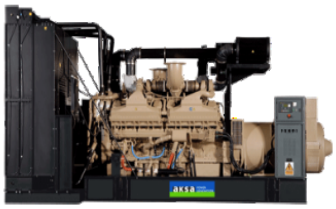
Standby 2250 kVA
Diesel Generating Sets

AC 2250

Engine : Cummins
Alternator : Stamford
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	2250,00	1800,00	2045,00	1636,00	2955,00

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 perod 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 coolant heater
Steel base frame and anti-vibration isolators
Spare external fuel tank (open set)
Flexible fuel connection hoses
Single bearing, class H alternator
Industrial exhaust silencer and steel bellows supplied separately
Static battery charger
Manual for application and installation
Generators Sets' voltage and frequency regulation comply with ISO 8528-5
Generators Sets' can take 100% load at one step according to NFPA110

OPTIONAL EQUIPMENTS

ENGINE

- Remote Radiator Cooling
- Fuel-Water Seperator Filter
- 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)
- Paralel system with mains.
- Transition synchronization with mains
- Remote annunciator panel
- Alarm output relays
- Remote communication with modem
- Earth fault, single set
- Charge Ammeter

OTHER ACCESSORIES

- Automatic or manual fuel filling system
- Electrical 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
- Tool kit for maintenance
- 1500/3000 hours maintenance kit
- Supplied with oil and coolant - 30 °C
- Main Fuel Tank

TRANSFER SWITCH

- Three or four pole contactor
- Three or four pole motor operated circuit breaker

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DIESEL ENGINE SPECIFICATIONS

Manufacturer		Cummins		
Model		QSK 60 G4		
No. of Cylinders and Build		16-cylinder, V - Type		
Aspiration and Cooling		Turbo Charged and Two Pump Two Loop		
Maximum Standby Power		1500 rpm		
		1915,00 kw [2567,00HP]		
Total Displacement	L	60,200		
Bore and Stroke	mm	159 x 190		
Compression Ratio		14,5:1		
Rated Speed (rpm)	rpm	1500		
Governor		Electronic		
Oil Capacity	L	280,00		
Coolant Capacity	L	500,00		
Intake Air Flow	m³ /min.	144,30		
Radiator Cooling Air	m³ /min.	2374,00		
Exhaust Gas Flow	m³ /min.	336,60		
Exhaust Gas Temperature	° C	450,00		
Start System		24 V d.c.		
Fuel Consumption	Load	%100	%75	%50
	L/h	394,00	291,00	200,00

ALTERNATOR SPECIFICATIONS

Make		Stamford
Model		PI 734 F
Frequency	Hz	50
Power	kVA	2080,00
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Insulation Class		H
Temperature		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 2250	15500,00	5676,00	2280,00	2967,00	2000,00
Canopy	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
AK 99	21100.00	9000	2800	3478/4452	2200

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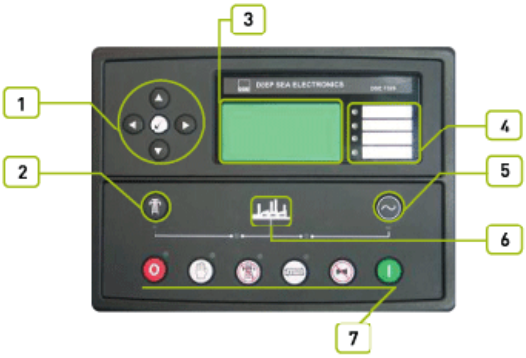
P 732 control system - Control System



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 220 kVA 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
Pf
kVAr
kWh, kVAh, kVArh
Phase sequence
MAINS
Voltage (L-L, L-N)
Frequency

Protection Circuits

WARNING
Charge failure
Battery under voltage
Fail to stop
Low fuel level (opt.)
kW over load
Negative phase sequence
Loss of speed signal
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
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

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)

Standards

Elecrical 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

Static Battery Charger

Battery charger is manufactured with switching-mode and SMD technology and ęt has high efficincy.
Battery charger models' output V-I characteristic is very close to square 2405 has fully output shot circuit protection and ęt can be used as a current source.
2405 charger has high efficiency, long life, low failure rate, light weight and low heat radiated in accordance with linear alternatives.
The charger is fitted with a protection diode across the output. Charge fail output is available. Connect charge fail relay coil between positive output and CF output.
Input: 196-264V.
Output: 27,6V 5A or 13,8V 5A.

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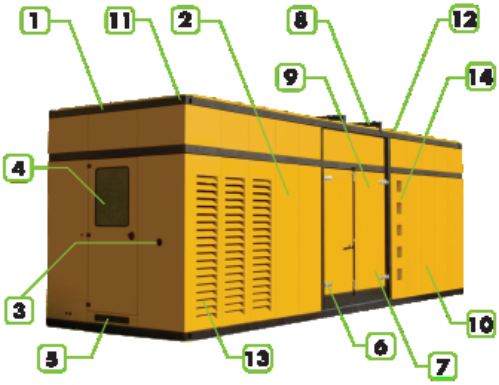
AK 99 - Canopy



1 Steel structure made from steel sheet and steel profiles.
2 canopy and panels made from powder coated sheet steel.
3 Emergency stop push button.
4 Control panel is mounted on the baseframe . Located at the back of the
5 generator set
6 Cables out locations are back of the canopy.
7 Corrosion-resistant locks and hinges.
8 oil could be drained via valve and a hose
9 Exhaust system on the canopy.
10 special large access doors for easy maintanance
11 the cap on the canopy provides easy accsess to radiator cap.
12 Lifting points similar to ISO container , located on each top corner of
13 the canopy.
14 sound proofing materials

Introduction

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.	2800
Lenght	mm.	9000
Height	mm.	3478/4452
Fuel Tank Capacity	L	2200

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