

APD 90 A

Engine : Aksa
 Alternator : Aksa
 Control System : P 602



This generator set is available with CE certification.

3 Phase Ratings, 50 Hz, PF 0,8

Voltage	Standby Rating (ESP)		Prime Rating (PRP)		
	kVA	kW	kVA	kW	Amp
400/230	93,00	74,40	85,00	68,00	123,00

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

- Heavy duty, 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
- Steel base frame and anti-vibration isolators
- Spare external fuel tank (open set)
- Flexible fuel connection hoses
- Two 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 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

- Three Pole Contactor
- Four Pole Contactor
- Motor Switch

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1 DIESEL ENGINE SPECIFICATIONS

Manufacturer		Aksa
Model		A4CRX46TI
No. of Cylinders and Build		4 Cylinder, In Line
Aspiration and Cooling		Turbo Charged and After Cooled
Maximum Standby Power		1500 rpm
		86,00 kW [115,00HP]
Total Displacement	L	4,580
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 ³ /min.	6,80
Radiator Cooling Air	m ³ /min.	132,00
Exhaust Gas Flow	m ³ /min.	18,50
Start System		24 V d.c.
Fuel Consumption	Load	%100
	L/h	19,30

2 ALTERNATOR SPECIFICATIONS

Make		Aksa
Model		AK370
Frequency	Hz	50
Power	kVA	87,50
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Current	A	126,00
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	1285,00	2150,00	1000,00	1590,00	195,00
Canopy	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
ASM 5	1620.00	3120	1070	1720	195

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P 602 - Control System



- 1 A U]b`gHh g`X]gd`Um`
- 2 8]gd`UmgVc`Vi`Hrcb`
- 3 DU[Yf]bZcfa U]cbE`Vi`Hrcb`
- 4 7 ca a cb`U`Ufa`]bX]W]Hrcf`
- 5 GHh g`@98f`
- 6 C dYfU]cb`gY`YV]b[`Vi`Hrcbg`

Devices

8G9ža cXY`*`\$\$`5i`hc`A`U]bg]: U]i`fY`V`b]fc`a`cXi`Y`
 6UHYfmVUf[Yf`]bdi`h%, !&*`(`j`c`h`z`ci`rdi`h`&+`z`j`)`5`f&(`j`E`cf`%`z`j`c`h`)`5`f&`j`E`
 9a`Yf[YbV]hrcd`di`g\`Vi`Hrcb`UbX`Z`gYg`Zc`f`V`b]fc`V]fV`]rg`

Construction and Finish

7 ca dcbYb]rg`]b]gU`YX`]b`g\`YY`gh`Y`Y`b`Wc]gi`fY`D\`c`gd\`UHY`W`Ya`]W`z`dfY!`V`U]b[`c`Z`gh`Y`d`fcj`]X`Y`g`V`f`fc`g`]cb`
 fY`g`]g`U`b`h`gi`f`Z`U`V`D`c`m`Y`g`Y`f`V`a`d`cg`]Y`d`ck`XY`f`h`cd`V`U`h`Z`c`f`a`g`\` \`[`c`gg`U`b`X`Y`i`f`Ya`Y`m`Xi`f`U`Y`Z`]b`g`@`c`V`U`V`Y`
 UbX` \`]b[YX`d`UbY`X`cc`f`d`fcj`]X`Y`g`Y`U`g`m`U`V`V`g`g`h`c`V`a`d`cb`Y`b]rg`

Installation

7`cb]fc`d`UbY`]g`a`ci`b`HY`cb`V`U`g`Y`Z`U`a`Y`k`]h`g`HY`g`H`UbX`@`c`W`H`Y`X`U`h`h`Y`f`[`h`g`]X`Y`c`Z`h`Y`[Y`b`Y`f`U`h`c`f`g`Y`h`f`K` \`Y`b`m`ci`
 `cc`_`U`h`h`Y` ;`Y`b`G`Y`H`Z`ca`5`H`f`b`U`h`c`f`E`

Generating Set Control Unit

H`Y`8`G`9`*`\$\$`]g`U`g`H`UbX`U`f`X`V`b]fc`a`cXi`Y`Z`c`f`ci`f`[Y`b`Y`f`U`h`c`f`g`Y`h`g`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`H`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`c`f`g`Y`h`g`H`Y`8`G`9`*`\$\$`a`cXi`Y`U`g`V`Y`Y`b`X`Y`g`[b`Y`X`h`c`a`cb`]h`c`f`[Y`b`Y`f`U`h`c`f`
 Z`Y`ei`Y`b`V`h`z`j`c`i`z`W`f`f`Y`b]h`Z`Y`b[]b`Y`c`d`f`Y`g`gi`f`Y`Z`V`c`U`b`h`Y`a`d`Y`f`U`h`f`Y`fi`bb`]b[\`ci`fg`U`b`X`V`U`H`Y`f`m`j`c`h`g`A`cXi`Y`
 a`cb`]h`c`f`g`h`Y`a`U`]b`g`gi`d`d`i`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`]b`g`d`ck`Y`f`Z`]g`H`Y`8`G`9`*`\$\$`U`g`c`
]b`X`]W`H`Y`g`c`d`Y`f`U`h`c`b`U`g`H`h`g`U`b`X`Z`i`h`V`c`b`X`]h`c`b`g`z`5i`h`ca`U`h`W`m`g`v`i`h`h`b[`X`ck`b`h`Y` ;`Y`b`G`Y`h`U`b`X`[]`]`b[`h`fi`Y`Z`f`g`h`i`d`
 Z`i`h`V`c`b`X`]h`c`b`c`Z` ;`Y`b`G`Y`h`Z`]i`f`Y`H`Y`@`7`8`X`]g`d`U`m`]b`X`]W`H`Y`g`h`Y`Z`i`h`

Standard Specifications

A`]W`c`d`f`c`W`g`g`c`f`V`b]fc`Y`X`
 @`7`8`X`]g`d`U`ma`U`_`Y`g`]b`Z`c`f`a`U`h`c`b`Y`U`g`m`h`c`f`Y`U`X`
 (!`]b`Y`z`*`(`1`%`&`d`])`Y`X`]g`d`U`m`f`
 5i`h`ca`U`h`W`m`i`f`U`b`g`Z`f`g`V`Y`h`k`Y`Y`b`a`U`]b`g`f`i`h`h`m`h`U`b`X`[Y`b`Y`f`U`h`c`f`d`ck`Y`f`
 A`U`bi`U`d`f`c`[`f`U`a`a`]b[`c`b`Z`c`b`h`d`U`b`Y`
 I`g`Y`f`Z`]Y`b`X`m`g`Y`H`i`d`U`b`X`Vi`H`rcb`U`h`c`i`H`
 :`f`c`b`h`d`U`b`Y`d`f`c`[`f`U`a`a`]b[`
 F`Ya`c`H`g`H`U`f`f`
 9`j`Y`b`h`c`[]`]b[`f`%`\$`g`k`c`k`]b[`X`U`P`Y`U`b`X`h`a`Y`
 7`cb]fc`g`G`h`c`d`#`Y`g`Y`h`Z`A`U`bi`U`z`5i`h`c`z`H`Y`g`h`Z`G`H`f`z`Vi`H`rcbg`5`b`U`X`]h`c`b`U`d`i`g` \`Vi`H`rcb`b`Y`i`h`c`h`Y`@`7`8`X`]g`d`U`m`]g`
 i`g`Y`X`h`c`g`V`c`h`h`c`i`[\`h`Y`a`cXi`Y`g`f`a`Y`h`f`]b[`X`]g`d`U`mg`

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Instruments

9B: #9
 9b[]bY'gdYYX"
 C]'dfYggi fY"
 7cc'UbhY'a dYfUhi fY"
 F i b' hja Y"
 6UHYfmj c'rg"
 7cbZ[i fUVY' hja]b["
 ; 9B9F5HCF
 J c' hU[Y f@ @B' "
 7i ffYbhf@ @& @' "
 : fYei YbVW"
 A5-BG
 J c' hU[Y f@ @B' "
 : fYei YbVW"
 A U]bg'fYUXn'
 A U]bg'YbUV'YX"
 ; Yb"GYhfYUXn'
 ; Yb"GYhYbUV'YX"

Protection Circuits

K5FB-B;
 7\Uf[YZ]i fY"
 6UHYfm@ck#[]\j c'hU[Y"
 : U] h' ghcd"
 @ck#[]\ [YbYfUhc'fj c'hU[Y"
 I bXYf#j Yf [YbYfUhc'fZ'Yei YbVW"
 Cj Yf# bXYf'gdYYX"
 @ck c]'dfYggi fY"
 <] \ V'c'UbhY'a dYfUhi fY"
 G<I H8CK BG
 : U] h' ghUf"
 9a Yf [YbVW'ghcd"
 @ck c]'dfYggi fY"
 <] \ V'c'UbhY'a dYfUhi fY"
 Cj Yf# bXYf'gdYYX"
 I bXYf#j Yf [YbYfUhc'fZ'Yei YbVW"
 I bXYf#j Yf [YbYfUhc'fj c'hU[Y"
 C]'dfYggi fY'gYbgcf'cdYb"
 7cc'UbhY'a dYfUhi fY'gYbgcf'cdYb"
 9@97HF=75@HF-D
 ; YbYfUhc'fj YfW'ffYbh'

Options

: 'YI J'Y'gYbgcf'Wb VY V'c'UbhY'a dYfUhi fY'
 dfYggi fY'Z'dYfVW'bH[U'Y'fk'Ufb]b[#]i' hXck b# 'YVW'VW' h'f'dL'
 @c'W'gYh]b['dUfUa YHfg'UbX'a cb]h'f]b['Zca 'D7' h'
 V'c'UbhY'a cXi 'Y'k]h' I G6 V'c'UbhY'a dYfUhi fY'gYbgcf'cdYb"

Standards

9'YVW'VW' GUZYhm#9A 7 V'c'UbhY'a dYfUhi fY'
 9'YVW'VW' Vi g]bYgg'Yei]da Ybh'
 6G'9B '*%\$#!*!&9A 7]a a i b]mighUbxUfX"
 6G'9B '*%\$#!*!('9A 7 Ya]gg]cb'ghUbxUfX"

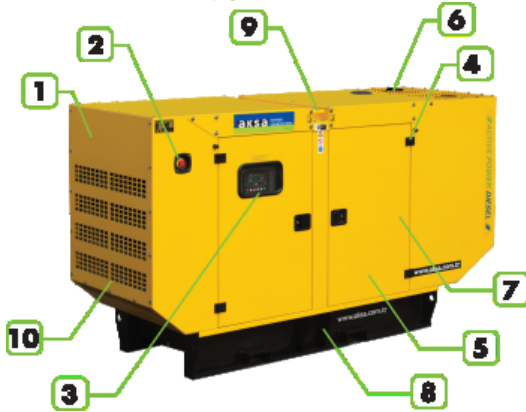
Static Battery Charger

'6UHYfmVUf[Yf]g'a Ubi ZVW' fYX'k]h' gk]h'W]b[!a cXY'UbX'GA 8 'YVW'bc'c[mUbX'ih\Ug\] [\ YZ]VbYVW' 6UHYfmVUf[Yf
 a cXY'gfci hdi hJ !=VUfUW'f]gh]W]g'j YfmV'cgY' h'c'gei UfY'UbX'ci hdi h]g']'Ua dYfz% z']'Z'f'&]c'hUbX'&+Z']'Z'f'&(']'
 #bdi h% , ' !&* (j c'h57 "' Dfc]bY'&(\$) \Ug'Z' mci hdi hg\chV'VW]hdfchV'W]cb'UbX'ihVWb'VY' i gYX'Ug'U'V'ffYbhgci fVW"
 Dfc]bY'&(\$) #&(\$) VUf[Yf\Ug\] [\ YZ]VbYVW'cb[]Z'Z'ck ZU]i fY'fUfY'Z'] [\hk Y] [\hUbX'ck \YUhfUX]UfYX']b
 UVV'cfXUbW'k]h']'bYUf'U'fY'fbU]j Yg' H\Y'VUf[Yf]g'Z'hYX'k]h' U'dfchV'W]cb'X]cXY'UV'cgg'hY'ci hdi h'7 cbbYVW'VUf[Y'Z]
 fY'UmV'c] VY'hk Y'Yb'dcg]h]j Y'ci hdi hUbX'7: 'ci hdi h' H\Y'mUfY'Yei]ddYX'k]h' F: =Z]h'f' h' fYXi V'Y'YVW'VW'bc]gY'fUX]UfYX'
 Zca 'hY'XY'jVW"; Uj Ub]W' m]gc'UfYX']bdi hUbX'ci hdi h]m]VW'm(_J'Z'f'\] [\ fY']UV]]h'

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1 ASM 5 - Canopy



- 1 Steel structures.
- 2 Emergency stop push button.
- 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 maintenance
- 8 Base frame -fuel tank.
- 9 Lifting Points.
- 10 sound proofing materials.

2 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.

3 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.	3120
Height	mm.	1720
Fuel Tank Capacity	L	195