**APD-EPAP10S**

**Power**
- Pf. 0.8

**Standby**
- kVA 9
- kW 7.2

**Prime**
- kVA 8
- kW 6.4

**Model**
- APD-EPAP10S

**Comparative Table**

<table>
<thead>
<tr>
<th>Power Pf. 0.8</th>
<th>APD-EPAP10S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby</td>
<td>kVA 9</td>
</tr>
<tr>
<td></td>
<td>kW 7.2</td>
</tr>
<tr>
<td>Prime</td>
<td>kVA 8</td>
</tr>
<tr>
<td></td>
<td>kW 6.4</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 and checking and providing of all control and safety shut down functions testing
- Full engineered with a wide range of options and accessories: Canopy, sound proof canopy and on road trailer

**ENGINE**

- Heavy duty Perkins diesel engine
- Four stroke, water cooled, turbocharged
- Direct injection fuel system
- Mechanical governor system
- 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**

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

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

www.aksapowergen.com
# ENGINE

## PERKINS

<table>
<thead>
<tr>
<th>Model</th>
<th>403D-11G</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Certification</td>
<td>Tier 4</td>
</tr>
<tr>
<td>Engine Power Output at rated rpm</td>
<td></td>
</tr>
<tr>
<td>BHP</td>
<td>15.28</td>
</tr>
<tr>
<td>kWm</td>
<td>11.4</td>
</tr>
<tr>
<td>HP</td>
<td>15.5</td>
</tr>
<tr>
<td>Aspiration and Cooling</td>
<td>Natural</td>
</tr>
<tr>
<td>Total Displacement Cu.in. Litre</td>
<td>69.0178  1.131</td>
</tr>
<tr>
<td>No. of Cylinders and Build</td>
<td>3-Inline</td>
</tr>
<tr>
<td>Engine Speed rpm</td>
<td>1800</td>
</tr>
<tr>
<td>Bore and Stroke inches mmxmm</td>
<td>3.031x3.188  77x81</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>23:1</td>
</tr>
<tr>
<td>Governor</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Starter Motor Voltage</td>
<td>12 V</td>
</tr>
<tr>
<td>Fuel Consumption @ 100 % load gal/hr</td>
<td>0.823</td>
</tr>
<tr>
<td>Fuel Consumption @ 75% load gal/hr</td>
<td>0.641</td>
</tr>
<tr>
<td>Fuel Consumption @ 50% load gal/hr</td>
<td>0.465</td>
</tr>
<tr>
<td>Fuel Consumption @ 25% load gal/hr</td>
<td>N/A</td>
</tr>
<tr>
<td>Fuel Tank Capacity gal. Litre</td>
<td>N/A</td>
</tr>
<tr>
<td>Oil Capacity gal. Litre</td>
<td>1.293  4.9</td>
</tr>
<tr>
<td>Coolant Capacity gal. Litre</td>
<td>1.372  5.2</td>
</tr>
<tr>
<td>Radiator Cooling Air cfm m³/min</td>
<td>1419  40.2</td>
</tr>
<tr>
<td>Air Intake – Engine cfm m³/min</td>
<td>31.78  0.9</td>
</tr>
<tr>
<td>Exhaust Gas Flow cfm m³/min</td>
<td>77.69  2.2</td>
</tr>
<tr>
<td>Standard operating temp degree of radiator °C</td>
<td>40</td>
</tr>
<tr>
<td>Sound Level @1 meter / @ 7 meter dB</td>
<td>TBD</td>
</tr>
</tbody>
</table>

## ALTERNATOR

<table>
<thead>
<tr>
<th>Model</th>
<th>Marathon-GM-8.6-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size(mm)</td>
<td>365x292x375</td>
</tr>
<tr>
<td>Design</td>
<td>Brushless single bearing, revolving field</td>
</tr>
<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 °C Prime / 150 °C Stand by</td>
</tr>
<tr>
<td>Exciter Type</td>
<td>Self Excited(PMG excitation is optional)</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>
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 Gen-set 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
- Low fuel level alarm
- Residential silencer
- Enclosure or sound proof canopy
- Trailer
- Manual oil drain pump
- Tool kit for maintenance
- Fuel-water separator
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) NON-UL
- 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>OPEN TYPE</th>
<th>SOUND ATTENUATED TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>inches</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>Lb.</td>
</tr>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>inches</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>Lb.</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