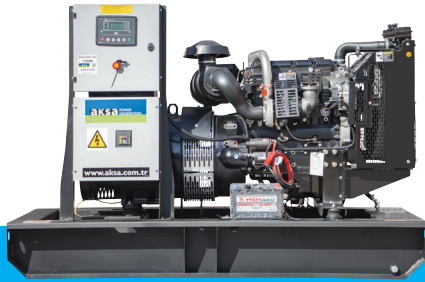


110
220 kVA

88
176 kW



Generating Set Model	Power P.f.0,8	
	400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
AP 110	110	100
AP 150	150	135
AP 165	165	150
AP 200	200	180
AP 220	220	200

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

- PERKINS heavy duty diesel engine
- Four cycle water cooled, turbo charged
- Direct injection fuel system
- Mechanical governor control system (AP 110 and AP 220 electronic)
- 12 V.D.C. starter and charge alternator
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Flexible fuel connection hoses and manual sump oil drain valve
- Industrial capacity exhaust silencer and steel bellows
- Starter battery (with lead acid) including Rack and Cables
- Jacket water heater
- Manual for application and installation

ALTERNATOR

- Brushless, single bearing system, 4 poles, flexibel disc
- Insulation class H
- Standard degree of protection IP23
- Self-exciting and self-regulating
- Solid state automatic voltage regulator
- Screen protected and drip proof
- Impregnation with tropicalized epoxy varnished
- Stator winding with 2/3 pitch for improved harmonics
- Close voltage regulation

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
- All metal canopy parts are painted by electrostatic polyester powder paint
- Panel window
- Lockable doors on each side.
- Easy maintenance and operation
- Easy lifting and moving, central lifting
- Thermally insulated engine exhaust system
- Exterior emergency stop push button.

QUALITY STANDARDS

- ISO 9001:2008, TS ISO 8528-2, TS ISO 8528-5, TS ISO 8528-8, BS EN ISO 14001:2004, BS OHSAS 18001:2007, TS 12650
- Generators Sets' voltage and frequency regulation comply with ISO 8528-5
- Generators Sets' can take 100% load at one step according to NFPA110

CONTROL SYSTEM

Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

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 controled

b) Metering via LCD Display

- Generator Volt (L-L, L-N)
- Generator Ampere (L1,L2,L3)
- Generator Frequency (Hz)
- Configurable timing
- 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
- Fail to stop
- Over current electrical trip
- Engine low oil pressure
- High coolant temperature
- 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



DSE 6020

DIESEL GENERATING SETS
400 / 230 V - 50Hz
GROUP

Model			AP 110	AP 150	AP 165	AP 200	AP 220		
Power P.f. 0,8	Standby	kVA	110	150	165	200	220		
		kW	88	120	132	160	176		
	Prime	kVA	100	135	150	180	200		
		kW	80	108	120	144	160		
Engine Made			Perkins						
Model			1104C-44TAG2	1106A-70TG1	1106A-70TAG2	1106A-70TAG3	1106A-70TAG4		
Gross Engine Power Output (at rated rpm)			kW	103	135,8	149,1	180,2	196,3	
				HP	138,1	182,1	199,9	241,6	263,2
Aspiration and Cooling			Turbo Charged + IC	Turbo Charged	Turbo Charged + IC				
Total Displacement			Liter	4,4	7,01				
No. of Cylinders and Build			4L			6L			
Engine Speed			rpm						
Bore and Stroke			mm x mm	105 x 127	105 x 135				
Compression Ratio			18,23:1		18,2:1		16:1		
Governor Type			Electronic		Mechanic		Electronic		
Fuel Consumption (L/h)			Load	1/2	11,8	15,9	16,4	20,2	23,1
				3/4	17,1	22,7	24,7	32,0	34,7
				Full	22,6	30,3	33,4	41,4	45,8
Fuel Tank Capacity			Liter	240	340				
Total Oil Capacity			Liter	8	18				
Coolant Capacity (Engine and radiator)			Liter	12,6	21				
Radiator Cooling Air			m ³ /dk.	165,6	234				
Air intake - Engine			m ³ /dk.	6,27	8,09	10,67	13,87	13,2	
Exhaust Gas Flow			m ³ /dk.	16,3	22,66	25,53	33,85	36,8	
Exhaust Gas Temperature			°C	543	576	484	491	550	

IC: Inter Cooler
Open Types

Dimensions (Lenght x Width x Height)	m	2150 x 1050 x 1390	2300 x 1080 x 1566	2316 x 1080 x 1667	2316 x 1080 x 1693
Dry Weight	kg	-			

Sound Attenuated Types

Canopy Model		AK 40	AK 49
Dimensions (Lenght x Width x Height)	m	3100 x 1113 x 1741	3402 x 1147 x 2008
Dry Weight	kg	1450	-

Optional Equipments
Diesel Engine

- Low water level
- Electronic governor control except AP 110 and AP 220
 - Oil heater
- Remote radiator only for AP 150

Alternator

- 3 pole output circuit breaker
 - Anti-condensation heater
 - Oversized alternator

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
- Manual oil drain pump
- Low fuel level alarm
- Residential silencer
- Enclosure or soundproof canopy
- Trailer
- Tool kit for maintenance



Akxa 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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