

DESIGN SPECIFICATIONS

- ✓ High quality, reliable, long life and complete power unit.
- ✓ Every generating set is subjected to a comprehensive test programme which includes full load testing and checking and proving of all control and safety shutdown functions testing.
- ✓ Fully engineered with a wide range of options and accessories; both electrical and mechanical, soundproof canopy and on road trailer.
- ✓ Easy start and maintenance possibility.
- ✓ Compact design: ES series DG sets are smaller and lighter than any other DG set in it's class.

DYNAMIC RANGE



400 / 230 V - 50 Hz	Generating Set Model		ADR 17	ADR 22	ADR 28	ADR 33	ADR 43	ADR 68
Power Pf. 0,8	Standby	kVA	16,5	22	27,5	33	43	68
	Prime	kVA	15	20	25	30	40	62

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 hours period.

STANDARD GENSET SPECIFICATIONS

ENGINE

- CUMMINS, X and S series, 1500 rpm, diesel engines.
- Four stroke, water cooled, direct injection fuel system.
- Mechanical Governor Control System.
- Dual fuel filter.
- Full flow lub oil filter.
- Changeable cylinder liners.
- Dry type air cleaner.
- 12 Volt D.C. starter and charge alternator.
- Cooling radiator.
- Flexible fuel connection hoses.
- Industrial capacity exhaust silencer.
- Starter battery (with lead acid).
- Jacket water heater (automatic models).
- Operation manuals and circuit diagram documents.

ALTERNATOR

- Stamford Alternator from Newage.
- Screen protected and drip - proof, brushless type, revolving field, self - exciting, 4 poles, IP23 Enclosure, single bearing system, self regulated through an automatic voltage regulator.

CHASSIS

- The complete generating set is mounted as whole on a heavy - duty fabricated, steel base frame. Antivibration pads are fixed between the engine / alternator feet and the base frame.
- Base frame design incorporates FRP fuel tank.

CANOPY

- Easy maintenance and operation are supplied by design.
- All metal canopy parts are painted by electrostatic powder paint.
- Emergency stop button is outside of canopy.

QUALITY STANDARDS

- The equipment meets the following standards:
BS 4999 / 5000, ISO 8528, ISO 3046, BS5514,
VDE 0530, IEC34-1



CONTROL SYSTEM

Control, supervision and protection panel is mounted on the genset. Control panel is equipped as follows:

1. Auto Start and Control Panel,

Control panel is equipped as follows:

- Control with PCC 300 module.
 - Multi function meter.
 - Emergency Stop button.
- #### a) Control module PCC 300 Features:
- Generator set, monitoring and control.
 - Micro - processor based design.
 - Generator set, manual and remote Start / Stop.
 - Shutdown fault indication and hours run meter (LCD).
 - Key switch operation and Start push button.

b) Protections and Indications:

- High engine temperature, shutdown.
- Low oil pressure, shutdown.
- Overspeed.
- Fail to start.
- Charge fail.

c) Multi Function Meter Which Measures:

- Generator phase Voltages (V).
- Generator phase Current (A).
- Generator phase Frequency (Hz).
- Engine water temperature (°C).
- Engine lube oil pressure (kg. / cm²).

2. MCCB of Suitable Rating with Overload and Short Circuit.

TECHNICAL DATA

DIESEL GENERATING SETS 400 / 230 V - 50 Hz

GROUP	MODEL		ADR 17	ADR 22	ADR 28	ADR 33	ADR 43	ADR 68
	Power Pf. 0,8	Standby	kVA	16,5	22	27.5	33	43
kW			13	17,6	22	26	35	54.5
Prime		kVA	15	20	25	30	40	62
		kW	12	16	20	24	32	50
DIESEL ENGINE	Engine Make		Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
	Model		X1,7 G1	X2,5 G1	X2,5 G2	S3,8 G2	S3,8 G4	S3,8 G7
	Engine Output (at rated rpm)	kW HP	14,9	18,6	23,8	27	38	56
			20	25	32	36	52	76
	Aspiration and Cooling		Natural	Natural	Natural	Natural	Turbocharged	Turbocharged & Chargecooled
	Cubic Capacity	Litre	1,7	2,5	2,5	3,8	3,8	3,8
	Cylinders - Build		2 - In Line	3 - In Line	3 - In Line	4 - In Line	4 - In Line	4 - In Line
	Engine Speed	rpm	1500	1500	1500	1500	1500	1500
	Bore and Stroke	mm. x mm.	91,4 x 127	91,4 x 127	91,4 x 127	97 x 128	97 x 128	97 x 128
	Compression Ratio		18,5:1	18,5:1	18,5:1	17,5:1	17,5:1	17,5:1
	Governor		Mechanical "A2"	Mechanical "A2"	Mechanical "A2"	Mechanical "A2"	Mechanical "A2"	Mechanical "A2"
	Fuel Injection System		Direct	Direct	Direct	Direct	Direct	Direct
	Fuel Consumption at % 75 load	Lt. / hr.	2,8	3,5	4.5	5.6	7.5	10.3
	Fuel Tank Capacity	Litre	45	45	45	100	100	100
	Engine Oil Capacity	Litre	5	6,5	6,5	9	9	9
Engine Water Capacity	Litre	6	7,5	7,5	11	11	11	
Exhaust Pipe Diameter	mm.	50	50	50	75	75	75	
ALTERNATÖR	Make (brand)		Stamford	Stamford	Stamford	Stamford	Stamford	Stamford
	No. Phases		3 Phase	3 Phase	3 Phase	3 Phase	3 Phase	3 Phase
	Class of Insulation		H	H	H	H	H	H
	Voltage Regulation		± 1,5 %	± 1,5 %	± 1,5 %	± 1,5 %	± 1,5 %	± 1,5 %

OPEN TYPES

Dimensions (length x width x height)	m.	1,2 x 0,73 x 1,21	1,4 x 0,73 x 1,21	1,4 x 0,73 x 1,21	1,8 x 0,76 x 1,26	1,8 x 0,76 x 1,23	1,8 x 0,76 x 1,32
Dry Weight	kg.	410	490	490	700	750	800

SOUND ATTENUATED TYPES

		ASG 1			ASG 2		
Dimensions (length x width x height)	mm.	1850 x 900 x 1630			2150 x 970 x 1730		
Dry Weight	kg.	720	755	790	1165	1215	1265

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

OPTIONAL EQUIPMENTS

- Fuel - water separator filter.
- Remote radiator (except ADR 68).
- Manual fuel filling system.
- Charge voltmeter.
- Charge ammeter.
- Engine oil drain manual pump.



- Auto Mains Failure & Transfer switch panel.
- 4 pole transfer switch panel.
- Residential type silencer.
- Enclosure, soundproof canopy.
- Trailer.
- Tools (for maintenance).

Aksa Jenerator Sanayi A.S. Gulbahar Caddesi 1. Sokak 34212 Gunesli - Istanbul / Turkey
Tel: +90 212 478 66 66 (pbx) Fax: +90 212 657 55 16 e-mail: aksa@aksa.com.tr www.aksa.com.tr