



DESIGN SPECIFICATIONS

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



400 / 230 V - 50Hz		AJD 90		AJD 110		AJD 132	
Power Factor 0.8	Standby	kVA	90	110	132		
	Prime	kVA	80	100	120		

Standby: Continuous running at variable load for duration of an emergency. 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. In accordance with ISO 8528, ISO 3046.

ENGINE

JOHN DEERE heavy duty diesel engine.
 Four cycle, water cooled turbo charged.
 Mechanical governor control system, direct injection fuel 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 steel bellows.
 Starter battery (with lead acid) including rack and cables.
 Jacket water heater (at automatic models).
 Manual and circuit diagram documents.

ALTERNATOR

Newage Stamford brushless single bearing system, 4 Pole.
 Insulation class H.
 Standard degree of protection IP21 .
 Self-exciting and self-regulating.
 Solid state automatic voltage regulator.
 Stator windings with 2/3 pitch for improved harmonics.
 Vacuum Impregnation windings with tropicalized epoxy varnished.

CHASSIS

Steel chassis and antivibration pads.
 Base frame design incorporates an integral fuel tank.
 The generating set can be lifted or pushed / pulled by the base.
 Dial type fuel gauge and drain plug.
 Forklift pockets within base frame.

CANOPY

All canopy parts are designed with modular principles.
 Without welding assembly.
 To enable for lifting, easy maintenance and operation.
 canopies 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.
 Thermally insulated engine exhaust system.

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

CONTROL SYSTEMS

Deep Sea Control, Supervision and Protection Panel Mounted on genset base frame. The control panel is equipped as follows;

Auto Mains Failure Control Panel P300

Control panel requirements.
 Control with DSE 720 Features.
 Static Battery Charger.
 Emergency stop-push button.

Generating Set Control Module DSE 720 Features

Module is used to monitor a mains supply and automatically start a standby generator set.
 Scrolling Digital LCD Panel.
 Front panel configuration of timers and alarm trip points.
 Easy push button control.
 OFF - MANUAL-AUTO-TEST-START
 LCD display scroll push button.

Metering via LCD Display

Generator Volt (F-N). - Engine oil pressure.
 Generator Ampere (L1, L2, - Engine speed,
 Generator Frequency (Hz). - Engine hours run.
 Mains Volts (F-F/F-N). - Plant battery volt.
 Engine temperature.

Alarms

Over current. - High engine temperature.
 Over Speed. - Low battery volt.
 Under / Over mains volt. - Charge fail.
 Under / Over mains frequency. - Start failure.
 Low oil pressure. - Emergency stop.

LED Indications

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

Power Outlet-Terminal Board Mounted on the Genset Base Frame.



DSE 720

TECHNICAL DATA**DIESEL GENERATING SETS 400 / 230 V - 50Hz**

MODEL		AJD90			AJD110			AJD132			
Power	Standby	kVA	90			110			132		
		Kw	72			88			105		
Pf. 0.8	Prime	Kva	80			100			120		
		Kw	64			80			96		
Engine Make		John deere			John Deere			John deere			
Model		4045 T			4045 H			6068 T			
Gross Engine Power Output (at rated rpm)		kWm	83			100			120		
		hp	111			134			161		
Aspiration and Cooling		Turbo Charged			Turbo Charged and AC*			Turbo Charged			
Cubic Capacity		Litre	4.5			4.5			6.8		
Cylinders and Build		4 - In Line			4 - In Line			6 - In Line			
Engine Rated Speed		rpm	1500			1500			1500		
Compression Ratio		17.0:1			17.0:1			17.0:1			
Bore and Stroke		mm x mm	106 x 127			106 x 127			106 x 127		
Governor Type		Mechanical			Mechanical			Mechanical			
Fuel Consumption		Load	1/2	3/4	Full	1/2	3/4	Full	1/2	3/4	Full
			L/h.	10	14	19.5	11.5	16.5	23.5	13.5	18.5
Fuel Tank Capacity		Litre	215			215			360		
Total Oil Capacity		Litre	12			12			19		
Coolant capacity (Engine and Radiator)		Litre	21.5			30.3			25.5		
Air Intake Engine		m ³ / min.	5.6			7			8.9		
Exhaust Gas Flow		m ³ / min.	12.3			18.7			19.1		
Exhaust Gas Temperature		0°C	524			545			575		
Alternator Voltage regulation		Plus / Minus %1.5			Plus / Minus %1.5			Plus / Minus %1.5			

All Sets Come With Battery Charger and Engine Heater as Standard.

OPEN TYPES

		2.2 x 1.03 x 1.53	2.18 x 1.03 x 1.53	2.35 x 1.15 x 1.6
Dimensions (Length x width x height)	m.			
Dry Weight	kg.	1205	1230	1425

SOUND ATTENUATED TYPES

		ASM5	ASM6
Dimensions (Length x width x height)	m.	3.12 x 1.06 x 1.75	3.27 x 1.16 x 1.9
Dry Weight	kg.	1635	1690

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

OPTIONAL EQUIPMENTS**Engine**

Electronic Governor
Remote Radiator

Alternator

3 Pole Output Circuit Breaker
Oversized Alternator
Anti-Condensation Heater

Panel

Transfer Switch
Auto Mains Failure
Earth Fault

**Accessories**

Bulk Fuel Tank
Automatic Fuel Filling Systems
Fuel Water Separator
Low Fuel Alarm
Residential Silencer
Trailer
Tool-Kit for maintenance



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