

# AC 110

Engine : Cummins  
 Alternator : Mecc Alte  
 Control System : P 72



## ISO8528

This generator set has been designed to meet ISO 8528 regulation.

## SZUTEST

This generator set is manufactured in facilities certified to ISO 9001.



This generator set is available with CE certification.

## 2000/14/EC

Enclosed product is tested EU noise legislation 2000/14/EC

### 3 Phase Ratings, 50 Hz, PF 0,8

Voltage	Standby Rating (ESP)		Prime Rating (PRP)		
	kVA	kW	kVA	kW	Amp
400/230	110,00	88,00	100,00	80,00	144,00

**Standby Rating (ESP):** Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. ESP is in accordance with ISO 8528. Overload is not allowed.

**Prime Rating (PRP):** Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

### OPTIONAL EQUIPMENTS

#### ENGINE

- Remote Radiator Cooling
- Electronic governor control
- Fuel-Water Separator Filter
- Low water level alarm
- Oil heater

#### ALTERNATOR

- Anti-Condensation Heater
- Over sized alternator
- Main line circuit breaker

#### CONTROL SYSTEM

- Remote annunciator panel
- Earth fault, single set
- Charge Ammeter

#### OTHER ACCESSORIES

- Automatic or manual fuel filling system
- Manual oil drain pump
- Low and high fuel level alarm
- Residential silencer
- Enclosure: weather protective or sound attenuated
- Duct adapter ( on radiator)
- Inlet and outlet motorised louvers
- Inlet and outlet acoustic baffles
- Trailer
- Tool kit for maintenance
- 1500/3000 hours maintenance kit
- Double wall chassis
- Supplied with oil and coolant - 30 °C
- Battery isolating switch
- Main Fuel Tank

#### TRANSFER SWITCH

- Four Pole Contactors

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## ● DIESEL ENGINE SPECIFICATIONS

Manufacturer		Cummins		
Model		6BTA 5,9-G5		
No. of Cylinders and Build		6 Cylinder, In Line		
Aspiration and Cooling		Turbo Charged and After Cooled		
Maximum Standby Power		1500 rpm		
		102 kW[137HP]		
Total Displacement	L	5,90		
Bore and Stroke	mm	102 x 120		
Compression Ratio		17,6:1		
Rated Speed (rpm)	rpm	1500		
Governor		Electronic		
Oil Capacity	L	16,40		
Coolant Capacity	L	25,00		
Intake Air Flow	m <sup>3</sup> /min.	7,90		
Radiator Cooling Air	m <sup>3</sup> /min.	94		
Exhaust Gas Flow	m <sup>3</sup> /min.	21,40		
Exhaust Gas Temperatures	° C	540		
Start System		12 V d.c.		
Fuel Consumption	Load	%100	%75	%50
	L/h	25,00	18,00	12,00

## ● ALTERNATOR SPECIFICATIONS

Make		Mecc Alte
Model		ECP34 - 2S/4
Frequency	Hz	50
Power	kVA	105
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Current	A	151
Insulation Class		H
Temperatur		H
Stator		2 / 3 steps
Rotor		Single Bearing System, Flexible Disc
Excitation System		Electronic ( AVR )

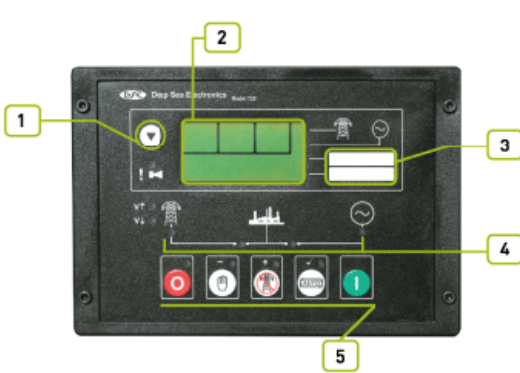
## ● DIEMENSIONS AND WEIGHT

Open Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
AC 110	1250	2200	1050	1600	240
Sound Attenuated Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
AK 40	1650	3100	1110	1750	240

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## P 72 - Control System



- 1 LCD display scroll button
- 2 LCD display
- 3 Additional alarm / Status LED's
- 4 Status LED's
- 5 Operation selecting buttons

### Devices

DSE, model 720 Auto Mains Failure control module  
 Static battery charger 5A, 220/240 volt  
 Emergency stop push button and fuses for control circuits

### Construction and Finish

Components installed in sheet steel enclosure. Phosphate chemical, pre-coating of steel provides corrosion resistant surface  
 Polyester composite powder topcoat forms high gloss and extremely durable finish  
 Lockable hinged panel door provides for easy component access

### Installation

Control panel is mounted generating set baseframe on robust steel stand.  
 Located at side of generating set with properly panel visibility.

### Generating Set Control Unit

8G9'+&\$

H\Y`8G9'+&\$`Wbfc`a cXi`Y`g`U`g`U`b`X`U`F`X`U`X`h`c`b`h`c`i`f`[`Y`b`Y`f`U`h`c`f`g`Y`h`i`d`h`c`&`\$`\_`J`5`U`b`X`i`h`U`j`Y`V`Y`Y`b`X`Y`g`[`b`Y`X`h`c`g`U`f`h`U`b`X`g`h`c`d`X`Y`g`Y`U`b`X`[`U`g`[`Y`b`Y`f`U`h`b`[`g`Y`h`g`H\Y`8G9'+&\$`a`c`X`i`Y`U`g`V`Y`Y`b`X`Y`g`[`b`Y`X`h`c`a`c`b`[`h`c`f`[`Y`b`Y`f`U`h`c`f`Z`Y`e`i`Y`b`V`h`z`j`c`h`z`W`f`Y`b`h`z`Y`b`[`j`b`Y`c`]`d`f`Y`g`g`i`f`Y`z`V`c`U`b`h`i`Y`a`d`Y`f`U`h`i`f`Y`i`f`i`b`b`[`\`c`i`f`g`U`b`X`V`U`h`Y`f`m`j`c`h`g`"A`c`X`i`Y`a`c`b`[`h`c`f`g`h`Y`a`U`j`b`g`g`i`d`d`m`U`b`X`g`k`]`h`W`c`j`Y`f`h`c`h`Y`[`Y`b`Y`f`U`h`c`f`k`Y`b`h`Y`a`U`j`b`g`d`c`k`Y`f`Z`j`g`"H\Y`8G9'+&\$`U`g`c`]`b`X`]`W`h`Y`g`c`d`Y`f`U`h`c`b`U`g`h`i`g`U`b`X`Z`j`i`h`V`c`b`X`]`h`c`b`g`z`U`i`h`c`a`U`h`W`m`i`g`i`h`j`b`[`X`c`k`b`h`Y`[`Y`b`Y`f`U`h`b`[`g`Y`h`U`b`X`]`b`X`]`W`h`j`b`[`Z`j`i`h`g`V`m`i`a`Y`U`b`g`c`Z`]`h`g`@`7`8`X`]`g`d`U`m`i`c`b`h`Y`Z`c`b`h`d`U`b`Y`"

#### Standard Specifications

- Microprocessor controlled
- LCD display makes information easy to read
- Black-lit character/icon LCD display
- Transfer between mains (utility) and generator power
- On-site module configuration and remote configuration (max 100 meters) using PC software
- User-friendly set-up and button layout
- Front panel programming
- Remote start
- Multiple engine parameters are monitored simultaneously
- Controls: Stop/Reset, Manual, Auto, Test, Start, buttons. An additional push button next to the LCD display is used to scroll through the modules' metering displays

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## Instruments

- ENGINE
- Engine speed
- Oil pressure
- Coolant temperature
- Run time
- Battery volts
- GENERATOR
- Voltage (L-N)
- Current (L1-L2-L3)
- Frequency
- MAINS
- Voltage (L-L, L-N)

## Protection Circuits

- WARNING
- Battery charge failure
- Low battery voltage
- SHUT DOWNS
- Fail to start
- Emergency stop
- Low oil pressure
- High engine temperature
- Over /Under speed
- Under/over generator frequency
- Failed to reach loading voltage
- Failed to reach loading frequency
- ELECTRICAL TRIP
- Generator over current

## Options

- High oil temperature shut down
- Low fuel level alarm
- High fuel level alarm
- Low coolant level

## Standards

- Electrical Safety / EMC compatibility
- BS EN 60950 Electrical business equipment
- BS EN 61000-6-2 EMC immunity standard
- BS EN 61000-6-4 EMC emission standard for the industrial environment

## Static Battery Charger

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## AK 40 - Canopy



- 1 Steel structures
- 2 Emergency stop push button
- 3 Control panel is right side of the set.
- 4 Corrosion-resistant locks and hinges
- 5 Sump drains valves
- 6 Sound proof foam material
- 7 Lifting Points

## Introduction

Sound-attenuated and Weather-protective Enclosures Sound-attenuated and weather protective enclosures for generating sets from Aksa, meet event the sound requirements and provide optimum protection from inclement weather and development by our specialist acoustic engineers. Our modular designed sound insulated canopies (10- 300kVA) provide ease of access for servicing and general maintenance and interchangeable components permitting on-site repair. Enclosures are designed to optimize genset cooling performance, providing you with confidence that genset ratings and ambient capability.

## Standard Specifications

Compact footprint, low profile design.

Enclosure, generator set, exhaust system and fuel tank are pre-ssembled, pre-integrated and shipped as one package

Body made from steel components treated with polyester powder coating

Fire retardant foam insulation

Easy access to all service points

Exhaust system inside canopy

Large doors on each side

Control panel viewing window in a lockable access door

Emergency stop push button mounted on enclosure exterior

Cooling fan and battery charging alternator fully guarded

Fuel fill and battery can only be reached via lockable access doors.

Lifting points on the top of canopy and base frame

Customer options available to meet your applications needs.

Aksa makes its generating sets' noise level tests in accordance with directive 2000/14/EC validation of the noise level test has been approved by the notified body Szutest

Width	mm.	1110
Lenght	mm.	3100
Height	mm.	1750
Fuel Tank Capacity		240