### AD630

**Power**
- Pf. 0.8

<table>
<thead>
<tr>
<th>Power</th>
<th>Standby</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>kVA</strong></td>
<td>630</td>
<td>575</td>
</tr>
<tr>
<td><strong>kW</strong></td>
<td>504</td>
<td>460</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

**POWERED by Doosan**

630kVA / 504kW

**630kVA / 504kW POWERED by Doosan**

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

**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><strong>Model</strong></th>
<th><strong>DOOSAN</strong></th>
<th><strong>DP180LA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine Power Output at rated rpm</strong></td>
<td>kWm</td>
<td>552</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>740</td>
</tr>
<tr>
<td><strong>Aspiration and Cooling</strong></td>
<td></td>
<td>Turbocharged intercooled</td>
</tr>
<tr>
<td><strong>Total Displacement</strong></td>
<td>Litre</td>
<td>18.273</td>
</tr>
<tr>
<td><strong>No. of Cylinders and Build</strong></td>
<td>rpm</td>
<td>10-Cylinder, V-type</td>
</tr>
<tr>
<td><strong>Engine Speed</strong></td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td><strong>Bore and Stroke</strong></td>
<td>mm</td>
<td>xmm</td>
</tr>
<tr>
<td><strong>Compression Ratio</strong></td>
<td></td>
<td>15:1</td>
</tr>
<tr>
<td><strong>Governor</strong></td>
<td></td>
<td>Electronic control</td>
</tr>
<tr>
<td><strong>Fuel Consumption at full load</strong></td>
<td>L/hr</td>
<td>123.6</td>
</tr>
<tr>
<td><strong>Fuel Tank Capacity</strong></td>
<td>Litre</td>
<td>Open: 850/Canopy:850</td>
</tr>
<tr>
<td><strong>Oil Capacity</strong></td>
<td>Litre</td>
<td>34</td>
</tr>
<tr>
<td><strong>Coolant Capacity</strong></td>
<td>Litre</td>
<td>91</td>
</tr>
<tr>
<td><strong>Radiator Cooling Air</strong></td>
<td>m³/min</td>
<td>700</td>
</tr>
<tr>
<td><strong>Air Intake – Engine</strong></td>
<td>m³/min</td>
<td>33.2</td>
</tr>
<tr>
<td><strong>Exhaust Gas Flow</strong></td>
<td>m³/min</td>
<td>106</td>
</tr>
</tbody>
</table>

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

- 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

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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 3Pole
- 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>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPEN TYPE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>mm</td>
<td>3193<em>1550</em>2048</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>kg</td>
<td>3500</td>
</tr>
<tr>
<td><strong>SOUND ATTENUATED TYPE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIMENSIONS (LxWxH)</td>
<td>mm</td>
<td>4813<em>1606</em>2620</td>
</tr>
<tr>
<td>DRY WEIGHT</td>
<td>kg</td>
<td>5000</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