



**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 33		AJD 44		AJD 70	
Power Factor 0.8	Standby	kVA	33	44	70		
	Prime	kVA	28	40	63		

**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. In accordance with ISO 8528, ISO 3046.

**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**

**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.  
 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 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		AJD33			AJD44			AJD70			
Power Pf. 0.8	Standby	kVA	33			44			70		
		Kw	26.4			35			56		
	Prime	Kva	28			40			63		
		Kw	22.4			32			50.4		
Engine Make		John deere			John Deere			John deere			
Model		3029 D			4039 D			4039 T			
Gross Engine Power Output (at rated rpm)		kWm	31			40			63		
		hp	42			54			85		
Aspiration and Cooling		Natural Aspiration			Natural Aspiration			Turbo Charged			
Cubic Capacity		Litre	2.9			3.9			3.9		
Cylinders and Build		3 - In Line			4 - In Line			4 - In Line			
Engine Rated Speed		rpm	1500			1500			1500		
Compression Ratio		17.8:1			17.8:1			17.8:1			
Bore and Stroke		mm x mm	106 x 110			106 x 110			106 x 110		
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.	3.6	5	7	5	7.5	9	7	10.5	14.5
Fuel Tank Capacity		Litre	115			132			132		
Total Oil Capacity		Litre	6			9.5			13.2		
Coolant capacity (Engine and Radiatc		Litre	12			21.5			21.5		
Air Intake Engine		m3 / min.	1.7			2.4			3.7		
Exhaust Gas Flow		m3 / min.	4.7			6.7			11.1		
Exhaust Gas Temperature		0°C	555			546			566		
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

Dimensions (Length x width x height)	m.	11.6 x 0.88 x 1.3	1.86 x 0.93 x 1.34	1.86 x 0.93 x 1.35
Dry Weight	kg.	720	940	1045

#### SOUND ATTENUATED TYPES

		ASM3	ASM4
Dimensions (Length x width x height)	m.	2.12 x 0.92 x 1.48	2.5 x 0.97 x 1.57
Dry Weight	kg.	980	1300
			1405

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  
Oversised 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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