



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			ACQ 881	ACQ 1030	ACQ 1130
Power Factor 0.8	Standby	kVA	880	1030	1130
	Prime	kVA	800	930	1030

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° (104°F) 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 fabricated, steel base frame. Antivibration pads are fixed between the engine / alternator feet and the base frame.
 Lifting eyes allow easy transportation by a crane.

The generating set can be lifted or carefully pushed / pulled by the base fra

SILENT TYPE CONTAINER

Container (ACQ881 except)
 Sandwich mineral wood attenuation on the roof surface.
 Lockable doors on each side.
 Removable roof.
 Acoustic baffles for the air inlet and outlet.
 Aluminium internal floor
 Exhaust silencer manufactured from aluminium plated steel.
 White paint finishing.
 500 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		ACQ881			ACQ1030			ACQ1130			
Power Pf. 0.8	Standby	kVA	880			1030			1130		
		Kw	704			824			904		
	Prime	Kva	800			930			1030		
		Kw	640			744			824		
Engine Make		Cummins			Cummins			Cummins			
Model		QSK 23 G3			QST 30 G3			QST 30 G4			
Gross Engine Power Output		kWm	768			895			970		
(at rated rpm)		hp	1030			1200			1300		
Aspiration and Cooling		Turbo Charged and charge cooled			Turbo Charged and After cooled			Turbo Charged and After Cooled			
Cubic Capacity		Litre	23.15			30.48			30.48		
Cylinders and Build		6 - In Line			12 - 50° Vee			12 - 50° Vee			
Engine Rated Speed		rpm	1500			1500			1500		
Compression Ratio		16.0:1			14.0:1			14.0:1			
Bore and Stroke		mm x mm	170 x 170			140 x 165			140 x 165		
Governor Type		Electronic			Electronic			Electronic			
Fuel Consumption		Load	1/2	3/4	Full	1/2	3/4	Full	1/2	3/4	Full
			L/h.	85	121	161	94	139	184	102	151
Fuel Tank Capacity		Litre	600			1250			1250		
Total Oil Capacity		Litre	103			154			154		
Coolant capacity (Engine and Radiatc		Litre	120			175			342		
Air Intake Engine		m3 / min.	53			56			60		
Exhaust Gas Flow		m3 / min.	148			163			180		
Exhaust Gas Temperature		0°C	543			563			575		
Alternator Voltage regulation		Plus / Minus %1			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.	4200 x 1700 x 2230	4240 x 1770 x 2330	4400 x 2000 x 2350
Dry Weight	kg.	6160	7200	7600

SOUND ATTENUATED TYPES

		AK 90		AKS 95	
Dimensions (Length x width x height)	m.	6500 x 2200 x 2340		7915 x 2300 x 2350	
Dry Weight	kg.	1070		11500	

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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