



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 220		AJD 275	
Power Factor 0.8	Standby	kVA	220		275
	Prime	kVA	200		250

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 bellow.
 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.

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 P2020
 Control panel requirements.
 Control with DSE 5220 Features.
 Static Battery Charger.
 Emergency stop-push button.
Generating Set Control Module DSE 5220 Features
 Automatic controls generating set, start and shutdown.
 Front panel programming of the module settings.
 Remote communication via RS 232 port or RS 485 "modbus" output
 Scrolling digital LCD display.
 Event Logging of shutdown alarms.
 Monitoring AC mains supply.
 Provides signal to change over switch.
 Easy push button control.
 Stop / Reset - Auto - Manual - Test - Start.

Metering via LCD Display

- Generator Volt (F-F / F-N). - Engine oil pressure (PSI & Bar)
- Generator Ampere (L1, L2, - Engine temprature,
- Generator Frequency (Hz). - Engine speed RPM..
- Generator kVA. - Engine hours run.
- Generator kW. - Plant battery volts'
- Generator Cos φ - Mains volts (F-F / F-N).
- Mains Frequency (Hz). -

Alarms

- Under / Over generator volt - Low coolant level.
- Under / Over generator frequen - Fail to start
- Over current. - Fail to stop.
- Low oil pressure. - Emergency stop.
- High engine temprature. - Charge fail.
- Under / Over speed. - Low / High battery volts.
- Under / Over mains volts. - Under / Over mains frequency.
- Can data fail - Can ECU Fail

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		AJD220			AJD275			
Power Pf. 0.8	Standby	kVA	220			275		
		Kw	176			220		
	Prime	Kva	200			250		
		Kw	160			200		
Engine Make		John deere			John Deere			
Model		6081 H			6081 H			
Gross Engine Power Output		kWm	268			268		
(at rated rpm)		hp	359			359		
Aspiration and Cooling		Turbo Charged and Charge Cooled			Turbo Charged and Charge Cooled			
Cubic Capacity		Litre	8.1			8.1		
Cylinders and Build		6 - In Line			6 - In Line			
Engine Rated Speed		rpm	1500			1500		
Compression Ratio		15.7:1			15.7:1			
Bore and Stroke		mm x mm	116 x 129			116 x 129		
Governor Type		Mechanical			Mechanical			
Fuel Consumption		Load	1/2	3/4	Full	1/2	3/4	Full
		L/h.	25	37	50	28	41	55
Fuel Tank Capacity		Litre	420			420		
Total Oil Capacity		Litre	32			32		
Coolant capacity (Engine and Radiatc		Litre	44			44		
Air Intake Engine		m3 / min.	17.3			17.3		
Exhaust Gas Flow		m3 / min.	47.3			47.3		
Exhaust Gas Temperature		0'C	703			703		
Alternator Voltage regulation		Plus / Minus %1			Plus / Minus %1			

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

OPEN TYPES

Dimensions (Length x width x height)	m.	2.9 x 1.15 x 1.9	2.9 x 1.15 x 1.9
Dry Weight	kg.	2020	2120

SOUND ATTENUATED TYPES

		ASM7		ASM7	
Dimensions (Length x width x height)	m.	4.0 x 1.21 x 2.05		4.0 x 1.21 x 2.05	
Dry Weight	kg.	2610		2860	

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



Redgen Power Systems, Unit 44 Hemming Road, Redditch, Worcestershire B98 0DH England UK.
tel. +44 (0)1564 782066 fax. +44 (0)1564 784785 email sales@redgen.co.uk