

# APD 275 A

Engine : Aksa  
 Alternator : Aksa  
 Control System : P 732 control system



## SZUTEST

This generator set is manufactured in facilities certified to ISO 9001.

## 2000/14/EC

Enclosed product is tested according to EU noise legislation 2000/14/EC

### 3 Phase Ratings, 50 Hz, PF 0,8

Voltage	Standby Rating (ESP)		Prime Rating (PRP)		
	kVA	kW	kVA	kW	Amp
400/230	275,00	220,00	250,00	200,00	361,00

**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. 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. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

### 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 Separator Filter
- Oil heater

#### ALTERNATOR

- Anti-Condensation Heater
- Main line circuit breaker

#### CONTROL SYSTEM

- Charge Ammeter

#### OTHER ACCESSORIES

- Manual oil drain pump
- Residential silencer
- Enclosure: weather protective or sound attenuated
- Trailer
- Tool kit for maintenance
- Main Fuel Tank

#### TRANSFER SWITCH

- Three or four pole contactor
- Three or four pole motor operated circuit breaker

# APD 275 A

Engine : Aksa  
 Alternator : Aksa  
 Control System : P 732 control system



## 1 DIESEL ENGINE SPECIFICATIONS

Manufacturer		Aksa
Model		A6CRX97TI
No. of Cylinders and Build		6 Cylinder, In Line
Aspiration and Cooling		Turbo Charged and After Cooled
Maximum Standby Power		1500 rpm
		219,00 kW [293,60HP]
Total Displacement	L	9,726
Bore and Stroke	mm	126 X 130
Compression Ratio		16,5:1
Rated Speed (rpm)	rpm	1500
Governor		Electronic
Oil Capacity	L	24,00
Coolant Capacity	L	68,00
Intake Air Flow	m <sup>3</sup> /min.	13,50
Exhaust Gas Flow	m <sup>3</sup> /min.	38,90
Exhaust Gas Temperature	° C	490,00
Start System		24 V d.c.
Fuel Consumption	Load	%100
	L/h	58,20

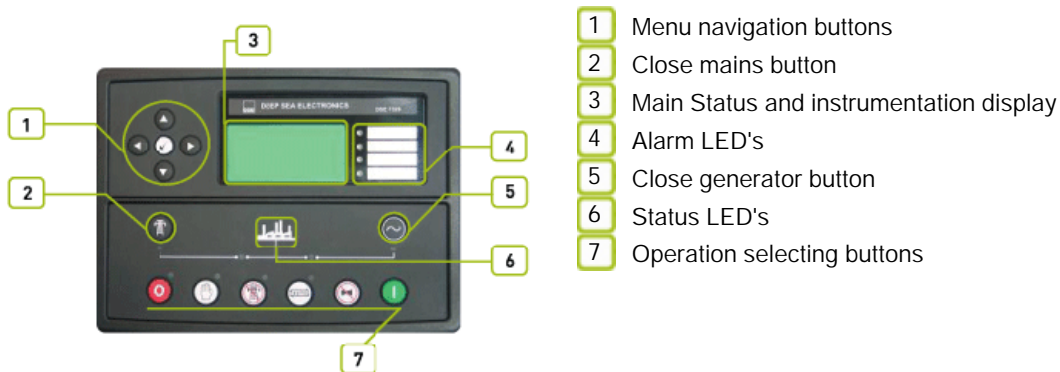
## 2 ALTERNATOR SPECIFICATIONS

Make		Aksa
Model		AK4200
Frequency	Hz	50
Power	kW	200,00
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Current	A	288,00
Insulation Class		H
Excitation System		Electronic ( AVR )

## 3 DIEMENSIONS AND WEIGHT

Open Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
APD 275 A	2645,00	2900,00	1400,00	2045,00	526,00
Canopy	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
APD 275 A	3080	3918	1463	2163	526

## 1 P 732 control system - Control System



### 2 Devices

DSE, model 7320 Auto Mains Failure control module  
Static battery charger  
Emergency stop push button and fuses for control circuits

### 3 Construction and Finish

Components 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

### 4 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.

## 5 Generating Set Control Unit

The DSE 7320 control module is a standard addition to our generator sets from 220 kVA upwards and it has been designed to start and stop diesel and gas 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 DSE 7320 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 and SMS messaging  
Event logging (50) showing date and time  
Multiple date and time engine exercise mode and maintenance scheduler  
Engine block heater control.  
Controls; stop, manual, auto, test, start, mute lamp test/transfer to generator, transfer to mains, menu navigation.

# APD 275 A

Engine : Akxa  
 Alternator : Akxa  
 Control System : P 732 control system



## Instruments

- ENGINE
- Engine speed
- Oil pressure
- Coolant temperature
- Run time
- Battery volts
- Engine maintenance due
- 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

## Protection Circuits

- 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
- 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

- Electrical 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

6UHf mVUf [ Yf ]g'a Ubi ZUM FYX'k ]h'gk ]Hx ]b[ !a cXY'UbX'GA 8'fVWbc`c[ mUbX'ih\Ug\ ] [ \ YZZ]bVWf  
 6UHf mVUf [ Yf'a cXY'gfci hdi hJ !=VXUfUWVf]ghW]g j YfmVcgy'hc'gei Ufy'&(\$) \Ug'Z`mici hdi hg\chVfVW ]hdfchVW]cb UbX  
 ihVWb'VY i gYX'Ug'U'W'ffYbhgci fVW"  
 &(\$) VUf [ Yf\Ug\ ] [ \ YZZ]VYbVWz`cb[ "]Zz`ck 'Z]i'fy'fUYz`[ \hk Y] [ \hUbX`ck \YUhfUX]UfYX' ]b UVMc'fXUbW'k ]h' "]bYUf  
 U'fYfbU'hj Yg"  
 H\Y VUf [ Yf ]g'Z]H'X'k ]h' U'dfchVW]cb'X]cXY'UWcgg'h'Y'ci hdi h'7\Uf [ Y'Z]`ci hdi h]g'Uj U]UV'Y""7 cbbYVWUf [ Y'Z]`fY'Um  
 Vt` ]'VY'hk YYb dcg]h] Y ci hdi hUbX'7: ci hdi h'  
 -bdi h'% \*!&\*(J"  
 Ci hdi h'&+Z'J ) 5'cf% z J ) 5"

# APD 275 A

Engine : Akxa  
 Alternator : Akxa  
 Control System : P 732 control system



## APD 275 A - Canopy

### Introduction

Sound-attenuated and weather protective enclosures for generating sets from Akxa, meet even the sound requirements and provide optimum protection from inclement weather and development by our specialist acoustic engineers. Our modular designed sound insulated canopies (8 - 275kVA) fit directly to the open generator set to 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.

### Standard Specifications

Compact footprint, low profile design.

Enclosure, generator set, exhaust system and base-tank are pre-assembled, pre-integrated and shipped as one package

Body made from steel components treated with polyester powder coating

Fire retardant foam insulation

Easy access to all service points

Exhaust system inside canopy

Large doors on each side

Control panel viewing window in a lockable access door

Emergency stop push button mounted on enclosure exterior

Cooling fan and battery charging alternator fully guarded

Fuel fill and battery can only be reached via lockable access doors.

Lifting points on the top of canopy and base frame

Customer options available to meet your applications needs.

Width	mm.	1463
Length	mm.	3918
Height	mm.	2163
Fuel Tank Capacity	L	526