

APD66C









DIESEL GENERATING SET 400/230 V - 50 Hz

MODEL			APD66C
Power Pf. 0.8	Standby	l kVA	66 1
		l kW	52.8
	Prime	l kVA	i 60 i
		l kW	1 48 1

Standby : Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance with ISO 3046 .

Prime : Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. In accordance with ISO 8528,ISO 3046.

- ✓ High quality, reliable and complete power unit
- ✓ Compact design
- ✓ Easy start and maintenance possibility

✓ Every generating set is subject to a comprehensive test program which includes full load testing, checking and provision of all control and safety shut down functions testing

✓ Fully engineered with a wide range of options and accessories: Canopy, sound proof canopy and on-road trailer









Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

AKSA POWER GENERATION

ENGINE



CUMMINS						
Model		4BTA3.9G2				
Engine Power Output	kWm	55				
at rated rpm	HP HP	r 74				
Aspiration and Cooling	1	Turbocharged&Aftercooled				
Total Displacement	Litre	3.9				
No. of Cylinders and Build		4 - Inline				
Engine Speed	rpm	1500				
Bore and Stroke	mmxmm	102x120				
Compression Ratio	(16.5:1				
Governor	T.	Electronic				
Fuel Consumption at full load	L/hr	12.9				
Fuel Tank Capacity	Litre	145				
Oil Capacity	Litre	10.9				
Coolant Capacity	Litre	19.9				
Radiator Cooling Air	m³/min	120				
Air Intake – Engine	m³/min	2.928				
Exhaust Gas Flow	m³/min	7.5				

✓ Heavy duty Cummins diesel engine

- ✓ Four stroke, water cooled, turbocharged&aftercooled
- ✓ Direct injection fuel system
- ✓ Electronic Governor system
- ✓ 12/24 V D.C. starter and charge alternator
- ✓ Replaceable fuel filter, oil filter and dry element air filter
- ✓ Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables \checkmark
- ✓ Flexible fuel connection hoses and manual oil sump drain valve
- ✓ Industrial capacity exhaust silencer and steel bellows
- Jacket water heater(at automatic models) \checkmark
- ✓ Operation manuals and circuit diagram documents

ALTERNATOR

Design	Brushless single bearing, revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible disc
Insulation System	Class H
Standard Temperature Rise	125 - 163°C Continuous
Exciter Type	Self Excited
Phase Rotation	I A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	I<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	l <2%
 Brushless, single bearing system, flexible disc, 4 poles Insulation class H 	 Impregnation with tropicalised epoxy varnish Solid state Automatic Valuage Degulator

- Insulation class H ✓ Standard degree of protection IP21 (*IP22/IP23 is availab.) ✓ Stator winding with 2/3 pitch for improved harmonics
- ✓ Self-exciting and self-regulating

- Solid state Automatic Voltage Regulator

CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

1. Auto Mains Failure Control Panel

- Panel equipments:
- ✓ Control with AMF module
- ✓ Static battery charger
- ✓ Emergency stop push button

aksa POWER

a) Generating set control module DSE 6020 features:

✓ The module is used to monitor main supply and starts and stops of a standby generating set

- ✓ Micro-processor based design
- ✓ Automatic control of main and generator contactors
- ✓ Monitors engine performance and AC power output LED alarm indication
- ✓ Front panel configuration of timers and alarm trip points
- ✓ CAN and magnetic pick-up versions(specify on ordering)
- ✓ 4 digital inputs/3 analogue inputs
- ✓ 6 outputs(4 configurable on Magnetic Pick-up, 6 configurable on CANbus version)
- ✓ Easy push button control STOP/RESET - MANUAL - AUTO - TEST - START

b) Metering via LED display:

- ✓ Generator Volts (L-L / L-N)
- ✓ Engine oil pressure (PSI-Bar)
- ✓ Generator Ampere (L1,L2,L3)
- ✓ Engine temperature (° C&° F)

- ✓ Engine hours run
- ✓ Mains Volts (Ph-Ph/Ph-N)

OPTIONAL EQUIPMENTS

Diesel Engine

✓ Oil heater

Altemator

- ✓ 3/4 Pole Output Circuit Breaker
- ✓ Anti-condensation Heater

Panel

- ✓ Charge ammeter
- ✓ Transfer Switch 3Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

Generator kVA

Generator kW

- Generator Cos (o)
- ✓ Generator Frequency (Hz)

✓ Plant battery volts

✓ Start and Stop Failure ✓ Charge fail ✓ Over Current

- ✓ Under / Over Generator Voltage
 - ✓ Low Oil Pressure

c) Alarms:

- ✓ Emergency stop
- ✓ High engine temperature

✓ Over and Under Speed

✓ Low and High Battery Volt.

d) LED Indications:

- Mains available
- ✓ Generator available
- Mains on load
- ✓ Generator on load

2. Power Outlet Terminal Board Mounted on the Genset Base frame

Panel

- ✓ Charge ammeter
- ✓ Transfer Switch 3Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

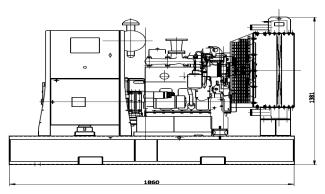
Accessories

- ✓ Bulk fuel tank
- ✓ Automatic filling system
- ✓ Fuel-water separator filter
- ✓ Low fuel level alarm
- ✓ Residential silencer
- ✓ Enclosure or sound proof canopy
- ✓ Trailer
- ✓ Manual oil drain pump
- ✓ Tool kit for maintenance

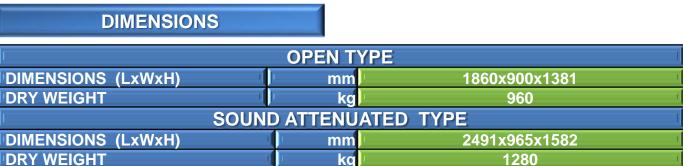


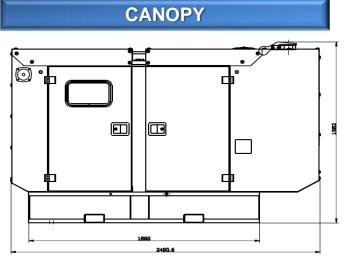
DSE 6020

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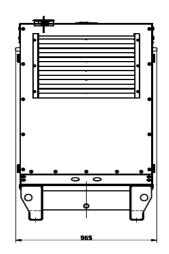


- $\checkmark\,$ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- $\checkmark\,$ Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- $\checkmark\,$ Base frame design incorporates an integral fuel tank (Up to 750 kVA)
- $\checkmark\,$ The generating set can be lifted or carefully pushed / pulled by the base frame
- $\checkmark\,$ Dial type fuel gauge and drain plug on the fuel tank
- ✓ Forklift pockets within base frame (up to 500kVA)





- ✓ All canopy parts are designed with modular principles
- ✓ Without welding assembly
- ✓ Doors on each side
- ✓ All metal canopy parts are painted by electrostatic polyester powder paint



- ✓ Exhaust silencer is protected against environment influences
- ✓ Thermally insulated engine exhaust system
- $\checkmark\,$ Emergency stop push button is installed outside of the canopy
- ✓ Easy lifting and moving
- ✓ Easy maintenance and operation

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