

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	AC1600-6	Frequency / PF	60Hz, 1800 rpm, 0.8pf
Engine Make & Model	Cummins KTA50G3	Alternator Make	Stamford
Control Panel Model	DSE 7320	Base Frame / Enclosure	AK98

Genset Rating – 60Hz, 1800rpm, 0.8pf

Engine	Alternator	Voltage	Standby Power	Prime Power	Standby Current
KTA50G3	PI734A (Wnd-312)	480 / 277V	1600kVA	1410kVA	1924A
	PI734B (Wnd-13)	380 / 222V	1600kVA	1410kVA	2431A
	N.A.	220 / 127V	-	-	-
	N.A.	208 / 120V	-	-	-

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**



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

Engine Data

Manufacturer	Cummins
Model	KTA50G3
Displacement	50.3 L / 16 Cylinders
Engine Speed	1800rpm
Engine Standby Power	1380 Kw
Engine Prime Power	1220 kW
Aspiration	Turbocharged &Aftercooled
Compression Ratio	13.9 : 1
Bore / Stroke	159 mm / 159 mm
Break Mean Effective Pressure	1827 kPa
Piston Speed	9.5 m/s
Friction Power	168 kWm
Radiated Heat to Ambient	176 kWm
Steady State Stability	0.25 %
Dry Weight – fan to flywheel	5360 kg
Exhaust Noise 1m @Rated Power	126 DbA

Fuel System

Type Injection System	Cummins PT
Max Fuel Flow	625 L/h
Max Allowable Head on Injector Return Line	165 mmHg
Max Restriction at PT Fuel Injection Pump – Dirty Filter	203 mmHg

Fuel Consumption

Standby Power (110%)	330 liter / hour
Prime Power (100%)	291 liter / hour
Prime Power (75%)	222 liter / hour
Prime Power (50%)	157 liter / hour
Prime Power (25%)	89 liter / hour

Electric System

Engine Cranking Motor	24V
Engine Battery Charge System	Negative Ground
Battery Qty, Rating, CCA	4 x 150Ah

Cooling System

Coolant Capacity (Engine Only)	161 L
Minimum Pressure Cap	96 kPa
Max Coolant Friction Head External to Engine	103 kPa
Max Top Tank Temperature	104 °C
Thermostat Range	82 – 93 °C

Exhaust System

Exhaust Gas Temp	475 °C
Max Allowable Back Pressure	51 mmHg
Exhaust Gas Flow	9100 cfm

Air Intake System

Intake Air Flow	3900 cfm
Max Intake Air Restriction	635mmH ₂ O Dirty Element 381mmH ₂ O Clean Element
Air Filter Type	Dry Paper Element

Lubrication System

Total System Capacity	177 L
Sump Capacity Max / Min	151 L / 121 L
Max Oil Temp	121 °C
Oil Pressure at Rated Speed	345 – 483 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

Battery Charger & Electrical System Data

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

Jacket Water Heater Data

Manufacturer	AKSA
Model	HTR4000
Input Voltage	Based on Genset Voltage
Power	2 x 4000W

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

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

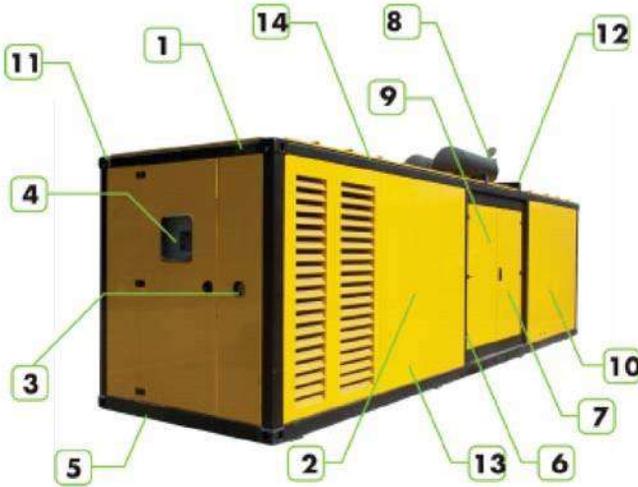
Independent Earth Fault trip

Fully configurable via DSE Configuration Suite PC Software

SCADA monitoring via DSE Configuration Suite PC Software

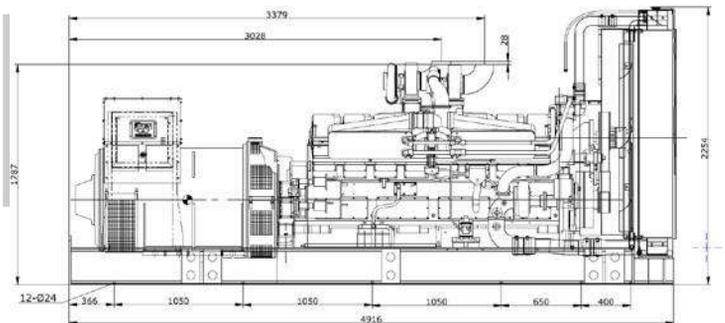
Enclosure Features

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



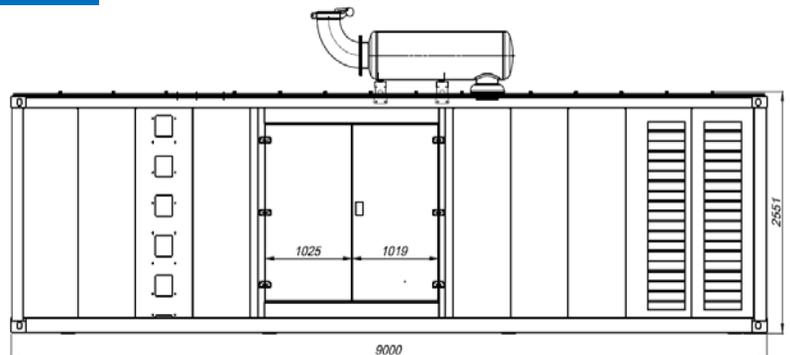
Open Skid Gen-Set Dimensions

Length	4916 mm
Width	1780 mm
Height	2254 mm
Dry Weight	9400 kg
Tank Capacity	-



Enclosed Gen-Set Dimensions

Length	9000 mm
Width	2270 mm
Height	2550 mm
Dry Weight	14000 kg
Tank Capacity	2000 L
Sound Pressure @ 7 meters	80 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 SkidSets
- ✓ 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

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

SEDE PRINCIPAL:

Av. Nicolás Ayllón N° 2241 – Ate – Lima – Perú
Telf.: (51-1) 748-3333 / 326-0411 / Anexo 1152

