



**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 1030	AC 1130	AC 1435	AC 1675
Power Factor 0.8	Standby	kVA	1030	1130	1435	1675
	Prime	kVA	930	1030	1280	1500

**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.

**ENGINE**

CUMMINS heavy duty diesel engine.  
 Four cycle, water cooled, turbo charged and after cooled.  
 Electronic Governor Control system.  
 Direct injection fuel system.  
 4 Valves per cylinder.  
 24 Volt D.C.starter and charge alternator.  
 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 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.  
 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 profile type, steel base frame. Antivibration pads are fixed between the engine / alternator feet and the base frame.  
 Lifting eyes allow easy transportation by a crane.

**SILENT TYPE CONTAINER**

40' Container for AC 1435 and AC 1675  
 Sandwich mineral wood attenuation on the roof surface.  
 Lockable doors on each side.  
 Acoustic baffles for the air inlet and outlet.  
 Aluminium internal floor  
 Residential silencer  
 White paint finishing (RAL 9010).  
 2000 Litres fuel tank with retention bund.

**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 with DSE model 5220 module..  
 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 2 "modbus" output.  
 Scrolling digital LCD display.  
 Event logging of shutdown alarms.  
 Monitoring AC mains supply.  
 Provides signal to change over switch gear.  
 Easy pushbutton 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 Temperature (°C & °F)
- 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 vol - Low coolant level
- Under / Over generator frequency - Fail to start
- Over current - Fail to stop
- Low oil pressure. - Emergency stop.
- High engine temperature - Charge fail
- Under / Over speed. - Low / High batteries volts.
- Under / Over mains volts. - Can data fail.
- Under / over mains frequency. - Can ECU fail.

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



**DSE 720**

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

MODEL		AC 1030			AC 1130			AC 1435			AC 1675			
Power Pf. 0.8	Standby	kVA	1030			1130			1435			1675		
		Kw	824			904			1148			1340		
	Prime	Kva	930			1030			1280			1500		
		Kw	744			824			1024			1200		
Engine Make		Cummins			Cummins			Cummins			Cummins			
Model		KTA 38 G3			KTA 38 G5			KTA 50 G3			KTA 50 GS8			
Gross Engine Power Output (at rated rpm)		kWm	895			970			1227			1429		
		hp	1200			1300			1645			1915		
Aspiration and Cooling		Turbo Charged After Cooled												
Cubic Capacity		Litre	37.8			37.8			50.3			50.3		
Cylinders and Build		12-60° Vee			12-60° Vee			16-60° Vee			16-60° Vee			
Engine Rated Speed		rpm	1500			1500			1500			1500		
Compression Ratio		13.9:1			13.9:1			13.9:1			14.9:1			
Bore and Stroke		mm x mm	159 x 159			159 x 159			159 x 159			159 x 159		
Governor Type		Electronic			Electronic			Electronic			Electronic			
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.	104	151	198	113	161	209	139	199	261	167	238
Fuel Tank Capacity		Litre	1250			1250			2000			2000		
Total Oil Capacity		Litre	135			135			177			204		
Coolant capacity (Engine and Radiat		Litre	280			280			Approx. 340			345		
Air Intake Engine		m3 / min.	60			73			105			99		
Exhaust Gas Flow		m3 / min.	167			198			240			261		
Exhaust Gas Temperature		0°C	570			513			525			510		
Alternator Voltage regulation		Plus / Minus %1			Plus / Minus %1			Plus / Minus %1			Plus / Minus %1			

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

**OPEN TYPES**

		AKS 95			SC 40								
Dimensions (Length x width x height)	m.	4300 x 1770 x 2350			4330 x 1770 x 2350			4910 x 2120 x 2260			5450 x 2120 x 2840		
Dry Weight	kg.	7600			7720			10100			11500		

**SOUND ATTENUATED TYPES**

		AKS 95			SC 40								
Dimensions (Length x width x height)	m.	7915 x 2300 x 2350			12192 x 2438 x 2591								
Dry Weight	kg.	12000			12200			17000			18400		

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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