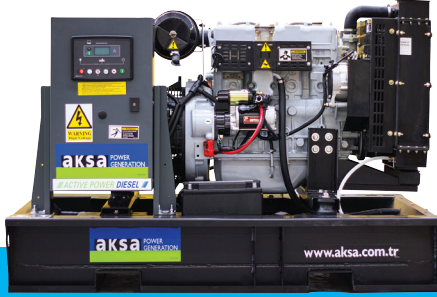


AKSA POWER DIESEL GENERATING SETS



12
20 kVA

9,6
16 kW



| Generating Set Model | Power Pf.0,8 400 / 230 V - 50 Hz | |
|----------------------|-------------------------------------|-----------|
| | Standby kVA | Prime kVA |
| APD 12 E | 12 | 11 |
| APD 12 A | 11,5 | 10,6 |
| APD 16 A | 15,5 | 14,5 |
| APD 20 A | 20 | 18 |

Standby: Continuous running at variable load for duration of an emergency.No overload is permitted on these ratings.

Prime: Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. Contact us for the other running periods.

STANDARD GENSET SPECIFICATIONS

ENGINE

- Heavy duty diesel engine
- Four stroke, water cooled.
- Mechanical governor control.
- Electronic governor control APD 12E
- Direct injection fuel system (APD 12 except)
- 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)
- Manual for use and installaion.

ALTERNATOR

- Brushless, single bearing system, flexile disc, 4 poles
- Insulation class H
- Standard degree of protection IP21
- Self-exciting and self-regulating
- Impregnation with tropicalised epoxy varnish
- Solid stade Automatic Voltage Regulator (APD 12E transformer)

CHASSIS

- Steel chassis and antivibration pads
- Base frame design incorporates an integral fuel tank.
- 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

CANOPY

- All canopy parts are designed with modular principles
- Without welding assembly
- Lockable doors on each side
- Panel window
- All metal canopy parts are painted by electrostatic polyester powder paint
- Thermally insulated engine exhaust system
- Emergency stop push button is installed outside of canopy
- Easy lifting and moving
- Easy maintenance and operation

QUALITY STANDARDS

- The generating sets have been designed to meet ISO 9001 Certificate.

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 - P 602

Panel equipments:

- Control with DSE, model 6020 module
- Static battery charger
- Emergency stop push button.

a) DSE 6020 Module Features:

- Automatic control generating set start and stop
- 3 phase generator and mains voltage monitoring
- Transfer between mains and generator power
- Scrolling digital LCD display
- 4-line, 64x132 graphic display with LED backlight
- Front panel configuration of timers and alarm trip points
- Easy push button control
STOP/RESET - MANUAL - AUTO - TEST - START
- LCD display Scroll push-button
- Page button
- Remote start
- Micro processor controlled

b) Metering via LCD Display:

- Generator Volt (L-L, L-N)
- Generator Ampere (L1,L2,L3)
- Generator Frequency (Hz)
- Event log(5) events
- Engine hours run
- Engine oil pressure (PSI)
- Engine speed RPM
- Engine cooling temperature (°C)
- Plant battery volts
- Mains Volts (L-L, L-N)
- Mains frequency (Hz)

c) Protections

- Shutdowns**
- Under/Over Speed
 - Engine low oil pressure
 - High coolant temperature
 - Over current electrical trip
 - Fail to start
 - Under/over generator frequency
 - Under/over generator voltage
 - Emergency stop
 - Oil pressure sensor open
 - Coolant temp. sensor open

Warning

- Under/Over generator voltage
- Over/under generator frequency
- Over/under speed
- Engine low oil pressure
- High coolant temperature
- Battery high/low voltage
- Charge alternator failure
- Fail to stop

P452 is used for APD 12E.

d) LED Indications:

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



DSE 6020

DIESEL GENERATING SETS
400 / 230 V - 50Hz
GROUP

| Model | | APD 12 E | APD 12 A | APD 16 A | APD 20 A |
|---------|---------|----------|----------|----------|----------|
| Power | Standby | kVA 12 | 11,5 | 15,5 | 20 |
| | | kW 9,6 | 9,2 | 12,4 | 16 |
| Pf. 0,8 | Prime | kVA 11 | 10,6 | 14,5 | 18 |
| | | kW 8,8 | 8,5 | 11,6 | 14,4 |

DIESEL ENGINE

| | | | | | |
|--|----------------------|------------|------------|------------|----------|
| Engine Make | | Aksa | | | |
| Model | | A2CRX08 | A3CRX14 | A4CRX18 | A4CRX24 |
| Gross Engine Power Output (at rated rpm) | kW | 13,2 | 13,2 | 16,5 | 21 |
| | HP | 18 | 18 | 22 | 28 |
| Aspiration and Cooling | | Natural | | | |
| Total Displacement | Liter | 0,794 | 1,4 | 1,8 | 2,54 |
| No. of Cylinders and Build | | 2 - V | 3 - Inline | 4 - Inline | |
| Engine Speed | rpm | 3000 | | 1500 | |
| Bore ve Stroke | mmxmm | 80 x 79 | 80 x 90 | 80 x 90 | 90 x 100 |
| Compression Ratio | | 24:1 | | 18:1 | |
| Governor | | Electronic | | Mechanic | |
| Fuel Consumption at prime load | L/h. | 4 | 3,4 | 4,1 | 5,4 |
| Fuel Tank Capacity | Liter | 15 | 32 | 32 | 95 |
| Oil Capacity | Liter | 2,3 | 4,5 | 5 | 8,5 |
| Coolant Capacity (radiator and engine) | Liter | 6,4 | 7 | 9 | 18,5 |
| Radiator Cooling Air | m ³ /min. | 48 | 80 | 120 | 174 |
| Air intake - Engine | m ³ /min. | 1 | 1,6 | 2 | 1,542 |
| Exhaust Gas Flow | m ³ /min. | 2,07 | 4,5 | 5,8 | 3,9 |

IC: Inter Cooler
AC: After Cooler

Open Type

| | | | | | |
|--------------------------------------|-----|---|------------------|------------------|-------------------|
| Dimensions (Length x Widht x Height) | m | - | 1400 x 760 x 927 | 1400 x 760 x 927 | 1500 x 900 x 1061 |
| Dry Weight | kg. | - | 350 | 390 | 640 |

Sound Attenuated Type

| | | | | | |
|--------------------------------------|-----|------------------|-------------------|-------------------|-------------------|
| Dimensions (Length x Widht x Height) | m | 1152 x 776 x 998 | 1522 x 823 x 1127 | 1672 x 823 x 1127 | 1933 x 963 x 1213 |
| Dry Weight | kg. | 252 | 470 | 520 | 870 |

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

Optional Equipments
Diesel Engine

- Remote radiator

Alternator

- 3 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 or manual fuel filling system
- Fuel - water separator filter
- Low fuel level alarm
- Residential silencer
- Enclosure or soundproof canopy
- Trailer
- Manual oil sump drain pump
- Tool kit for maintenance



Aksa makes its sound attenuated generator sets sound pressure level tests in accordance with Directive 2000/14/EC validation of the sound level test has been approved by the notified body szutest

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