

MODEL: HC-BD1600-60

440V | 1800rpm | 60Hz



ESP Standby Power	1600kVA	PRP Prime Power	1475kVA
ENGINE	Baudouin 12M33G1300/6	ALTERNATOR	STAMFORD S6L1D-H4

GENERAL FEATURES

Engine: Baudouin 12M33G1300/6

Alternator: single bearing, IP23, insulation class H

40°C radiator, fans are driven by belt, with safety guard

Dry type air filter, fuel filter & oil filter

Vibration damper

Standard control panel

24V charging alternator

Exhaust bellows, elbows, flange & muffler

Lead-acid batteries, rack and cables

User manual

MODEL: HC-BD1600-60**440V | 1800rpm | 60Hz****GENERATOR RATINGS**

Voltage	Hz	Phase	PF (COS Φ)	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
480/277	60	3	0.8	1925	1280kW/1600kVA	1180kW/1475kVA
460/266	60	3	0.8	2008	1280kW/1600kVA	1180kW/1475kVA
440/254	60	3	0.8	2100	1280kW/1600kVA	1180kW/1475kVA
416/240	60	3	0.8	2221	1280kW/1600kVA	1180kW/1475kVA

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820 (eqv ISO 8528) ; A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

SALES PROMISES

HiChai Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: One year after installation or 1000 running hours (accumulated), whichever comes first.

Service and parts are available from HiChai Power or distributors in your location.

MODEL: HC-BD1600-60**440V | 1800rpm | 60Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Baudouin 12M33G1300/6
----------------------	-----------------------

Air intake system	Turbocharged and Aftercooled
-------------------	------------------------------

Fuel system	Mechanical Pump
-------------	-----------------

Cylinder arrangement	12 in V
----------------------	---------

Displacement	39.2L
--------------	-------

Bore and stroke	150 × 185 mm
-----------------	--------------

Compression ratio	15
-------------------	----

Rated speed	1800rpm
-------------	---------

Max. Standby power at rated speed	1420kW
-----------------------------------	--------

Governor type	Electronic
---------------	------------

Exhaust System

Exhaust gas flow	320 m ³ /min
------------------	-------------------------

Exhaust temperature	550°C
---------------------	-------

Max back pressure	7.5kPa
-------------------	--------

Air Intake System

Max intake restriction	6.5kPa
------------------------	--------

Combustion air flow	115.5 m ³ /min
---------------------	---------------------------

Air flow required for radiator	2100 m ³ /min
--------------------------------	--------------------------

Comprehensive Solutions For

POWER GENERATION

MODEL: HC-BD1600-60

440V | 1800rpm | 60Hz

Fuel System

Fuel consumption @ 100% (Prime Power) Load	209.0g/kWh	318.3L/h
Fuel consumption @ 75% (Prime Power) Load	203g/kWh	236.6L/h
Fuel consumption @ 50% (Prime Power) Load	209g/kWh	166.9L/h

Oil System

Total oil capacity	160L
Oil sump capacity	117-155L
Oil fuel consumption ratio based on engine fuel consumption data	≤ 0.3%

Cooling System

Coolant capacity	303L
Max water temperature	103°C

MODEL: HC-BD1600-60**440V | 1800rpm | 60Hz**

ALTERNATOR SPECIFICATION

Industrial alternators meet the requirements of the relevant parts of the BS5000, VDE 0530, NEMA MG1-22, IEC34, CSA 22.2-100 and AS1359.

Alternator Data

Number of Phase	3
Connecting Type	3 Phase and 4 Wires, Y type connecting
Number of Bearing	1
Power Factor	0.8
Protection Class	IP23
Altitude	≤1000m
Exciter Type	Brushless exciting
Insulation Class/Temperature Rise	H/H
Telephone Influence Factor (TIF)	< 50
THF	< 2%
Alternator Capacity	1569kVA
Alternator Efficiency	95.0%

MODEL: HC-BD1600-60

440V | 1800rpm | 60Hz

GENERATING SET DATA

Related range of voltage setting	$\geq \pm 5\%$
Steady-state voltage deviation	$\leq \pm 1\%$
Transient voltage deviation (100 % sudden power decrease)	$\leq +25\%$
Transient voltage deviation (sudden power increase)	$\leq -20\%$
Voltage recovery time (100 % sudden power decrease)	$\leq 6S$
Voltage recovery time (sudden power increase)	$\leq 6S$
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	$\leq 1.5\%$
Transient frequency deviation (100 % sudden power decrease)	$\leq +12\%$
Transient frequency deviation (sudden power increase)	$\leq -10\%$
Frequency recovery time (100 % sudden power decrease)	$\leq 5S$
Frequency recovery time (sudden power increase)	$\leq 5S$

STANDARD FEATURES

Standard auto control system	Exhaust system (including until muffler)	Documents
Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	

MODEL: HC-BD1600-60

440V | 1800rpm | 60Hz

OPTIONS

Daily fuel tank	Rainproof type	Remote control panel
Alternator heater	Soundproof type	Paralleling system
Spare parts	Trailer type	Switch box
Automatic transfer switch		

DIMENSIONS & WEIGHT



Standard Configuration (open type)

Overall Dimensions: 4750×2200×2430 mm

Weight: 9300 kg



Soundproof Type (standard 20'ft HQ container)

Overall Dimensions: 6058×2438×2896 mm

Weight: 14300 kg

Specifications are subject to change without notice.