



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			APD 30 - C	APD 44 - C	APD 60 - C	APD 110 - C	APD 200 - C
Power Factor 0.8	Standby	kVA	30	43	60	110	200
	Prime	kVA	24	34	48	88	160

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

Heavy duty diesel engine.
Four cycle, water cooled.
Electronic Governor Control system.
Direct injection fuel system.
12 or 24 Volt D.C. starter and charge alternator.
Replaceable fuel filter, oil filter and dry element air filter
Cooling radiator and fan.
Starter battery (with lead acid) including Rack and Cables.
Flexible fuel connection hoses and manual sump oil drain pump.
Industrial capacity exhaust silencer and steel bellows.
Jacket water heater (at automatic models).
Operation manuals and circuit diagrams documents

ALTERNATOR

Newage Stamford brushless single bearing system, flexible disc, 4 Pole.
Insulation class H.
Standard degree of protection IP21 .
Self-exciting and self-regulating.
Impregnation with tropicalized epoxy varnished.
Solid State Automatic Voltage Regulator

CHASSIS

The complete generating set is mounted as whole on a heavy - duty fabricated, steel base frame. Antivibration pads are fixed between the engine / alternator feet and the base frame.
Base frame design incorporates an intergral 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.
Forklift pockets with base frame.

SILENT TYPE CONTAINER

All canopy parts are designed with modular principles.
Without welding assembly
Doors on each side
All metal canopy parts are painted by electrostatic polyester powder paint.
Emergency stop push button outside of canopy
Easy lifting and moving
Easy maintenance and operation
Modular canopy can also be installed at a later date.

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 equipments
Control with DSE 720 Automatic mains failure module
Static Battery Charger.
Emergency stop-push button.
Generating Set Control Module DSE 720 Features
The module is used to monitor a mains supply and automatically start and stop a standby generating set.
Microprocessor based design.
Monitors engine performance and AC power output.
LCD alarm indication.
Front panel configuration of times and alarm trip points.
Easy push button control
Stop / Reset - Auto - Manual - Test - Start.
Operation indicators accessed by the LCD display scroll push button.

Metering via LCD Display

- Generator Volt (L-N). - Engine speed (RPM)
- Generator Ampere (L1, L2, - Engine Temperature (°C)
- Generator Frequency (Hz). - Plant battery volts.
- Engine hours run - Mains volts (L-L/L-N).
- Engine oil pressure (PSI) -

Automatic shutdown on Fault Conditions.

- Over speed - Low battery volt.
- Start failure. Charge fail.
- Over current. - Under / Over mains frequency.
- Low oil pressure - Under / Over mains voltage.
- High engine temperature - 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		APD 30 - C	APD 44 - C	APD 60 - C	APD 110 - C	APD 200 - C	
Power Pf. 0.8	Standby	kVA	30	43	60	110	200
		Kw	24	34	48	88	160
	Prime	Kva	27	39	55	100	180
		Kw	21	31	44	80	144
Engine Make		Cummins	Cummins	Cummins	Cummins	Cummins	
Model		4 B3.9-G2	4 BT 3.9-G2	4 BTA 3.9-G2	6BT 5.9 - G2	6CTA 8.3 - G2	
Gross Engine Power Output		kWm	27	40	55	92	180
(at rated rpm)		hp	36	53	73	123	241
Aspiration and Cooling		Natural Aspiration	Turbo Charged	Turbo Charged and AC*	Turbo Charged	Turbo Charged and AC*	
Cubic Capacity		Litre	3.92	3.92	3.92	5.28	8.3
Cylinders and Build		4 - In Line	4 - In Line	4 - In Line	6 - In Line	6 - In Line	
Engine Rated Speed		rpm	1500	1500	1500	1500	
Compression Ratio		16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	
Bore and Stroke		mm x mm	102 x 120	102 x 120	102 x 120	114 x 135	
Governor Type		Electronic	Electronic	Electronic	Electronic	Electronic	
Fuel Consumption		Load	Full	Full	Full	Full	Full
		L/h.	6.8	9.2	13	23	40
Fuel Tank Capacity		Litre	160	160	160	215	360
Total Oil Capacity		Litre	11	11	11	16.5	20
Coolant capacity (Engine and Radiat		Litre	19	19	19	25	36
Air Intake Engine		m3 / min.	2.5	3	3.5	5.6	12.5
Exhaust Gas Flow		m3 / min.	7	10.3	10.5	17	30
Exhaust Gas Temperature		0°C	543	504	504	577	536
Heat Radiated to Ambient			8	10	11	14	24

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

OPEN TYPES

Dimensions (Length x width x height)	m.	1.86 x 0.92 x 1.35	1.86 x 0.92 x 1.35	1.86 x 0.92 x 1.35	2.15 x 1.03 x 1.7	2.4 x 1.13 x 1.17
Dry Weight	kg.	810	880	930	1210	1700

SOUND ATTENUATED TYPES

		ASM4			ASM5	ASM6
Dimensions (Length x width x height)	m.	2.5 x 0.97 x 1.57			3.12 x 1.06 x 1.75	3.27 x 1.16 x 1.9
Dry Weight	kg.	1210	1280	1330	1775	2200

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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