

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 (F	Standby Amper	
voltage	kW	kVA	kW	kVA	
400/231	504,00	630,00	460,00	575,00	909,35

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	AD 630
Frequency (Hz)	50
Fuel Type	Diesel
Engine Made and Model	HYUNDAI DP180LA
Alternator Made and Model	AK 6480
Control Panel Model	DSE 7320
Canopy	MS 80 TRP

ENGINE SPECIFICATIONS

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Engine	HYUNDAI
Engine Model	DP180LA
Number of Cylinder (L)	10 cylinders - V type
Bore (mm.)	128
Stroke (mm.)	142
Displacement (It.)	18.273
Aspiration	Turbo Charged and Intercooled (Air to Air)
Compression Ratio	15.0:1
RPM (d/dk)	1500
Oil Capacity (Total With Filter) (It)	34
Standby Power (kW/HP)	552/750
Prime Power	502/683
Block Heater QTY	1
Block Heater Power (Watt)	3000
Fuel Type	Diesel
Injection Type and System	Direct
Type of Fuel Pump	Bosh In-Line P Type
Governor System	Electronic
Operating Voltage (Vdc)	24 Vdc

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AD 630

 $\ensuremath{\textbf{3.}}$ Control panel is mounted on the baseframe . Located

at the right side of the generator set.





- 4. Corrosion-resistant locks and hinges.
- 5. Oil could be drained via valve and a hose
- 6. Exhaust system in the canopy.
- 7. Special large access doors for easy maintanance
- **8.** In front and back side special large access doors for easy maintanance

9. Base frame -fuel tank.

10. Lifting points similar to ISO container , located on each top corner of the canopy.

11. The cap on the canopy provides easy access to radiator cap.

- 12. Sound proofing materials
- 13. Plastic air intake pockets.

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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.

Control Panel

Control Module	DSE
Control Module Model	DSE 7320
Communication Ports	MODBUS
	 Menu navigation buttons Close mains button Main Status and instrumentation display Alarm LED's Close generator button Status LED's 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.

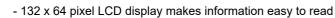
The DSE 7320 includes the additional capability of being able to monitor a mains (utility) supply and is therefore suitable for controlling a standby generating set in conjunction with an automatic transfer switch.

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





- 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.

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- Controls; stop, manuel, auto, test, start, mute lamb test/transfer to generator, transfer to mains, menu navigation.

		U	,	J
Instruments				
ENGINE				
Engine speed				
Oil pressure				
Coolant temperature				
Run time Battery volts				
Engine maintenance due	e			
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				
WARNING				
Charge failure				
Battery under voltage				
Fail to stop				
Low fuel level (opt.)				
kW over load				
Negative phase sequence	ce			
Loss of speed signal				
PRE-ALARMS				







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

AD 630

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.

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

STANDARD SPECIFICATIONS

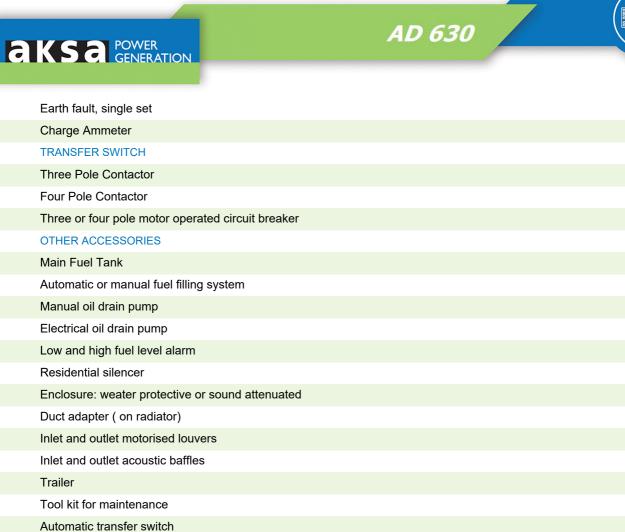
- Water cooled, Diesel engine
- Radiator with mechanical fan
- Protective grille for rotating and hot parts
- Electric starter and charge alternator
- Starting battery (with lead acid) including rack and cables
- Engine coolant heater
- Base frame design incorporates an integral fuel tank and anti-vibration isolators
- Flexible fuel connection hoses
- Single bearing, class H alternator
- Industrial exhaust silencer and steel bellows supplied separately(for open sets)
- Static battery charger

- Manual for application and installation

OPTIONAL EQUIPMENTS

ENGINE
Fuel-Water Seperator Filter
Oil heater
ALTERNATOR
Anti-Condensation Heater
Over sized alternator
PMG excitation + AVR
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





AKSA CERTIFICATES

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