

**33**  
110 kVA

**26<sup>4</sup>**  
88 kW



Generating Set Model	Power Pf.0,8	
	400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
AJD 33	33	28
AJD 45	45	40
AJD 75	75	68
AJD 90	90	80
AJD 110	110	100

**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
- 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 IP21
- 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

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 33	AJD 45	AJD 75	AJD 90	AJD 110
Power	Standby	kVA 33	45	75	90	110
		kW 26,4	36	60	72	88
Pf. 0,8	Prime	kVA 28	40	68	80	100
		kW 22.4	32	54,4	64	80
Engine Make		John Deere				
Model		3029 D	3029 T	4045 T-70	4045 T-83	4045 H
Gross Engine Power Output (at rated rpm)	kW	31	42	70	83	102
	HP	41	56	94	111	137
Aspiration and Cooling		Natural	Turbo Charged			Turbo CAC*
Total Displacement		2,9		4,5		
No. of Cylinders and Build		3 - Inline			4 - Inline	
Engine Speed		1500				
Bore and Stroke		106 x 110			106 x 127	
Compression Ratio		17,2 : 1	17,2 : 1	17 : 1		
Governor Type		Mechanical				
Fuel Consumption (L/h.)	1/2	3,6	5,3	8,1	11,8	13,5
	3/4	5,2	7,5	12,2	16,5	19,4
	Full	6,8	9,8	16	33	27,6
Fuel Tank Capacity	Liter	70	100	240	240	240
Total Oil Capacity	Liter	6	8,5	13,2	13,2	17
Coolant Capacity (Engine and radiator)	Liter	15,5	23	32	32	32
Radiator Cooling Air	m <sup>3</sup> /min	80,32	91,43	108,25	159,03	159,03
Air intake - Engine	m <sup>3</sup> /min	1,8	3,2	4,6	6,1	7
Exhaust Gas Flow	m <sup>3</sup> /min	5,2	7,6	12,2	13,6	18,7
Exhaust Gas Temperature	°C	610	609	538	600	565

\*CAC: Charge Air Cooled

### Open Types

Dimensions (Length x Width x Height)	m	1,49 x 0,90 x 1,23	1,78 x 0,95 x 1,13	2,15 x 1,05 x 1,46	2,15 x 1,05 x 1,45
Dry Weight	kg.	720	830	1050	1120

### Sound Attenuated Types

Canopy Model		AK 20	AK 30	AK 40	
Dimensions (Length x Width x Height)	m	2,1 x 0,96 x 1,44	2,47 x 1,01 x 1,46	3,1 x 1,11 x 1,74	
Dry Weight	kg.	900	1050	1400	1470

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

### Optional Equipments

#### Diesel Engine

- Electronic governor
- Low water level
- Oil heater
- Remote radiator (AJD 110 except)

#### 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



www.aksa.com.tr

Akša 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

Akša Jeneratör Sanayi A.Ş.  
Rüzgarlıbağçe Mah., Selvi Çıkmazı, No:10  
34805, Kavacık - Beykoz / İSTANBUL  
T: 0216 681 00 00 F: 0216 681 57 81  
e-mail: akša@aksa.com.tr www.akša.com.tr