

POWER YOUR FUTURE

Sa POWER

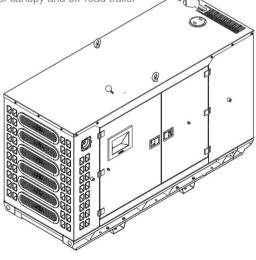
110 kVA / 88kW **POWERED by BAUDOUIN** 

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

	MODEL		APD110BD
Power Pf. 0.8	Standby	kVA	110
		kW	88
	Prime	kVA	100
		kW	80

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
- $\checkmark$ 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		4M10G6D0/S			
Engine Power Output	kWm	100			
at rated rpm	HP	134.1			
Aspiration and Cooling		Turbocharged and Aftercooled			
Total Displacement	Litre	4.087			
No. of Cylinders and Build		4 - Inline			
Engine Speed	rpm	1500			
Bore and Stroke	mm×mm	105 × 118			
Compression Ratio		17.5:1			
Governor		Electronic			
Fuel Consumption at full load	L/hr	21.3			
Fuel Tank Capacity	Litre	180			
Oil Capacity	Litre	13			
Coolant Capacity	Litre	23.6			
Radiator Cooling Air	m³/min	175			
Air Intake – Engine	m³/min	6.92			
Exhaust Gas Flow	m³/min	21.63			

✓ Heavy duty diesel engine

✓ Four stroke, water cooled, natural

✓ Direct injection fuel system

- ✓ Electronic Governor system
- ✓ 12Vdc 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 DSE6120 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
- ✓ 4 configurable analogue/digital inputs, 8 configurable digital inputs
- ✓ 6 configurable DC outputs
- ✓ Easy push button control

#### STOP/RESET - MANUAL - AUTO - TEST - START

- b) Metering via LCD display:
- Generator Volts (L-L / L-N)
- ✓ Generator Kva
- ~ Generator kW
- Generator Cos (Φ)
- ✓ 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)

#### 2. Power Outlet Terminal Board Mounted on the Gen-set 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
- $\checkmark$ Enclosure or sound proof canopy
- Trailer
- √ Manual oil drain pump
- Tool kit for maintenance



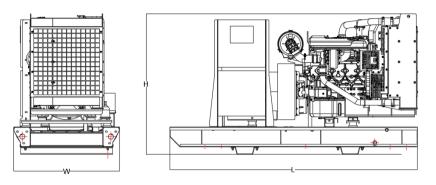
c) Alarms:

- 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

- d) LED indications
- Mains available ~
- Generator available
- 1 Mains on load
- ✓ Generator on load

## **CHASSIS**

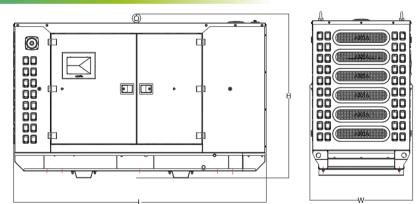


- $\checkmark$  The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 1000 kVA)
  ✓ The generating set can be lifted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

# DIMENSIONS

OPEN TYPE						
DIMENSIONS (L×W×H)	mm	2348×1004×1331				
DRY WEIGHT	kg	1230				
SOUND ATTENUATED TYPE						
SOUN	D ATTENU	ATED TYPE				
SOUN DIMENSIONS (L×W×H)	D ATTENU	ATED TYPE 2600×1058×1681				

## CANOPY



- ✓ All canopy parts are designed with modular principles
- Without welding assembly  $\checkmark$
- ✓ 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  $\checkmark$
- $\checkmark$ Emergency stop push button is installed outside of the canopy
- Easy lifting and moving  $\checkmark$
- Easy maintenance and operation  $\checkmark$

**Aksa Power Generation** Ruzgarlibahce Mahallesi - Özalp Cikmazi No:10 34805 Kavacik Beykoz - Istanbul / Turkey Tel:+90 212 444 46 30 E-mail: aksa@aksapowergen.com www.aksapowergen.com Aksa Power Generation is a member of KAZANCI HOLDING WWW.aksa.com.tr