



INTRODUCTION

AKSA POWER GENERATION

Aksa power generation system, providing optimum performance, and reliability, for stationary standby, prime power, and continuous duty applications. All generator sets are factory build, and production tested.

Power (kVA)

3 Phase,50 Hz, PF 0.8

	Voltage	STANDBY RATING (ESP)		PRIME RATING (PRP)		Standby Amper
		kW	kVA	kW	kVA	
	400/231	800,00	1000,00	728,00	910,00	1443,42

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 8528-1. Overload is not allowed.

PRIME RATING (PRP) Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528-1. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation.

General Characteristics

Model Name	AP 1000
Frequency (Hz)	50
Fuel Type	Diesel
Engine Made and Model	PERKINS 4008TAG1A
Alternator Made and Model	ECO 43-2S/4 A
Control Panel Model	DSE 7320
Canopy	AK 96-AP1125

ENGINE SPECIFICATIONS

Engine	PERKINS
Engine Model	4008TAG1A
Number of Cylinder (L)	8 cylinders - in line
Bore (mm.)	160
Stroke (mm.)	190
Displacement (lt.)	30.561
Aspiration	Turbo Charged
Compression Ratio	13.6:1
RPM (d/dk)	1500
Oil Capacity (Total With Filter) (It)	153
Standby Power (kW/HP)	882/1182,30
Prime Power	805/1079,08
Block Heater QTY	1
Block Heater Power (Watt)	4000
Fuel Type	Diesel
Injection Type and System	Direct
Type of Fuel Pump	MEUI
Governor System	Electronic

AP 1000



Operating Voltage (Vdc)	24 Vdc
Battery and Capacity (Qty/Ah)	2x143
Charge Alternator (A)	55
Cooling Method	Water Cooled
Cooling Fan Air Flow (m3/min)	1359.6
Coolant Capacity (engine only / with radiator) (It)	/133
Air Filter	Dry Туре
Fuel Cons. Prime With %100 Load (lt/hr)	195
Fuel Cons. Prime With %75 Load (lt/hr)	143
Fuel Cons. Prime With %50 Load (lt/hr)	98

ALTERNATOR CHARACTERISTICS

ALTERNATOR CHARACTERISTICS	
Manufacturer	Mecc Alte
Alternator Made and Model	ECO 43-2S/4 A
Frequency (Hz)	50
Power (kVA)	930
Voltage (V)	400
Phase	3
A.V.R.	DSR
Voltage Regulation	(+/-)1%
Insulation System	н
Protection	IP23
Rated Power Factor	0.8
WEIGHT COMP. GENERATOR (Kg)	2090
COOLING AIR (m³/min)	90
Open Gen.Set Dimensions (mm)	
LENGTH	4786
WIDTH	1973
HEIGHT	2205
DRY WEIGHT (kg.)	6670
TANK CAPACITY (It.)	1500
Gen.Set Canopy Dimensions (mm)	
LENGTH	7500
WIDTH	2300
HEIGHT	2508
DRY WEIGHT (kg.)	10200
TANK CAPACITY (It.)	1500

INTRODUCTION

No Data





Control Panel

Control Module	DSE
Control Module Model	DSE 7320
Communication Ports	MODBUS
	 Menu navigation buttons 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.
- 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.

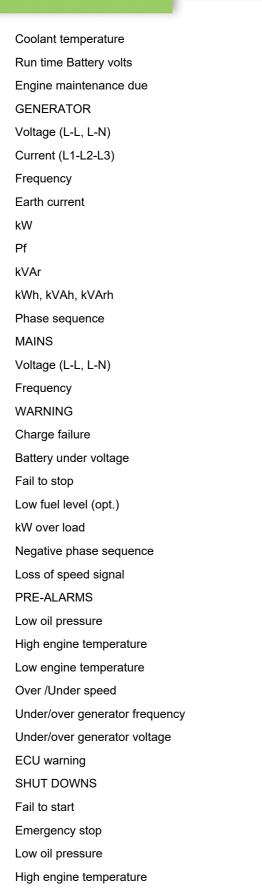
Instruments

- ENGINE
- Engine speed
- Oil pressure





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Low coolant level

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AP 1000





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 it has high efficincy.

Battery charger models' output V-I characteristic is very close to square

2405 has fully output shot circuit protection and it 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.

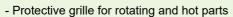
Input: 196-264V.

Output: 27,6V 5A or 13,8V 5A.

STANDARD SPECIFICATIONS

- Water cooled diesel engine
- Radiator with mechanical fan

AP 1000



- Electric starter and charge alternator
- Starting battery (with lead acid) including rack and cables
- Engine coolant heater

AKSA POWER GENERATION

- 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

OPTIONAL EQUIPMENTS

ENGINE
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)
Transition synchronization with mains
Remote annunciator panel
Remote relay output
Alarm output relays
Remote communication with modem
Earth fault, single set
Charge Ammeter
TRANSFER SWITCH
Three or four pole contactor
Three or four pole motor operated circuit breaker
OTHER ACCESSORIES
Main Fuel Tank
Automatic or manual fuel filling system
Manual oil drain pump
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

AKSA CERTIFICATES

- TS ISO 8528
- TS ISO 9001-2008
- CE
- SZUTEST
- 2000/14/EC

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