## APD330P







330KVA / 264KW POWERED by PERKINS

# DIESEL GENERATING SET 400/230 V - 50 Hz

|                  | MODEL   |     | APD330P |
|------------------|---------|-----|---------|
| Power<br>Pf. 0.8 | Standby | kVA | 330     |
|                  |         | kW  | 264     |
|                  | Prime   | kVA | 300     |
|                  |         | kW  | 240     |

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

| PERKINS                       |        |                                       |  |  |  |  |  |
|-------------------------------|--------|---------------------------------------|--|--|--|--|--|
| Model                         |        | 1506A-E88TAG5                         |  |  |  |  |  |
| Engine Power Output           | kWm    | 307                                   |  |  |  |  |  |
| at rated rpm                  | HP     | 412                                   |  |  |  |  |  |
| Aspiration and Cooling        |        | Air to air after cooled, turbocharged |  |  |  |  |  |
| Total Displacement            | Litre  | 8.8                                   |  |  |  |  |  |
| No. of Cylinders and Build    |        | 6 ; In-line                           |  |  |  |  |  |
| Engine Speed                  | rpm    | 1500                                  |  |  |  |  |  |
| Bore and Stroke               | mmxmm  | 112×149                               |  |  |  |  |  |
| Compression Ratio             |        | 16.1:1                                |  |  |  |  |  |
| Governor                      |        | Electronic                            |  |  |  |  |  |
| Fuel Consumption at full load | L/hr   | 64.9                                  |  |  |  |  |  |
| Fuel Tank Capacity            | Litre  | 470                                   |  |  |  |  |  |
| Oil Capacity                  | Litre  | 41                                    |  |  |  |  |  |
| Coolant Capacity              | Litre  | 33.2                                  |  |  |  |  |  |
| Radiator Cooling Air          | m³/min | 370                                   |  |  |  |  |  |
| Air Intake – Engine           | m³/min | 18.3                                  |  |  |  |  |  |
| Exhaust Gas Flow              | m³/min | 50                                    |  |  |  |  |  |

- ✓ Heavy duty Perkins diesel engine
- ✓ Four stroke, water cooled, turbocharged and air cooled
- ✓ 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                                | 2/3 pitch  |
| Rotor                                 | Single bearing, flexible disc                            |
| 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-exciting 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)

# DEEP REALECTIONICS BUT THE STATE OF THE STA

DSE 7320

#### 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

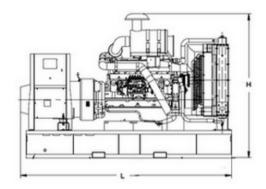
#### **Panel**

- ✓ Charge ammeter
- ✓ Transfer Switch 3 Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

#### **Accessories**

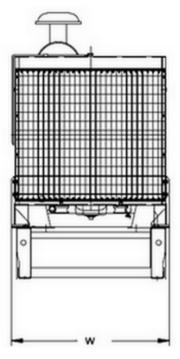
- ✓ Bulk fuel tank
- ✓ Automatic filling system
- √ Fuel-water separator filter
- ✓ Low fuel level alarm
- √ Residential silencer
- ✓ Enclosure or sound proof canopy
- ✓ Trailer
- √ Manual oil drain pump
- ✓ Tool kit for maintenance

# **CHASSIS**



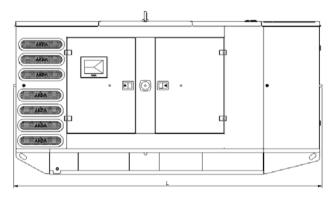
- ✓ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 1000 kVA)
   ✓ The generating set can be lifted or carefully 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**



| OPEN TYPE             |    |                |  |  |  |  |  |
|-----------------------|----|----------------|--|--|--|--|--|
| DIMENSIONS (LxWxH)    | mm | 2750*1300*1777 |  |  |  |  |  |
| DRY WEIGHT            | kg | 2350           |  |  |  |  |  |
| SOUND ATTENUATED TYPE |    |                |  |  |  |  |  |
| DIMENSIONS (LxWxH)    | mm | 3963*1356*2171 |  |  |  |  |  |
| DRY WEIGHT            | kg | 3020           |  |  |  |  |  |

# **CANOPY**



T-

- 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