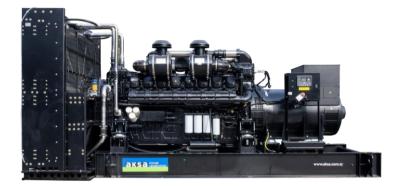
## APD2250BD



POWER YOUR FUTURE

KSa POWER CENERATION

2250 kVA / 1800 kW POWERED by BAUDOUIN

# DIESEL GENERATING SET 400/230 V - 50 Hz - 3 Phase

	MODEL		APD2250BD
Power Pf. 0.8	Standby	kVA	2250
		kW	1800
	Prime	kVA	
		kW	en e

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 hours 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 off-road trailer



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

# ENGINE

BAUDOUIN				
Model		16M33G2250/5		
Engine Power Output	kWm	1980		
at rated rpm	HP	2655		
Aspiration and Cooling		Turbocharged and Aftercooled		
Total Displacement	Litre	52.3		
No. of Cylinders and Build		16 - Vee		
Engine Speed	rpm	1500		
Bore and Stroke	mm×mm	150 × 185		
Compression Ratio		14:1		
Governor		ECU		
Fuel Consumption at full load	L/hr	428.6		
Fuel Tank Capacity	Litre	-		
Oil Capacity	Litre	175		
Coolant Capacity	Litre	542		
Radiator Cooling Air	m³/min	3480		
Air Intake – Engine	m³/min	127.7		
Exhaust Gas Flow	m³/min	440.6		

✓ Heavy duty diesel engine

✓ Four stroke, water cooled, natural

✓ Direct injection fuel system

✓ Electronic Governor system

- ✓ 24Vdc 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

✓ Flexible fuel connection hoses and manual oil sump drain valve

✓ Industrial capacity exhaust silencer and steel bellows

✓ Jacket water heater(at automatic models)

✓ 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	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)	<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	<2%

✓ Brushless, single bearing system, flexible disc, 4 poles

✓ Insulation class H

✓ Standard degree of protection IP22 (\*IP23 is available.)

✓ Self-exciting and self-regulating

- $\checkmark\,$  Impregnation with tropicalized epoxy varnish
- ✓ Solid state Automatic Voltage Regulator

✓ Stator winding with 2/3 pitch for improved harmonics

### **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

### a) Generating set control module DSE 7320 features:

The module is used to monitor a mains supply and starts and stops a standby generating set

- ✓ Micro-processor based design
- ✓ Automatic control of mains and generator contactors
- ✓ Monitors engine performance and AC power output
- ✓LED alarm indication
- ✓ Front panel configuration of timers and alarm trip points
- ✓ Easy push button control STOP/RESET - MANUAL -TEST- AUTO - MUTE ALARM - 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)
- ✓ Generator Frequency (Hz)
- ✓ Plant battery volts
- ✓ Engine hours run ✓ Mains Volts (Ph-Ph/Ph-N)
- ✓ Generator kVA, kWh
- ✓ Generator kW as % of rated kW setting
- ✓ Generator Cos ( $\sigma$ )

#### c) Alarms: Over and Under Speed

- Low and High Battery Volt.
- ✓ Start and Stop Failure
- ✓ Charge fail
- ✓ Over Current
- ✓ Under / Over Generator Voltage
- ✓ Low Oil Pressure
- ✓ Emergency stop
- ✓ High engine temperature
- ✓ kW overload
- ✓ Unbalanced load
- ✓ Independent earth fault trip

#### d) LED indications

- Four configurable LED's like:
- ✓ Mains available
- ✓ Generator available
- ✓ Mains on load
- ✓ Generator on load

### 2. Power Outlet Terminal Board Mounted on the Genset Base Frame

# **OPTIONAL EQUIPMENTS**

#### **Diesel Engine**

✓Oil heater

#### Alternator

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

### Panel

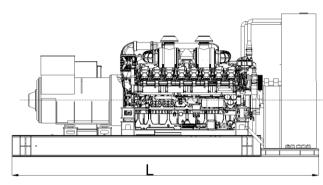
- ✓ Charge ammeter
- ✓ Transfer Switch 3Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

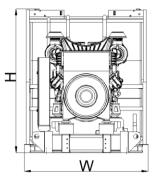
#### Accessories

- ✓ 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



# **CHASSIS**



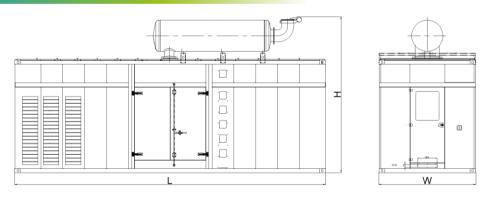


- $\checkmark$  The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 1000 kVA)
- ✓ The generating set can be lifted or carefully pushed / pulled by the base frame
- ✓ Dial type fuel gauge and drain plug on the fuel tank
- ✓ Forklift pockets within base frame (up to 500kVA)

## DIMENSIONS

OPEN TYPE						
DIMENSIONS (L $\times$ W $\times$ H)	mm	5704x2300x2664				
DRY WEIGHT	kg	13200				
	0					
SOUN	-	ATED TYPE				
SOUN DIMENSIONS (L×W×H)	-	ATED TYPE 9000x2800x4650				

## CANOPY



✓ 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
- ✓ Emergency stop push button is installed outside of the canopy
- ✓ Easy lifting and moving
- ✓ Easy maintenance and operation

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