

AJD 90

aksa POWER GENERATION



230/400 V - 50 Hz	Generating Set Model	AJD 90
Power Pf. 0,8	Standby kVA	90
	Prime kVA	80

Standby:Continuous running at variable load running position.It can run to main energy auxiliary.No overload is permitted on these ratings. In accordance with BS 5514, ISO 3046

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. In accordance with ISO 8528, ISO 3046.

DESIGN SPECIFICATIONS

- High quality, reliable and complete power unit
- Compact design
- Easy start and maintenance possibility
- Every generating set is subjected to a comprehensive test programme which includes full load testing and checking and providing of all control and safety shut down functions testing
- Full engineered with a wide range of options and accessories:Canopy,soundproof and on road trailer

STANDARD GENSET SPECIFICATIONS

ENGINE:

- **JOHN DEERE** heavy duty diesel engine
- Four stroke,water cooled,direct injection fuel system
- Mechanical governor control system
- Changeable wet type cylinder liners
- 12 V.D.C.starter and charge alternator
- Replaceable cartridge type air filter,fuel filter and oil filter
- Cooling radiator and fan
- Flexible fuel connection hoses and sump oil drain valve
- Industrial capacity exhaust silencer and expansion joint
- Starter battery (with lead acid)including rack and cables
- Jacket water heater (at automatic models)
- Manual and circuit diagram documents

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

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
- Forklift pockets within baseframe

CANOPY:

- All canopy parts are designed with modular principles
- Without welding assembly
- To enable for lifting, easy maintenance and operation
- All metal canopy parts are painted by electrostatic polyester powder paint
- Exhaust silencer is protected against environmental influences
- Emergency stop push button is installed outside of canopy
- Modular canopy can also be installed at a later date
- Easy maintenance and operation
- Easy lifting and moving

QUALITY STANDARDS:

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

WARRANTY:

- 12 months warranty from commissioning date as standard.

CONTROL SYSTEM:

- Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows;
- **Common Instruments**
- 3 Ammeter
- 1 Hour run meter
- 1 Volt-Frequency (by LED) and selector switch
- Engine oil pressure gauge
- Engine coolant temperature gauge
- Emergency stop push button
- **1- Auto start Control System - P500**
- Control with DSE 704 Module
- Static battery charger
- Thermally delayed overload protection
- Engine water heater control
- a) DSE 704 Module Features
- Three phases mains sensing
- Engine protection
- Automatic engine starting and stopping
- Simple push button controlled operation (Stop-Reset / Manual / Auto)
- Micro processor based design
- Configurable via front panel
- Configurable timer settings
- Adjustable mains fail voltage level

- Mains / Generator, change over-contactor control
- External remote start input
- b) Status and Fault Conditions Displayed by LED Illumination:
- High engine temperature shutdown
- Low oil pressure shutdown
- Over speed shutdown
- Charge alternator fault warning
- Indication for mains / generator and their contactor status
- **2- Manual Control System - ME 40**
- Control with DSE 701 Module
- a) DSE 701 Module Features
- Engine supervision and protection
- Key switch off/manual start positions
- Manual start pushbutton
- b) Module Emergency LED'S
- High engine temperature shutdown
- Low oil pressure shutdown
- Over speed, shutdown
- Charge failure warning
- 2-1 Circuit Breaker (manual modal)

TECHNICAL DATA										
Diesel Generating Sets 230/400 V - 50 Hz										
GROUP	MODEL			AJD 90						
	Power Pf. 0,8			90 72						
				80 64						
DIESEL ENGINE	Engine Make			John Deere						
	Model			4045 T						
	Gross engine power output at rated rpm		kWm hp	83 111						
	Aspiration and Cooling			Turbo charged						
	Cylinders Capacity		Lt	4.5						
	Cylinders and Build			4 - In line						
	Engine Speed		rpm	1500 rpm						
	Bore and Stroke		mmxmm	106x127						
	Compression Ratio			17.0:1						
	Governor			Mechanical						
	Fuel Consumption		Load L/hr	<table border="1"> <tr> <td>1/2</td> <td>3/4</td> <td>Full</td> </tr> <tr> <td>10</td> <td>14</td> <td>19.5</td> </tr> </table>	1/2	3/4	Full	10	14	19.5
	1/2	3/4	Full							
	10	14	19.5							
Fuel Tank Capacity		Lt	220							
Oil Capacity		Lt	12							
Water Capacity		Lt	21.5							
Air Intake - Engine		m ³ /min	5.6							

Exhaust Gas Flow	m ³ /min	12.3
Alternator Voltage Regulation		± %1

OPEN TYPES		
Dimensions (length x width x height)	mm	2200x1000x1550
Dry weight	kg	1210

SOUND ATTENUATED TYPE		
Canopy Model		ASM 5
Dimensions (length x width x height)	mm	3120x1060x1750
Dry weight	kg	1560

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

OPTIONAL EQUIPMENTS

- * Fuel - water separator filter
- * Automatic fuel filling system
- * Low fuel level alarm
- * Over sized alternator
- * Charge voltmeter
- * Anti condensation heater
- * Hand transfer pump
- * Oil temperature shutdown
- * Alternator circuit breaker (only for automatic models)
- * Enclosure, sound proof canopy
- * Remote Radiator
- * Engine oil heater
- * Tool kit
- * Electronic governor control
- * Charge ammeter
- * 4 Pole contactor
- * Sump oil drain pump
- * Automatic Transfer Switch by contactor
- * Special type silencer (residential,critical)
- * Trailer