



## DIESEL POWERED GENERATING SETS

**700**  
1410  
kVA

**560**  
1128  
kW



Generating Set Model	Power Pf.0,8	
	400 / 230 V - 50 Hz	Standby kVA Prime kVA
AC 700	700	638
AC 825	825	-
AC 880	880	800
AC 1100	1100	1000
AC 1100K	1100	1000
AC 1410	1410	1280

**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
- 4 valves per cylinder
- 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 (AC700 and AC825 have integral fuel tank)
- Lifting eyes allow for 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 inside the enclosure
- Aluminium internal floor (AK99, MS85 except)
- Residential silencer
- The enclosure has four lifting points
- Easy maintenance and operation
- Model AK99 enclosure is drop 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 navigation 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)

##### 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

##### Generator

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

##### 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 700	AC 825	AC 880	AC 1100	AC 1100K	AC 1410
Power Pf. 0,8	Standby kVA	700	825	880	1100	1100	1410
	kW	560	660	704	880	880	1128
Prime	kVA	638	-	800	1000	1000	1280
	kW	510	-	640	800	800	1024
Engine Make							
Model		VTA28-G5	VTA 28-G6	QSK 23-G3	QST 30-G4	KTA38G5	KTA 50 G3
Gross Engine Power Output (at rated rpm)	kW	612	722	768	970	970	1227
	HP	820	968	1030	1300	1300	1645
Aspiration and Cooling		Turbo Charged & AC	Turbo Charged & IC	Turbo Charged + 2 Pump & 2 Loop	Turbo Charged & AC		
Total Displacement	Liter	28		23,15	30,48	37,8	50,3
No. of Cylinders and Build		12 V		6-Inline	12 V	12 V	16 V
Engine Speed	rpm			1500			
Bore ve Stroke	mmxmm	140 x 152	140 x 152	170 x 170	140 x 165	159 x 159	
Compression Ratio		13,1:1	13,1 : 1	16,0:1	14,0:1	13,9:1	
Governor Type				Electronic			
Fuel Consumption (L/h) Load	1 / 2	73	91	85	102	113	139
	3 / 4	104	133	121	151	161	199
	Full	140	180*	161	202	209	261
Fuel Tank Capacity	Liter	1000	1000	1500	1500	1500	2000
Total Oil Capacity	Liter	83	83	103	154	135	177
Coolant Capacity (Engine and radiator)	Liter	170	170	120	342	350	415
Radiator Cooling Air	m³/min	651	651	626	1111	1489	1770
Air intake - Engine	m³/min	52,68	54,84	53,3	60,3	72,8	104,8
Exhaust Gas Flow	m³/min	122,88	132,72	147,8	178,8	198,4	240,7
Exhaust Gas Temperature	°C	507	489	543	575	513	525

IC: Inter Cooler

AC: After Cooler

\*At standby power

### Open Types

Dimensions (Length x Width x Height) m	3,81 x 1,55 x 2,27	3,95 x 1,55 x 2,27	3,95 x 1,71 x 2,23	4,4 x 1,78 x 2,34	4,47 x 1,77 x 2,37	4,86 x 2,10 x 2,41
Dry Weight kg.	5470	5610	5950	7350	8600	9900

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

### Sound Attenuated Types

Canopy Model	MS 85	AK 90	AK 96	AK 98
Dimensions (Length x Width x Height) m	5,3 x 1,61 x 2,66	6,5 x 2,2 x 2,35	7,5 x 2,3 x 2,5	9,0 x 2,27 x 2,55 / 3,2
Dry Weight kg.	7030	7170	9100	11000
Fuel Tank Capacity Liter	1000	1100	1500	1900

### Optional Equipments

#### Diesel Engine

- Oil heater
- Remote radiator (AC880 except)

#### 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
- Trailer
- 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 szustest

Aksa Jeneratör Sanayi A.Ş.  
Rüzgarlıbahçe Mah., Selvi Çıkmazı, No:10  
34805, Kavaklı - Beykoz / İSTANBUL  
T: 0216 681 00 00 F: 0216 681 57 81  
e-mail: aksa@aksa.com.tr www.aksa.com.tr

Aksa Jeneratör Sanayi A.Ş. is a member of KAZANCI HOLDING