

Engine: Alternator: Mecc Alte

Control System: P 732 control system





ISO8528 This generator set has been designed to meet ISO 8528 regulation.

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

CE This generator set is available with CE certification.

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

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

	Standby Rating (ESP)		Prime Rating (PRP)			
Voltage	kVA	kW	kVA	kW	Amp	
400/230	250,00	200,00	225,00	180,00	324,00	

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.

#### STANDARD SPECIFICATIONS

Water cooled, Diesel engine Radiator with mechanical fan

Protective grille for rotating and hot parts

Electric starter and charge alternator

Starting battery (with lead acid) including rack and cables

Engine jacket water heater

Base frame design incorporates an integral fuel tank and anti-vibration isolators

Flexible fuel connection hoses

Single bearing, class H alternator

Industrial exhaust silencer and steel bellows supplied separately

Static battery charger

Manual for aplication and installation.

## OPTIONAL EQUIPMENTS

## **ENGINE**

- Fuel-Water Seperator Filter
- Low water level alarm
- Oil heater

#### **ALTERNATOR**

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

#### CONTROL SYSTEM

- Automatic synchronising and power control system ( multi gen-set Parallel)
- 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: weater 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

- Three Pole Contactor
- Four Pole Contactor



Cummins Engine:

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# DIESEL ENGINE SPECIFICATIONS

Manufacturer		Cummins			
Model		6CTAA 8,3-G2			
No. of Cylindirs and Build		6 Cylinder, In Line			
Aspiration and Cooling		Turbo Charged and After Cooled			
Maximum Standby Power		1500 rpi 231,00 k [310,00H	ΚW		
Total Displacement	L	8,300			
Bore and Stroke	mm	114 x 135			
Compression Ratio		16,7:1			
Rated Speed (rpm)	rpm	1500			
Governor		Electronic			
Oil Capacity	L	23,80			
Coolant Capacity	L	32,00			
Intake Air Flow	m³ /min.	15,30			
Radiator Cooling Air	m³ /min.	186,00			
Exhaust Gas Flow	m³ /min.	41,00			
Exhaust Gas Tempratures	° C	565,00			
Start System		24 V d.c.			
Fuel Consumption	Load	%100	%75	%50	
i dei consumption	L/h	51,80	38,00	25,00	

# • ALTERNATOR SPECIFICATIONS

Make		Mecc Alte
Model		ECO 38-3SN
Frequency	Hz	50
Power	kVA	225,00
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Current	А	324,00
Insulation Class		Н
Temperatur		Н
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 250	1940,00	2600,00	1150,00	1750,00	390,00
Sound	Dry Weight	Lenght	Width	Height	Tank Capacity
Attenuated	kg.	mm.	mm.	mm.	L
Type					
AK 60	2600,00	3800	1210	2000	500



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# P 732 control system - Control System



- 1 Menu navigation buttons
- 2 Close mains button
- 3 Main Status and instrumentation display
- 4 Alarm LED's
- 5 Close generator button
- 6 Status LED's
- 7 Operation selecting buttons

### Devices

DSE, model 7320 Auto Mains Failure control module Static battery charger Emergency stop push button and fuses for control circuits

#### Construction and Finish

Comonents 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 or power module. Located at side of generating set with properly panel visibility.

### Generating Set Control Unit

The DSE 7320 conrol module is a standard addition to our generator sets from 250kVA upwards and it has been designed to start and stop diesel andgas generating sets that include electronic and non electronic engines. The DSE 7320 includes the additional capability of being able to monitor a mains (utility) supply and is therefore suitable for controlling a standby generating set in conjunction with an automatic transfer switch. The DSE7320 also indicates operational status and fault conditions, automatically shutting down the generating set and indicating faults by means of its LCD display on the front panel.

#### Standard Specifications

Microprocessor controlled

132 x 64 pixel LCD display makes information easy to read

Front panel programming and also via PC software

Soft touch membrane keypad and five key menu navigation

Remote communications via RS232, RS485 and ethernet and SMS messaging

Event logging (50) showing date and time

Multiple date and time engine exercise mode and maintenance scheduler

Engine block heater control.

Controls; stop, manuel, auto, test, start, mute lamb test/transfer to generator, transfer to mains, menu navigation.



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#### Instruments

**ENGINE** Engine speed Oil pressure Coolant temperature Run time Battery volts Engine maintenance due **GENERATOR** Voltage (L-L, L-N) Current (L1-L2-L3) Frequency Earth current kW kVAr kWh, kVAh, kVArh Phase sequence MAINS Voltage (L-L, L-N) Frequency

### Options

High oil temperature shut down Low fuel level shut down Low fuel level alarm High fuel level alarm EXPANSION MODULES Editional LED module (2548) Expension relay module (2157) Expansion input module (2130)

# Static Battery Charger

 Protection Circuits WARNING Charge failure Battery under voltage Fail to stop Low fuel level (opt.) kW over load Negative phase sequence PRE-ALARMS Low oil pressure High engine temperature Low engine temperature Over /Under speed Under/over generator frequency Under/over generator voltage ECU warning SHUT DOWNS Fail to start **Emergency stop** Low oil pressure High engine temperature Low coolant level Over /Under speed

Over /Under speed
Under/over generator
frequency
Under/over generator voltage
Oil pressure sensor open
Phase rotation
ELECTRICAL TRIP
Earth fault
kW over load
Generator over current
Negative phase sequence

#### 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

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- 1 Steel structures
- Control panel is right side of the set.
- 3 Corrosion-resistant locks and hinges
- 4 Sump drains valves
- 5 Sound proof foam metarial
- 6 Lockable, large doors o each side
- 7 Base frame -tank
- 8 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 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 aproved by the notified body Szutest

Width	mm.	1210
Lenght	mm.	3800
Height	mm.	2000
Fuel Tank Capacity		500