

# APD 43 C

Engine : Cummins  
 Alternator : Aksa  
 Control System : P 602



## SZUTEST

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

## 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	40,00	32,00	36,00	28,80	51,00

**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 fan and rotating parts
- Electric starter and charge alternator
- Starting battery (with lead acid) including rack and cables
- Engine jacket cooling 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 belows supplied separately
- Static battery charger
- Manual for use and installation.

### OPTIONAL EQUIPMENTS

#### ENGINE

- Remote Radiator Cooling
- Fuel-Water Separator Filter

#### 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

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## 1 DIESEL ENGINE SPECIFICATIONS

Manufacturer		Cummins
Model		4BT3,9-G2
No. of Cylinders and Build		4 Cylinder, In Line
Aspiration and Cooling		Turbo Charged
Maximum Standby Power		1500 rpm
		40 kW[54HP]
Total Displacement	L	3,90
Bore and Stroke	mm	102 x 120
Compression Ratio		16,5:1
Rated Speed (rpm)	rpm	1500
Governor		Electronic
Oil Capacity	L	11,00
Coolant Capacity	L	19,00
Intake Air Flow	m <sup>3</sup> /min.	2,60
Radiator Cooling Air	m <sup>3</sup> /min.	120
Exhaust Gas Flow	m <sup>3</sup> /min.	6,06
Start System		24 V d.c.
Fuel Consumption	Load	%100
	L/h	9,30

## 2 ALTERNATOR SPECIFICATIONS

Make		Aksa
Model		AK232
Frequency	Hz	50
Power	kVA	40
Design		Brushless, 4 poles
Cos Phi		0,80
Phase		3
Voltage	V	400/230
Current	A	58
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 43 C	860	1860	900	1400	154
Sound Attenuated Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
APD 43 C	1240	2500	970	1600	

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## 1 P 602 - Control System



- 1 A U]b'gHh g'X]gd'Um'
- 2 8]gd'Um]gVc''Vi Hrcb''
- 3 DU[ Yf]bZcfa U]hcbE'Vi Hrcb''
- 4 7 ca a cb U'Ufa ]bX]W]hrcf''
- 5 GHh g'@98fj''
- 6 C dYfU]hcb'gY'YV]b[ 'Vi Hrcbg''

## 2 Devices

8G9ža cXY''\$\$'5i hc'A U]bg:] U]i fy Vēbfc''a cXi 'Y''  
 6UHYfmVUf[ Yf]bdi h%, !&\*( 'j c'hžci rdi h''&+ž'J ) '5'f&( 'J E'cf%' ž 'J c'h) 5'f&&J E  
 9a Yf[ YbVhrcd'di g\ 'Vi Hrcb'UbX Ž gYg Zc'fVēbfc''V]fV ]fjg''

## 3 Construction and Finish

7 ca dcbYbrj ]b]g'U'YX ]b'g\YYgh'Y'YbWc]i fy''D\c]gd\UHY'WYa ]W]ždfY!VēU]b[ 'cZgh'Y' d'fcj ]Xyg Vēffcg]cb  
 fyg]g]Ubhgi fZUW''Dc'mYgYfVēa d'cg]Y' d'ck XYf'rcdVēU]hZcfa g\]] [ 'cgg'UbX'Yi H'Ya Y'mXi fU'Y Ž]b]g\''@cV]UV'  
 UbX\]b[ YX'dUbY'Xccf'dfcj ]Xyg YUgmUWV]gg'hc''Vēa dcbYbrj''

## 4 Installation

7 cblfc'dUbY' ]g'a ci bHY'cb VUgYZUa Y'k ]h' gHY'g'Ubx''@W]HY'U]h'Y'f[ \hig]XY'cZ'Y [ YbYfU]rcf'gYh'fK \Yb'nci  
 'cc\_'U]h'Y'; Yb''GYH'Zca '5'HYfbU]rcfE

## 5 Generating Set Control Unit

H'Y''8G9''\$\$' ]g'U'g'U]bXU]X Vēbfc''a cXi 'Y'Zc'ci f[ YbYfU]rcf'gYh'g'i d'hc'&\$\$\_J 5'UbX'ih\Uj Y'VYYb'XYg][ bYX'hc  
 g]U]h'UbX'ghrcd'X]YgY' UbX' [ Ug[ YbYfU]rcf'gYh'g''H'Y'8G9''\$\$' a cXi 'Y'Ug'VYYb'XYg][ bYX'hc'a cb]rcf[ YbYfU]rcf  
 ŽYei YbVhžj c'iz'W'fYb'žYb[ ]bY'c' d'fYggi fYžVēc'Ubh'Y'a dYfU]h'fY'fi bb]b[ \ci fg'UbX' VU]HY'fmj'c'hj''A cXi 'Y  
 a cb]rcf'g'Y'U' U]bg'gi dd'm'UbX'gk ]W'c] Yf'hc'Y'Y [ YbYfU]rcf'k \Yb'Y'Y'a U]bg'd'ck Yf'ZU]g''H'Y'8G9''\$\$' U'gc  
 ]bX]W]HY'g'cdYfU]hcbU'g'U]h'g'UbX'Z]i 'hVēbX]h]cbgž'5i hca U]h'W'm]g\i H]b[ 'X'ck b'Y'; Yb''GYh'UbX'[ ]j ]b[ 'H'i Y'Z]fghi d  
 Ž]i 'hVēbX]h]cb'cZ; Yb''GYh'Z]i' fY''H'Y'@7 8'X]gd'Um]bX]W]HY'g'Y'Z]i 'H'

### Standard Specifications

A ]Wēd'fc'W'ggcf'Vēbfc''YX''  
 @7 8'X]gd'Uma U\_Yg ]bZcfa U]hcb'YUgm]rc'fYUX''  
 (!]bYž\*( '1%'&d] Y'X]gd'Um'

5i hca U]h'W'm]f'U]bgZ'f'g'Y'Y'k'Y'Yb'a U]bg'fi H]h'hc'UbX' [ YbYfU]rcf'd'ck Yf''  
 A Ubi U'd'fc[ fUa a ]b[ 'cb'Z'cbhd'UbY''  
 I gYf]Z]YbX'm]gY'Hi d'UbX'Vi Hrcb''U]nci H'  
 : fcbhd'UbY'd'fc[ fUa a ]b[ ''  
 F Ya cHY'g'U]f'f'

9j Ybh'c[ [ ]b[ 'f]g'g'ck ]b[ 'XU]Y'UbX'h'a Y''  
 7 cblfc'g' Ghrcd#F YgYh'Z'Ubi U'Z'5i hcž'HYgh'GH'f'z'Vi Hrcbg''5b'UXX]h]cbU'di g\ 'Vi Hrcb'bYI hrc'Y'@7 8'X]gd'Um]g  
 i gYX'hc'g'Vc''H'fci [ \ 'Y'Y'a cXi 'Y'g'f'a Y'Y'f]b[ 'X]gd'Um]g''

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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 fUV'Y hja ]b[ "  
 ; 9B9F 5HCF  
 J c' hU[ Y f@ @B' "  
 7i ffYbhf@&! @ E"  
 : fYei YbVW"  
 A 5-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

K 5F B-B;  
 7\Uf[ Y Z]i fY"  
 6UHYfm@ck #:[ \ ] c' hU[ Y"  
 : U] h' ghcd"  
 @ck #:[ \ ] [ YbYfUhc'f j c' hU[ Y"  
 I bXYf#j Yf[ YbYfUhc'f ZYei 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'f ZYei YbVW"  
 I bXYf#j Yf[ YbYfUhc'f j c' hU[ Y"  
 C]'dFYggi fY'gYbgcf'cdYb"  
 7cc'UbhY'a dYfUhi fY'gYbgcf'cdYb"  
 9@97 HF =75@HF -D  
 ; YbYfUhc'f c' j YfW ffYbh"

## Options

: 'YI J'Y'gYbgcf'Wb VY V'c' bfc' 'YX' k ]h' h'Ya dYfUhi fYz  
 dFYggi fYz dYfVW'bhU[ Y f'k Ufb]b[ #]i h'Xck b# 'YVW'VW' h'f'dL  
 @c'W' gYh]b[ 'dUfUa YHfg'UbX'a cb]h'f]b[ 'Zca 'D7 h'  
 V'c' bfc' 'a cXi 'Y' k ]h' I G6 V'c' bbYVW'cb' f'a Ul '\* 'a H'

## Standards

9'YVW'VW' 'GUZYhm#9A 7 'V'c' a dUfV']hm6G'9B '\* \$- ) \$  
 9'YVW'VW' 'Vi g]bYgg' 'Yei ]da Ybh'  
 6G'9B '\*%\$!\*&9A 7 'ja a i b]mighUbXUfX"  
 6G'9B '\*%\$!\*( '9A 7 'Ya jgg]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 'J 'Zcf'& j c'hUbX' &+Z' 'J 'Zcf'& ( 'J '  
 #bdi h% , ' ! &\* ( j c'h57 "' Dfc' ]bY' &( \$ ) \Ug'Z 'mci hdi hg\chV'VW ]hdfchVW]cb'UbX'ihVWb'VY i gYX'Ug'U'VW'ffYbhgci fVW"  
 Dfc' ]bY' %&\$) #&( \$ ) VUf[ Yf' \Ug' \ ] [ \ YZ]VbYVW'cb[ ' ]Z'Z' 'ck ZU]i fY' fUYZ' ] [ \hk Y] [ \hUbX' 'ck \YUhfUX]UfYX' ]b  
 UVV'cfXUbW' k ]h' ' ]bYUf'U'fYfbU]j Yg' H\Y' VUf[ Yf ]g' Z]h'YX'k ]h' 'U' d'fchVW]cb' X]cXY'UV'cgg'h'Y'ci hdi h'7 cbbYVW'VUf[ Y' Z]  
 fY'UmV'c' ] VYh' Yyb'dcg]h]j Y'ci hdi hUbX'7: 'ci hdi h' H\Y'mUfY' Yei ]ddYX'k ]h' F: =Z]h'f' h'c' fYXi V'Y'YVW'VW' 'bc]gY' fUX]UfYX  
 Zca 'h'Y'XY' jVW'; Uj Ub]W' m]gc'UfYX' ]bdi hUbX'ci hdi h]m]d]VW' m( \_J 'Zcf' \ ] [ \ fY' ]UV' ]h'f'

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## 1 APD 43 C - Canopy

### 2 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.

### 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.	970
Length	mm.	2500
Height	mm.	1600