



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			AC 115	AC 150	AC 160	AC 200
Power Factor 0.8	Standby	kVA	115	150	160	200
	Prime	kVA	105	135	140	180

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. Power ratings based on a 40° ambient temperature reference. 35° for AC 160.

ENGINE

CUMMINS heavy duty diesel engine.
 Four cycle, water cooled, turbo charged.
 Mechanical governor control system. Electronic Governor on AC 160
 Direct injection fuel system.
 12 V.D.C.starter and charge alternator.
 24 Volt D.C., AC 150 and AC 200
 Replacement 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 valve.
 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, 4 Pole.
 Insulation class H.
 Standard degree of protection IP21 .
 Self-exciting and self-regulating.
 Stator windings with 2 /3 pitch for improved harmonics.
 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 fra
 Dial type fuel gauge and drain plug on the fuel tank.
 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.
 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.
 STOP / RESET - MANUAL - AUTO - TEST - START
 LCD display scroll push button.

Metering via LCD Display

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

Alarms

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

LED Indications

- Mains available.
- Mains on load.
- Generator available.
- 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		AC115	AC150	AC160	AC200	
Power Pf. 0.8	Standby	kVA	115	150	160	200
		Kw	92	120	128	160
	Prime	Kva	105	135	140	180
		Kw	84	108	112	144
Engine Make		Cummins	Cummins	Cummins	Cummins	
Model		6 BT 5.9 G6	6 CT 8.3 G2	6 BTA 5.9 G2	6 CTA 8.3G 2	
Gross Engine Power Output		kWm	107	135	145	180
(at rated rpm)		hp	143	181	194	241
Aspiration and Cooling		Turbo Charged	Turbo Charged	Turbo After Cooled	Turbo After Cooled	
Cubic Capacity		Litre	5.88	8.3	5.88	8.3
Cylinders and Build		6 - In Line	6 - In Line	6 - In Line	6 - In Line	
Engine Rated Speed		rpm	1500	1500	1500	1500
Compression Ratio			16.5:1	16.8:1	16.5:1	16.8:1
Bore and Stroke		mm x mm	102 x 120	114 x 135	102 x 120	114 x 135
Governor Type		Mechanical	Mechanical	Electronic	Mechanical	
Fuel Consumption		Load	1/2 3/4 Full	1/2 3/4 Full	1/2 3/4 Full	1/2 3/4 Full
			L/h.	12 17.8 24	15 22 30	17 24 31
Fuel Tank Capacity		Litre	215	360	215	360
Total Oil Capacity		Litre	14	23.8	16.4	23.8
Coolant capacity (Engine and Radiat		Litre	23	36	25.6	36
Air Intake Engine		m3 / min.	5.6	9.5	9	12.5
Exhaust Gas Flow		m3 / min.	17	25.3	25.2	30
Exhaust Gas Temperature		0°C	577	521	591	536
Alternator Voltage regulation			Plus / Minus %1.5	Plus / Minus %1.5	Plus / Minus %1.5	Plus / Minus %1

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

OPEN TYPES

Dimensions (Length x width x height)	m.	2.15 x 1.03 x 1.67	2.37 x 1.13 x 1.63	2.15 x 1.03 x 1.67	2.37 x 1.13 x 1.63
Dry Weight	kg.	1205	1650	1300	1700

SOUND ATTENUATED TYPES

		ASM5	ASM6	ASM5	ASM6
Dimensions (Length x width x height)	m.	3.12 x 1.06 x 1.75	3.27 x 1.16 x 1.89	3.12 x 1.06 x 1.75	3.27 x 1.16 x 1.89
Dry Weight	kg.	1770	2170	1780	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
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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