

**AKSA Power Generation** has been producing industrial generator sets with an innovative compact design and excellence in quality for over **30 years**. AKSA has been providing reliable power through three main production plants and over 15 branch offices worldwide.



**General Characteristics**

Model Name	<b>AC1000-6</b>	Frequency / PF	<b>60Hz, 1800 rpm, 0.8pf</b>
Engine Make & Model	<b>Cummins QSK23G3</b>	Alternator Make	<b>Stamford</b>
Control Panel Model	<b>DSE 7320</b>	Base Frame / Enclosure	<b>AK90</b>

**Genset Rating – 60Hz, 1800rpm, 0.8pf**

Engine	Alternator	Voltage	Standby Power	Prime Power	Standby Current
QSK23G3	HCI634G (Wnd-311)	480 / 277V	1000kVA	905kVA	1202A
	HCI634G (Wnd-13)	380 / 222V	1000kVA	905kVA	1519A
	HCI634G (Wnd-311)	220 / 127V	1000kVA	905kVA	2624A
	HCI634H (Wnd-311)	208 / 120V	1000kVA	905kVA	2775A

Stand-by Power (Maximum): Power available at variable load in the event of main power network failure. No over load is permitted.  
 Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours of operation.  
 The above ratings represent the engine performance capabilities to conditions specified in accordance with ISO 8528/5 & ISO3046.  
**Derating may be required for conditions outside of the test conditions.**

**Codes & Standards**

The Generator set is designed and manufactured in a facility certified to **ISO9001** standards.

The Generator set is designed and manufactured in a facility certified to **ISO14001:2015** standards.

**AKSA Power Generation** provides **single source responsibility** for the generator set & accessories.

The generator set, with its components, are **prototype tested** and **production tested**



**Engine Data**

Manufacturer	Cummins
Model	QSK23G3
Displacement	23.15 L
Engine Speed	1800rpm
Engine Standby Power	895 Kw
Engine Prime Power	809 kW
Aspiration	Turbocharged and Charge
Compression Ratio	Air Cooled
Bore / Stroke	16 : 1 170 mm / 170 mm
Break Mean Effective Pressure	2600 kPa
Piston Speed	10.3 m/s
Friction Power	93 kWm
Radiated Heat to Ambient	85 kWm
Steady State Stability	0.25 %
Dry Weight – fan to flywheel	2755 kg
Exhaust Noise 1m @Rated Power	TBD

**Fuel System**

Type Injection System	Cummins HPI-PT
Max Fuel Flow	684 L/h
Max Return Fuel Flow	662 L/h
Max Allowable Head on Injector Return Line	30 kPa

**Fuel Consumption**

Standby Power (110%)	212 liter / hour
Prime Power (100%)	189 liter / hour
Prime Power (75%)	139 liter / hour
Prime Power (50%)	97 liter / hour
Prime Power (25%)	56 liter / hour

**Electric System**

Engine Cranking Motor	24V
Engine Battery Charge System	Negative Ground
Battery Qty, Rating, CCA	2 x 150Ah

**Cooling System**

Coolant Capacity (Engine Only)	46.5 L
Minimum Pressure Cap	69 kPa
Max Coolant Friction Head External to Engine	48 kPa
Max Top Tank Temperature	104 °C
Thermostat Range	76.5– 90 °C

**Exhaust System**

Exhaust Gas Temp	514 °C
Max Allowable Back Pressure	10.2 kPa
Exhaust Gas Flow	3056 cfm

**Air Intake System**

Intake Air Flow	1132 cfm
Max Intake Air Restriction	6.2 kPa Dirty Element 3.7 kPa Clean Element
Air Filter Type	Dry Paper Element

**Lubrication System**

Total System Capacity	103 L
Sump Capacity Max / Min	95 L / 66 L
Max Oil Temp	120 °C
Oil Pressure at Rated Speed	345 – 448 kPa

**Alternator Data**

Manufacturer	Stamford
Standards	BS EN 60034
Control System	PMG
A.V.R.	MX321
Voltage Regulation	± 0.5 %
Insulation System	Class H
Protection	IP23
Rated Power Factor	0.8
Stator Winding	Double Layer Concentric
Winding Pitch	Two Thirds
Winding Leads	12
Telephone Interference	THF < 2 %
Waveform Distortion	No Load < 1.5 %
Maximum Over speed	2250 rev/min

**Controller Data**

Manufacturer	DSE
Model	7320
Type	Auto Mains Failure Control

**Controller Features & Benefits**

- microprocessor controlled
- License free PC Software
- IP65 rating offers increased resistance to water ingress
- Modules can be integrated to building management systems
- Real time clock provides accurate event log
- Four line back-lit LCD text display
- Five key menu navigation
- front panel editing with PIN protection
- Support up to three remote display modules
- Configurable timers and alarms

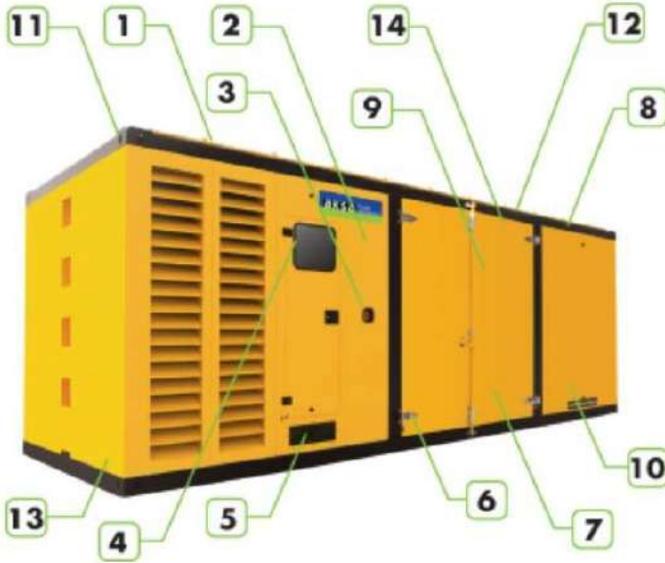
**Battery Charger & Electrical System Data**

Manufacturer	AKSA
Model	SmartGen BAC06A
Input Voltage	100V ~ 250V AC
Output Voltage / Current	27,6V DC / 3A

- Multiple date and timer scheduler
- Integral PLC editor
- 'Protections disabled' feature
- kW & kVAr protection
- Reverse power (kW & kVAr) protection
- Power monitoring (kWh, kVAr, kVAh, kVARh)
- Load switching (load shedding and dummy load outputs)
- Unbalanced load protection
- Independent Earth Fault trip
- Fully configurable via DSE Configuration Suite PC Software
- SCADA monitoring via DSE Configuration Suite PC Software

**Jacket Water Heater Data**

Manufacturer	AKSA
Model	HTR4000
Input Voltage	Based on Genset Voltage
Power	4000W



**Enclosure Features**

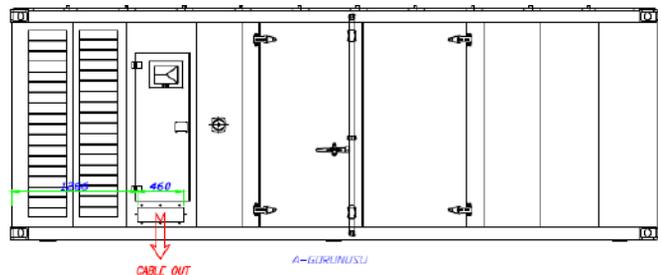
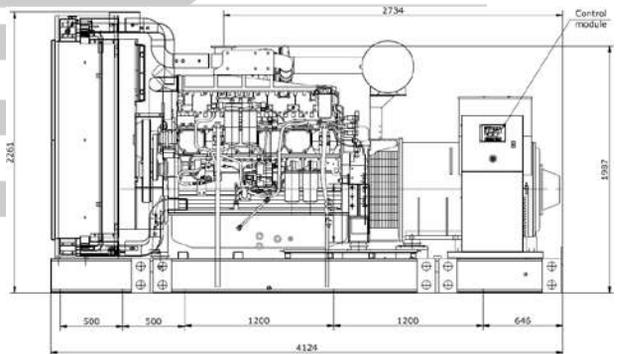
- ✓ Heavy Duty Steel Structure
- ✓ E-Stop on Enclosure
- ✓ Control Panel Eliminated from Engine Vibrations
- ✓ Control Panel Window
- ✓ Plastic Covered Corrosion Resistant Locks & Hinges
- ✓ Internally Mounted Exhaust System with Rain Cap
- ✓ Coolant Fill Cap
- ✓ Top Lifting Feature
- ✓ Base Fuel Tank
- ✓ Easy Access for Maintenance
- ✓ Sound Absorb High Density Foam

**Open Skid Gen-Set Dimensions**

Length	4124 mm
Width	2000 mm
Height	2261 mm
Dry Weight	6500 kg
Tank Capacity	1400 L

**Enclosed Gen-Set Dimensions**

Length	6500 mm
Width	2200 mm
Height	2353 mm
Dry Weight	9300 kg
Tank Capacity	1100 L
Sound Pressure @ 7 meters	77 dBA



\*Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

**Standard Features & Accessories**

- ✓ Heavy Duty Steel Base Frame
- ✓ Integral Fuel Tank
- ✓ PMG w/MX321 AVR
- ✓ Engine Jacket Water Heater
- ✓ Battery and Battery Rack
- ✓ Battery Charger
- ✓ Battery Restraint
- ✓ Anti Vibration Pads between Engine/Alternator & Base Frame
- ✓ Residential Grade Silencer Inside Enclosure
- ✓ Industrial Grade Silencer Set for Open Skid Sets
- ✓ Sound Absorb Foam for Enclosure
- ✓ Air Inlet & Outlet Rodent Guards
- ✓ Oil Drain Valve
- ✓ Coolant Drain Valve
- ✓ Flex Fuel Lines
- ✓ Air Filter Restriction Gauge
- ✓ Engine Manifold Cover
- ✓ Turbocharger Cover
- ✓ Protection Covers for Rotating Parts
- ✓ Exhaust Insulation Cover
- ✓ Control Panel Window
- ✓ Operations Manual
- ✓ 24 Months / 2000 hours Limited Standby Warranty

**Optional Accessories**

- Main Line CB (3 / 4 Poles)
- Anti-condensation Heater
- Stand Alone Bulk Fuel Tank
- Fuel Level Display & Alarm on Controller
- Low / High Fuel Alarms
- Fuel Water Separator Filter
- Auto Fuel Fill Control System
- Oil Temperature Display on Controller
- Manual Speed Adjust Rheostat
- Manual Voltage Adjust Rheostat
- Remote Annunciator Panel
- Remote Control & Monitoring Panel
- Advanced SMS Messaging
- Control Panel Heater
- Battery Disconnect Switch
- Battery Heater
- 10A Battery Charger
- Battery Charge Ammeter
- Tool Kit for Maintenance
- Power Plug Outlet Kit
- Automatic Transfer Panel (ATS) – Contactor Design
- Automatic Transfer Panel (ATS) – Changeover Design

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**SEDE PRINCIPAL:**

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