



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 2100	ACQ 2250	ACQ 2500
Power Factor 0.8	Standby	kVA	2100	2250	2500
	Prime	kVA	1900	2000	2250

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

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 base frame and foundation.
 The generating set can be lifted or carefully pushed / pulled by the base frame.
 Lifting eyes allow easy transportation by a crane.

SILENT TYPE CONTAINER

40' high type container .
 Sandwich mineral wood attenuation.
 Large 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.



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

MODEL		ACQ2100			ACQ2250			ACQ2500			
Power Pf. 0.8	Standby	kVA	2100			2250			2500		
		Kw	1680			1800			2000		
	Prime	Kva	1900			2000			2250		
		Kw	1520			1600			1800		
Engine Make		Cummins			Cummins			Cummins			
Model		QSK 60 G3			QSK 60 G4			QSK 60 G8			
Gross Engine Power Output		kWm	1790			1915			2145		
(at rated rpm)		hp	2399			2567			2875		
Aspiration and Cooling		Turbo Charged and After Cooled									
Cubic Capacity		Litre	60.2			60.2			60.2		
Cylinders and Build		16 - 60° Vee			16 - 60° Vee			16 - 60° Vee			
Engine Rated Speed		rpm	1500			1500			1500		
Compression Ratio		14.5:1			14.5:1			14.5:1			
Bore and Stroke		mm x mm	159 x 190			159 x 190			159 x 190		
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.	190	270	363	200	291	394	237	342	450
Fuel Tank Capacity		Litre	2000			2000			2000		
Total Oil Capacity		Litre	280			280			195		
Coolant capacity (Engine and Radiator)		Litre	492			492			620		
Air Intake Engine		m ³ / min.	135			144			157		
Exhaust Gas Flow		m ³ / min.	331			336			379		
Exhaust Gas Temperature		0°C	440			450			485		
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.	6030 x 2500 x 3230	6030 x 2500 x 3230	6050 x 2600 x 3300
Dry Weight	kg.	15500	15500	17200

SOUND ATTENUATED TYPES

		SCH 40		
Dimensions (Length x width x height)	m.	12192 x 2438 x 2800		
Dry Weight	kg.			

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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