

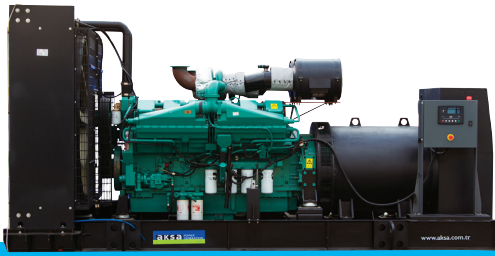


DIESEL POWERED GENERATING SETS

aksa POWER GENERATION

1650
3000 kVA

1320
2400 kW



Generating Set Model	Power Pf.0,8 400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
	AC 1650	1650
AC 1675	1675	1400
AC 1675	1675	1500
AC 2250	2250	2045
AC 2500	2500	2000
AC 3000	3000	2750

Standby: Continuous running at variable load for duration of an emergency.No overload is permitted on these ratings.

Prime: Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. Contact us for the other running periods.

STANDARD GENSET SPECIFICATIONS

ENGINE

- CUMMINS heavy duty diesel engine
- Four cycle, water cooled, turbo charged
- Direct injection fuel system
- Electronic governor control system
- Replaceable wet type cylinder liners
- 24 V.D.C.starter and charge alternator
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Flexible fuel connection hoses and manual sump oil drain pump
- Industrial capacity exhaust silencer and steel bellows
- Starter battery (with lead acid) including Rack and Cables
- Jacket water heater
- Manual for use and installation

ALTERNATOR

- Brushless, single bearing system, 4 poles, flexible disc
- Insulation class H
- Standard degree of protection IP21
- Self-exciting and self-regulating
- Solid state automatic voltage regulator
- Screen protected and drip proof
- Impregnation with tropicalized epoxy varnished
- Stator winding with 2/3 pitch for improved harmonics
- Close voltage regulation

CHASSIS

- Steel chassis and antivibration pads
- The generating set can be lifted or carefully pushed / pulled by the base frame
- Separate fuel tank
- Lifting eyes allow is the transportation by a crane

ENCLOSURE

- All canopy parts are designed with modular principles
- All metal canopy parts are painted by electrostatic polyester powder paint
- Lockable doors on each side
- Acoustic fire retardant foam is covered in side the enclosure
- Aluminium internal floor (AK99 except)
- Residential silencer
- The enclosure have four lifting points
- Easy maintenance and operation
- Model AK99 enclosure is droop over style
- Colour black/yellow (RAL 9005 / RAL 1003)
- Emergency stop push button is installed outside of canopy

QUALITY STANDARDS

- ISO 9001:2008, TS ISO 8528-4, TS ISO 8528-5, TS ISO 8528-8, BS EN ISO 14001:2004, BS OHSAS 18001:2007, TS 12650

CONTROL SYSTEM

1) Auto. Mains Failure control panel - P732

Control, supervision and protection panel is mounted on the gen-set base frame. The control panel is equipped as follows:

Equipments:

- Control with DSE, model 7320 module
- Static battery charger
- Emergency stop push button.

a) Control Module DSE 7320 Features

- The module monitors a mains supply and controls a standby generating set with automatic transfer switch
- Module indicates operational status and fault conditions by means of its LCD display
- Microprocessor controlled
- Front panel programming and also via PC software
- 132 x 64 pixel LCD display makes information easy to read
- Soft touch membrane keypad and five key menu navigation
- Remote communication via RS 232, RS 485 and Ethernet and SMS messaging
- Event logging (50) showing date and time
- Multiple date and time engine exercise mode and maintenance scheduler

Controls

Stop - Manual - Auto - Test - Start - Mute/Lamp test - Transfer to generator - Transfer to mains - Menu navigations buttons

b) Instruments via LCD display

Engine

- Oil pressure (PSI & Bar)
- Temperature (°C & °F)
- Speed RPM
- Run time
- Battery volts
- Maintenance due

Mains

- Volts (L-L / L-N)
- Frequency (Hz)

Generator

- Volts (L-L / L-N)
- Currents (L1, L2, L3)
- Frequency (Hz)
- kW
- Cos φ
- kVA, kVAR,
- kWh, kVAh, kVAh
- Phase sequence

c) Protections

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

d) Led Indication

- Mains available
- Mains on load
- Generator available
- Generator on load

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



DSE 7320

DIESEL GENERATING SETS
400 / 230 V - 50Hz
GROUP
DIESEL ENGINE

Model		AC 1650	AC 1675	AC 1675	AC 2250	AC 2500	AC 3000	
Power Pf. 0,8	Standby	kVA	1650	1675	1675	2250	2500	3000
		kW	1320	1340	1340	1800	2000	2400
	Prime	kVA	1400	1400	1500	2045	2000	2750
		kW	1200	1120	1200	1636	1600	2200
Engine Make		Cummins						
Model		KTA 50 G8		KTA 50 GS8	QSK 60 G4	QSK 60 G13	QSK 78 G9	
Gross Engine Power Output (at rated rpm)		kW	1429		1915	2164	2539	
		HP	1915		2567	2901	3404	
Aspiration and Cooling		Turbo charged 2 Pump & 2 Loop		Turbo charged 1 Pump & 2 Loop	Turbo charged 2 Pump & 2 Loop			
Total Displacement		Liter	50,3		60,2		77,6	
No. of Cylinders and Build		16 V					18 V	
Engine Speed		rpm	1500					
Bore ve Stroke		mmxmm	159 x 159		159 x 190		170 x 190	
Compression Ratio			14,9 : 1		14,5 : 1		15,5 : 1	
Governor Type		Electronic						
Fuel Consumption (L/h) Load		1 / 2	155	167	200	210	291	
		3 / 4	222	238	291	302	406	
		Full	289	309	394	399	528	
Fuel Tank Capacity		Liter	2000				N/A	
Total Oil Capacity		Liter	204		280		466	
Coolant Capacity (Engine and radiator)		Liter	420		500	N/A	N/A	
Radiator Cooling Air		m ³ /min	2631		2374	N/A	N/A	
Air intake - Engine		m ³ /min	99,3		144,3	154,4	193,14	
Exhaust Gas Flow		m ³ /min	261		336,6	393,2	432,5	
Exhaust Gas Temperature		°C	510		450	507	427	

IC: Inter Cooler
AC: After Cooler

Open Types

Dimensions (Lenght x Width x Height)	m	5,45 x 1,95 x 2,45	5,68 x 2,28 x 2,97	6,0 x 2,5 x 3,22	N/A
Dry Weight	kg.	10100	15500	17200	N/A

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

Sound Attenuated Types

Canopy Model	AK 98	AK 99	N/A		
Dimensions (Lenght x Width x Height)	m	9,0 x 2,27 x 2,55 / 3,2	9,0 x 2,8 x 3,3 / 4,80	N/A	
Dry Weight	kg.	15100	21100	22800	N/A
Fuel Tank Capacity	Liter	1900	2200	N/A	

Optional Equipments
Diesel Engine

- Oil heater
- Remote radiator
(Except AC3000)

Alternator

- 3 pole output circuit breaker
 - Anti-condensation heater
 - Oversized alternator

Panel

- Charge ammeter
- Transfer switch 3 pole
- Transfer switch 4 pole
- Earth fault, single set
- Remote communications

Accessories

- Bulk fuel tank
- Automatic or manual fuel filling system
- Fuel - water separator filter
- Low fuel level alarm
- Residential silencer
- Enclosure or soundproof container
- Tool kit for maintenance



Aksa makes its sound attenuated generator sets sound pressure level tests in accordance with Directive 2000/14/EC validation of the sound level test has been approved by the notified body szutest

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