



# DIESEL POWERED GENERATING SETS

**aksa** POWER GENERATION

132  
275 kVA

105<sup>6</sup>  
220 kW



Generating Set Model	Power Pf.0,8 400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
AJD 132	132	120
AJD 170	170	155
AJD 200	200	180
AJD 275	275	250

**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

- JOHN DEERE heavy duty diesel engine
- Four stroke, water cooled
- Direct injection fuel system
- Mechanical governor control system (AJD275 electronic)
- Replaceable wet type cylinder liners
- 12 V.D.C.starter and charge alternator
- Replaceable fuel filter, oil filter and dry type air filter
- Cooling radiator and fan
- Flexible fuel connection hoses and 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
- 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.
- Central lifting and moving
- Thermally insulated engine exhaust system
- Exterior emergency stop push button.
- Easy maintenance and operation

### QUALITY STANDARDS

The equipment meets the following standards: IEC 34-1, ISO 3046, VDE 0530, BS 4999, BS 5000. The generating sets are manufactured by a full accredited ISO 9001 Szutest.

SZUTEST



TS EN ISO 9001:2008

### 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 - (AJD275 - P732)

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)
- Engine maintenance due
- Configurable timing
- 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**
**DIESEL ENGINE**

Model		AJD 132	AJD 170	AJD 200	AJD 275
Power	Standby	kVA 132	170	200	275
		kW 105,6	136	160	220
Pf. 0,8	Prime	kVA 120	155	180	250
		kW 96	124	144	200
Engine Make		John Deere			
Model		6068 T	6068 H-155	6068 H-183	6068 HFG55
Gross Engine Power Output (at rated rpm)	kW	121	155	183	250
	HP	162	208	245	335
Aspiration and Cooling		Turbo Charged	Turbo Charged - CAC*		
Total Displacement		Liter 6,8			
No. of Cylinders and Build		6 - Inline			
Engine Speed		rpm 1500			
Bore and Stroke		mmxmm 106 x 127			
Compression Ratio		17 : 1			17,2 : 1
Governor Type		Mechanical			Elektronik
Fuel Consumption (L/h.)	1/2	14	17,8	20,5	27,4
	3/4	20,2	26,2	31,3	40,4
	Full	26,7	33,8	41	53
Fuel Tank Capacity	Liter	380	380	380	470
Total Oil Capacity	Liter	17	24,6	32	33
Coolant Capacity (Engine and radiator)	Liter	35	36,5	36,5	31,2
Radiator Cooling Air	m <sup>3</sup> /min	159	252,1	252,1	301
Air intake - Engine	m <sup>3</sup> /min	7	9,8	11,5	14,5
Exhaust Gas Flow	m <sup>3</sup> /min	18,6	20,8	32,9	37,3
Exhaust Gas Temperature	°C	584	600	603	523

\*CAC: Charge Air Cooled

### Open Types

Dimensions (Length x Width x Height)	m	2,3x 1,08 x 1,62	2,4 x 1,08 x 1,66	2,4 x 1,08 x 1,66	2,75 x 1,3 x 1,66
Dry Weight	kg.	-	-	-	1970

### Sound Attenuated Types

Canopy Model		AK 49	MS 60
Dimensions (Length x Width x Height)	m	3,4 x 1,15 x 2,01	
Dry Weight	kg.	-	2680

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

### Optional Equipments

#### Diesel Engine

- Electronic governor (AJD 275 except)
- Low water level
- Oil heater
- Remote radiator (Only AJD132)

#### 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 sump 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

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