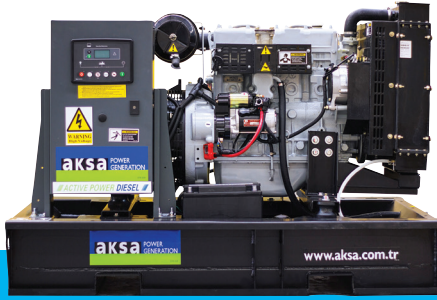


AKSA POWER DIESEL GENERATING SETS



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
DIESEL ENGINE

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
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.

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