

# AKSA POWER DIESEL GENERATING SETS



93  
250 kVA

74,4  
200 kW



Generating Set Model	Power Pf.0,8	
	400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
APD 90 A	93	85
APD 110 C	110	100
APD 125 A	125	115
APD 145 C	145	132
APD 165 A	165	150
APD 200 C	200	180
APD 250 A	250	230

**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, turbocharged.
- Electronic governor control
- Direct injection fuel system
- 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)
- 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

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

#### d) LED Indications:

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

#### 2. Power Outlet Terminal Board Mounted on the Genset Baseframe



DSE 6020

**DIESEL GENERATING SETS**  
**400 / 230 V - 50Hz**
**GROUP**
**DIESEL ENGINE**

Model		APD 90 A	APD 110 C	APD 125 A	APD 145 C	APD 165 A	APD 200 C	APD 250 A
Power	Standby	kVA 93	110	125	145	165	200	250
		kW 74,4	88	100	116	132	160	200
Pf. 0,8	Prime	kVA 85	100	115	132	150	180	230
		kW 68	80	92	106	120	144	184
Engine Make		Aksa	Cummins	Aksa	Cummins	Aksa	Cummins	Aksa
Model		A4CRX46TI	6BT5,9 - G2	A6CRX65TI	6BTAA5,9 - G2	A6CRX69TI	6CTA8,3 - G2	A6CRX98TI
Gross Engine Power Output at rated rpm		kW 86	92	120	130	138	180	220
		HP 115	123	161	174	185	241	295
Aspiration and Cooling		Turbo Charged & IC	Turbo Charged	Turbo Charged & IC			Turbo Charged & AC	Turbo Charged & IC
Total Displacement		Liter 4,58	5,9	6,49	5,9	6,87	8,3	9,726
No. of Cylinders and Build		4 - Inline	6 - Inline					
Engine Speed		rpm 1500						
Bore ve Stroke		mmxmm 108 x 125	102 x 120	105 x 125	102 x 120	108 x 125	114 x 135	126 x 130
Compression Ratio		17 : 1	17,3 : 1	17 : 1	17,3 : 1	17 : 1	17,3 : 1	16,5 : 1
Governor		Electronic						
Fuel Consumption at prime load		L/h. 19,3	22	26,3	30	32,5	42	51,9
Fuel Tank Capacity		Liter 195	195	350	195	350	350	526
Oil Capacity		Liter 14	16,4	16	16,4	16	27,6	24
Coolant Capacity (radiator and engine)		Liter 26	32,9	26	34,4	26	41,3	54
Radiator Cooling Air		m <sup>3</sup> /min. 132	136	190	148	190	186	265
Air intake - Engine		m <sup>3</sup> /min. 6,8	6,5	9,8	7,2	10,4	12,4	14,6
Exhaust Gas Flow		m <sup>3</sup> /min. 18,5	16,8	26,7	19,7	28,7	34,7	40

IC: Inter Cooler  
AC: After Cooler

**Open Type**

Dimensions (Length x Widht x Height)	APD 90 A	APD 110 C	APD 125 A	APD 145 C	APD 165 A	APD 200 C	APD 250 A
Dimensions (Length x Widht x Height)	2,15 x 1,0 x 1,46	2,15 x 1,0 x 1,47	2,3 x 1,1 x 1,68	2,15 x 1,0 x 1,47	2,4 x 1,1 x 1,68	2,34 x 1,1 x 1,7	2,9 x 1,4 x 2,05
Dry Weight	kg. 1265	1280	1570	1360	1720	1780	2645

**Sound Attenuated Type**

Dimensions (Length x Widht x Height)	APD 90 A	APD 110 C	APD 125 A	APD 145 C	APD 165 A	APD 200 C	APD 250 A
Dimensions (Length x Widht x Height)	m 3,12 x 1,06 x 1,72	3,27 x 1,16 x 1,86	3,32 x 1,06 x 1,72	3,27 x 1,16 x 1,86	3,92 x 1,46 x 2,16		
Dry Weight	kg. 1685	1700	2070	1800	2200	2280	3080

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

**Optional Equipments**
**Diesel Engine**

- Remote radiator (APD 110 C and 200 C)
- Oil Heater

**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.

Aksa Jeneratör Sanayi A.Ş.  
Rüzgarlıbağ Mah., Özalp Çıkmazi, No:10  
34805, Kavacık - Beykoz / İSTANBUL  
T: 0216 681 00 00 F: 0216 681 57 81  
e-mail: aksa@aksa.com.tr www.aksa.com.tr

08.2017