>kVA 888</td>
</tr>
<tr>
<td></td>
<td>kW 710.4</td>
</tr>
<tr>
<td>Prime</td>
<td>kVA 800</td>
</tr>
<tr>
<td></td>
<td>kW 640</td>
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</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><strong>Model</strong></th>
<th>CUMMINS KTA38G2B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine Power Output at rated rpm</strong></td>
<td>kWm 790</td>
</tr>
<tr>
<td></td>
<td>HP 1058</td>
</tr>
<tr>
<td><strong>Aspiration and Cooling</strong></td>
<td>Turbocharged &amp; Aftercooled</td>
</tr>
<tr>
<td><strong>Total Displacement</strong></td>
<td>Litre 38</td>
</tr>
<tr>
<td><strong>No. of Cylinders and Build</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Engine Speed</strong></td>
<td>rpm 1500</td>
</tr>
<tr>
<td><strong>Bore and Stroke</strong></td>
<td>mm x mm 159 x 159</td>
</tr>
<tr>
<td><strong>Compression Ratio</strong></td>
<td>14.5:1</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 167.3</td>
</tr>
<tr>
<td><strong>Fuel Tank Capacity</strong></td>
<td>Litre Open: 900/Canopy: 630</td>
</tr>
<tr>
<td><strong>Oil Capacity</strong></td>
<td>Litre 135.1</td>
</tr>
<tr>
<td><strong>Coolant Capacity</strong></td>
<td>Litre 263.8</td>
</tr>
<tr>
<td><strong>Radiator Cooling Air</strong></td>
<td>m³/min 1164.75</td>
</tr>
<tr>
<td><strong>Air Intake – Engine</strong></td>
<td>m³/min 55.2</td>
</tr>
<tr>
<td><strong>Exhaust Gas Flow</strong></td>
<td>m³/min 158.04</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

| **Design** | Brushless single bearing, revolving field |
| **Stator** | Single bearing, flexible disc |
| **Rotor** | Flexible disc, 4 poles |
| **Insulation System** | Class H |
| **Standard Temperature Rise** | 125 - 163°C Continuous |
| **Exciter Type** | Self Excited |
| **Phase Rotation** | A (U), B (V), C (W) |
| **Alternator Cooling** | Direct drive centrifugal blower fan |
| **AC Waveform Total Harmonic Distortion** | No load < 1.5%. Non distorting balanced linear load < 5% |
| **Telephone Influence Factor (TIF)** | <50 per NEMA MG1-22.43 |
| **Telephone Harmonic Factor (THF)** | <2% |

- Brushless, single bearing system, flexible disc, 4 poles
- Insulation class H
- Standard degree of protection IP21 (*IP22/IP23 is available.*)
- Self-exiting 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
        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 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 500 kVA)

DIMENSIONS

<table>
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<tr>
<th>OPEN TYPE</th>
<th></th>
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<tbody>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>mm</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>kg</td>
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<table>
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<th>SOUND ATTENUATED TYPE</th>
<th></th>
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<tr>
<td>DIMENSIONS (LxWxH)</td>
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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