AP750-6

B Perkins

Sa POWER GENERATION





750KVA / 600KW POWERED by PERKINS

DIESEL GENERATING SET 480/277 V,440/254V,380/220V,220/127V - 60 Hz

| | MODEL | | AP750-6 |
|------------------|---------|-----|---------|
| Power Pf. 0.8 | Standby | kVA | 750 |
| | | kW | 600.0 |
| | Prime | kVA | 681.25 |
| | | kW | 545.0 |

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.

- \checkmark 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



ENGINE

| PERKINS | | | | |
|-------------------------------|--------|---|--|--|
| Model | | 2806A-E18TAG3 | | |
| Engine Power Output | kWm | 678.2 | | |
| at rated rpm | HP | 909 | | |
| Aspiration and Cooling | | Turbocharged, air to air charge cooling | | |
| Total Displacement | Litre | 18.13 | | |
| No. of Cylinders and Build | | 6 ; In-line | | |
| Engine Speed | rpm | 1800 | | |
| Bore and Stroke | mmxmm | 145×183 | | |
| Compression Ratio | | 14.5:1 | | |
| Governor | | Electronic | | |
| Fuel Consumption at full load | L/hr | 145 | | |
| Fuel Tank Capacity | Litre | 1150 | | |
| Oil Capacity | Litre | 62 | | |
| Coolant Capacity | Litre | 61 | | |
| Radiator Cooling Air | m³/min | 852 | | |
| Air Intake – Engine | m³/min | 50.5 | | |
| Exhaust Gas Flow | m³/min | 135.7 | | |

✓ Heavy duty Perkins diesel engine

✓ Four stroke, water cooled, turbocharged and air charge 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 | 105 - 130°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 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)

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

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:

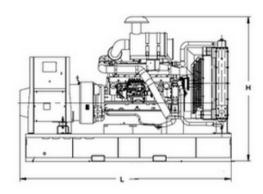
- ✓ Mains available
- ✓ Generator available
- ✓ Mains on load
- ✓ Generator on load

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CHASSIS

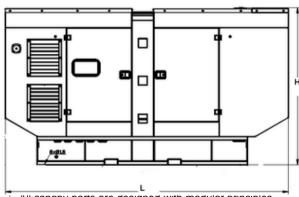


- \checkmark The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 750 kVA)
- ✓ The generating set can be lifted or carefully pushed / pulled by the base frame
- Dial type fuel gauge and drain plug on the fuel tank \checkmark
- ✓ Forklift pockets within base frame (up to 500kVA)

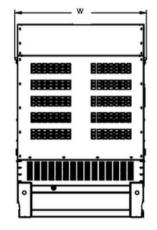
DIMENSIONS

| OPEN TYPE | | | | | | |
|--------------------|----|----------------|--|--|--|--|
| DIMENSIONS (LxWxH) | mm | 3450*1800*2178 | | | | |
| DRY WEIGHT | kg | 4500 | | | | |
| | | 4000 | | | | |
| | | ATED TYPE | | | | |
| | | | | | | |

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

Aksa Power Generation Evren Mah.Gulbahar Caddesi 1.Sokak Gunesli-Istanbul-TURKEY Tel:+90 212 478 66 66 Fax:+90 212 657 55 16 E-mail: aksa@aksapowergen.com www.aksapowergen.com Aksa Power Generation is a member of a kazanci Holding www.aksa.com.tr