

# APD 90 A

Engine : Aksa  
 Alternator : Aksa  
 Control System : P 72 Control System



## ISO8528

This generator set has been designed to meet ISO 8528 regulation.

## SZUTEST

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



This generator set is available with CE certification.

## 2000/14/EC

Enclosed product is tested 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	93,00	74,00	85,00	68,00	122,00

**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

Aksa power generation system, providing optimum performance, reliability, and versatility for stationery standby, prime power, and continuous duty applications.

All generator sets are prototype tested, factory build, and production tested.

### OPTIONAL EQUIPMENTS

#### ENGINE

- Fuel-Water Separator Filter
- Oil heater

#### ALTERNATOR

- Anti-Condensation Heater
- Single Phase ( 4 lead)
- Main line circuit breaker

#### CONTROL SYSTEM

- Earth fault, single set
- Charge Ammeter

#### OTHER ACCESSORIES

- Automatic or manual fuel filling system
- Manual oil drain pump
- Low and high fuel level alarm
- Residential silencer
- Enclosure: weater protective or sound attenuated
- Trailer
- Tool kit for maintenance
- Main Fuel Tank

#### TRANSFER SWITCH

- 
- Four Pole Contactor
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## 1 DIESEL ENGINE SPECIFICATIONS

Manufacturer		Akxa
Model		A4CRX46TI
No. of Cylinders and Build		4 Cylinder, In Line
Aspiration and Cooling		Turbo Charged and After Cooled
Maximum Standby Power		1500 rpm
		82 kW[110HP]
Total Displacement	L	4,58
Bore and Stroke	mm	110 X 125
Compression Ratio		17:1
Rated Speed (rpm)	rpm	1500
Governor		Electronic
Oil Capacity	L	14,00
Coolant Capacity	L	26,00
Intake Air Flow	m <sup>3</sup> /min.	4,90
Radiator Cooling Air	m <sup>3</sup> /min.	132
Exhaust Gas Flow	m <sup>3</sup> /min.	15,50
Start System		24 V d.c.
Fuel Consumption	Load	%100
	L/h	22,00

## 2 ALTERNATOR SPECIFICATIONS

Make		Akxa
Frequency	Hz	50
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Insulation Class		H
Rotor		Single Bearing System, Flexible Disc
Excitation System		Electronic ( AVR )

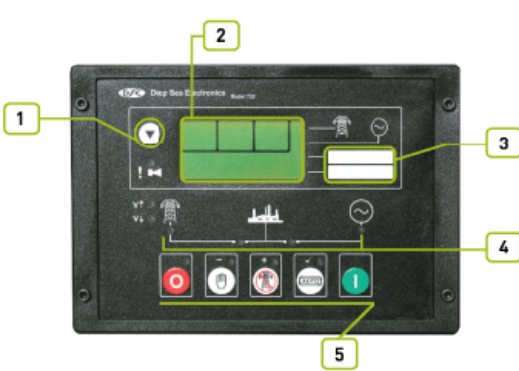
## 3 DIEMENSIONS AND WEIGHT

Open Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
APD 90 A	1290	2150	1000	1600	195
Sound Attenuated Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
APD 90 A	1620	3130	1070	1750	

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## 1 P 72 Control System - Control System



- 1 LCD display scroll button
- 2 LCD display
- 3 Additional alarm / Status LED's
- 4 Status LED's
- 5 Operation selecting buttons

### 2 Devices

DSE, model 720 Auto Mains Failure control module  
 Static battery charger 5A, 220/240 volt  
 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.  
 Located at side of generating set with properly panel visibility.

### 5 Generating Set Control Unit

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 H\Y'8G9'+&\$'W'bf'c'a cXi `Y`g`U`g`f`U`b`X`U`F`X`U`X`h`c`b`h`c`i`f`[`Y`b`Y`f`U`h`c`f`g`Y`h`i`d`h`c`&`\$`\_`J`5`U`b`X`i`h`U`j`Y`V`Y`Y`b`X`Y`g`[`b`Y`X`h`c`g`U`f`h`U`b`X`g`h`c`d`X`Y`g`Y`U`b`X`[`U`g`[`Y`b`Y`f`U`h`b`[`g`Y`h`g`H\Y'8G9'+&\$'a cXi `Y`U`g`V`Y`Y`b`X`Y`g`[`b`Y`X`h`c`a`c`b`[`h`c`f`[`Y`b`Y`f`U`h`c`f`Z`Y`e`i`Y`b`V`h`z`j`c`h`z`W`f`Y`b`h`z`Y`b`[`j`b`Y`c`]`d`f`Y`g`g`i`f`Y`z`V`c`U`b`h`i`Y`a`d`Y`f`U`h`i`f`Y`i`f`i`b`b`[`\`c`i`f`g`U`b`X`V`U`h`Y`f`m`j`c`h`g`"A`c`X`i`Y`a`c`b`[`h`c`f`g`h`Y`a`U`j`b`g`g`i`d`d`m`U`b`X`g`k`]`h`W`c`j`Y`f`h`c`h`Y`[`Y`b`Y`f`U`h`c`f`k`\`Y`b`h`Y`a`U`j`b`g`d`c`k`Y`f`Z`j`g`"  
 H\Y'8G9'+&\$'U`g`c`]`b`X`W`h`Y`g`c`d`Y`f`U`h`c`b`U`g`h`i`g`U`b`X`Z`j`h`V`c`b`X`]`h`c`b`g`z`U`i`h`c`a`U`h`W`m`i`g`i`h`h`b`[`X`c`k`b`h`Y`[`Y`b`Y`f`U`h`b`[`g`Y`h`U`b`X`]`b`X`W`h`b`[`Z`j`h`g`V`m`i`a`Y`U`b`g`c`Z`]`h`g`@`7`8`X`j`g`d`U`m`i`c`b`h`Y`Z`c`b`h`d`U`b`Y`"

#### Standard Specifications

- Microprocessor controlled
- LCD display makes information easy to read
- Black-lit character/icon LCD display
- Transfer between mains (utility) and generator power
- On-site module configuration and remote configuration (max 100 meters) using PC software
- User-friendly set-up and button layout
- Front panel programming
- Remote start
- Multiple engine parameters are monitored simultaneously
- Controls: Stop/Reset, Manual, Auto, Test, Start, buttons. An additional push button next to the LCD display is used to scroll through the modules' metering displays

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## Instruments

- ENGINE
- Engine speed
- Oil pressure
- Coolant temperature
- Run time
- Battery volts
- GENERATOR
- Voltage (L-N)
- Current (L1-L2-L3)
- Frequency
- MAINS
- Voltage (L-L, L-N)

## Protection Circuits

- WARNING
- Battery charge failure
- Low battery voltage
- SHUT DOWNS
- Fail to start
- Emergency stop
- Low oil pressure
- High engine temperature
- Over /Under speed
- Under/over generator frequency
- Failed to reach loading voltage
- Failed to reach loading frequency
- ELECTRICAL TRIP
- Generator over current

## Options

- High oil temperature shut down
- Low fuel level alarm
- High fuel level alarm
- Low coolant level

## 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 for the industrial environment

## Static Battery Charger

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# APD 90 A

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## APD 90 A - Canopy

### Introduction

Sound-attenuated and weather protective enclosures for generating sets from Aksa, 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.	1070
Length	mm.	3130
Height	mm.	1750