

MODEL: HC-BD90 400V | 1500rpm | 50Hz



<b>ESP</b> Standby Power	90 kVA	<b>PRP</b> Prime Power	80 kVA
<b>ENGINE</b>	Baudouin	<b>ALTERNATOR</b>	LEROY SOMER
	4M10G88/5		TAL-A44-C

## GENERAL FEATURES

Engine: Baudouin 4M10G88/5	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

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## GENERATOR RATINGS

Voltage	Hz	Phase	PF (COS $\Phi$ )	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	118	72kW/90kVA	64kW/80kVA
415/240	50	3	0.8	125	72kW/90kVA	64kW/80kVA
400/230	50	3	0.8	130	72kW/90kVA	64kW/80kVA
380/220	50	3	0.8	137	72kW/90kVA	64kW/80kVA

**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.

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## ENGINE SPECIFICATION

Manufacturer / Model	Baudouin 4M10G88/5
Air intake system	Turbocharged
Fuel system	Mechanical pump
Cylinder arrangement	4 cylinders in line
Displacement	4.087 L
Bore and stroke	105×118 mm
Compression ratio	17.5 : 1
Rated speed	1500rpm
Max. Standby power at rated speed	80KW
Governor type	Electronic

## Exhaust System

Exhaust gas flow	17.3 m <sup>3</sup> /min
Exhaust temperature	570°C
Max back pressure	5 kPa

## Air Intake System

Max intake restriction	6 kPa
Combustion air flow	4.8 m <sup>3</sup> /min
Air flow required for radiator	190 m <sup>3</sup> /min

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**Fuel System**

Fuel consumption @ 100% (Prime Power) Load	212.8 g/kWh	18.7L/h
Fuel consumption @ 75% (Prime Power) Load	208.7 g/kWh	13.4L/h
Fuel consumption @ 50% (Prime Power) Load	210.6 g/kWh	9.2L/h

**Oil System**

Total oil capacity	15L
Oil consumption ratio based on fuel consumption data	≤ 0.2%
Oil sump capacity	12-14L

**Cooling System**

Coolant capacity	17L
Max water temperature	105°C

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**ALTERNATOR SPECIFICATION****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	85kVA
Alternator Efficiency	87.6%

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## GENERATING SET DATA

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

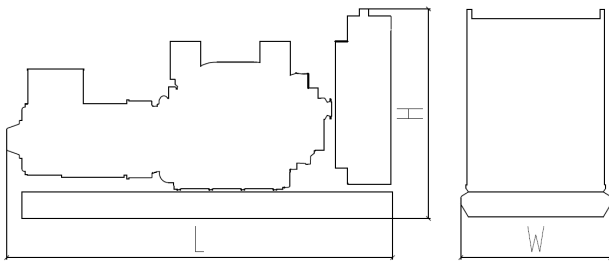
Base fuel tank

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## OPTIONS

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

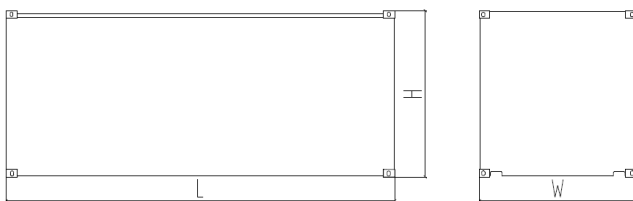
## DIMENSIONS & WEIGHT



### Standard Configuration (open type with base fuel tank)

Overall Dimensions: 1830×700×1300 mm

Weight: 1040 kg



### Soundproof Type

Overall Dimensions: 2810×1140×1830 mm

Weight: 1540 kg

*Specifications are subject to change without notice.*