

**MODEL: HC-BD2250**

**400V | 1500rpm | 50Hz**



|                             |                     |                           |                 |
|-----------------------------|---------------------|---------------------------|-----------------|
| <b>ESP</b><br>Standby Power | <b>2250 kVA</b>     | <b>PRP</b><br>Prime Power | <b>2050 kVA</b> |
| <b>ENGINE</b>               | <b>Baudouin</b>     | <b>ALTERNATOR</b>         | <b>STAMFORD</b> |
|                             | <b>20M33G2250/5</b> |                           | <b>PI734F1</b>  |

### GENERAL FEATURES

Engine: Baudouin 20M33G2250/5

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<br>( COSΦ ) | Standby<br>Amps | Standby Ratings<br>(kW / kVA) | Prime Ratings<br>(kW / kVA) |
|---------|----|-------|----------------|-----------------|-------------------------------|-----------------------------|
| 440/254 | 50 | 3     | 0.8            | 2952            | 1800kW/2250kVA                | 1640kW/2050kVA              |
| 415/240 | 50 | 3     | 0.8            | 3130            | 1800kW/2250kVA                | 1640kW/2050kVA              |
| 400/230 | 50 | 3     | 0.8            | 3248            | 1800kW/2250kVA                | 1640kW/2050kVA              |
| 380/220 | 50 | 3     | 0.8            | 3419            | 1800kW/2250kVA                | 1640kW/2050kVA              |

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 20M33G2250/5     |
| Air intake system                 | Turbo, intercooling       |
| Fuel system                       | High Pressure Common Rail |
| Cylinder arrangement              | 20 cylinders in V         |
| Displacement                      | 65.4 L                    |
| Bore and stroke                   | 150×185 mm                |
| Compression ratio                 | 15:1                      |
| Rated speed                       | 1500rpm                   |
| Max. Standby power at rated speed | 2020KW                    |
| Governor type                     | ECU                       |

**Exhaust System**

|                     |                         |
|---------------------|-------------------------|
| Exhaust gas flow    | 458 m <sup>3</sup> /min |
| Exhaust temperature | 550°C                   |
| Max back pressure   | 7.5 kPa                 |

**Air Intake System**

|                                |                          |
|--------------------------------|--------------------------|
| Max intake restriction         | 5 kPa                    |
| Combustion air flow            | 143 m <sup>3</sup> /min  |
| Air flow required for radiator | 3480 m <sup>3</sup> /min |



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**Fuel System**

|  |             |           |
|--|-------------|-----------|
| Fuel consumption @ 100% (Prime Power) Load | 196.1 g/kWh | 412.6 L/h |
| Fuel consumption @ 75% (Prime Power) Load  | 197.9 g/kWh | 315.1 L/h |
| Fuel consumption @ 50% (Prime Power) Load  | 204.9 g/kWh | 224.3 L/h |

**Oil System**

|  |          |
|--|----------|
| Total oil capacity                                   | 240L     |
| Oil consumption ratio based on fuel consumption data | ≤ 0.3 %  |
| Oil sump capacity                                    | 210-240L |

**Cooling System**

|                       |       |
|-----------------------|-------|
| Coolant capacity      | 410L  |
| Max water temperature | 103°C |

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**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               | 2080kVA                                |
| Alternator Efficiency             | 96.0%                                  |
|                                   |  |

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**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)   | $\leq +20\%$    |
| Transient voltage deviation (sudden power increase)         | $\leq -15\%$    |
| Voltage recovery time (100 % sudden power decrease)         | $\leq 4S$       |
| Voltage recovery time (sudden power increase)               | $\leq 4S$       |
| Related range of frequency setting                          | 0-5% adjustable |
| Steady-state frequency band                                 | $\leq 0.5\%$    |
| Transient frequency deviation (100 % sudden power decrease) | $\leq +10\%$    |
| Transient frequency deviation (sudden power increase)       | $\leq -7\%$     |
| Frequency recovery time (100 % sudden power decrease)       | $\leq 3S$       |
| Frequency recovery time (sudden power increase)             | $\leq 3S$       |

**STANDARD FEATURES**

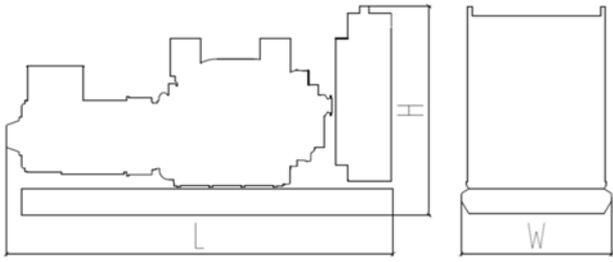
|                              |   |           |
|------------------------------|---|-----------|
| Standard auto control system | Exhaust system (including until muffler)                                    | Documents |
| Oil drain valve              | Starting batteries (maintenance-free & watering-free)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

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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)    |
| Overall Dimensions: 6250×2320×2600 mm |
| Weight: 14900 kg                      |
|                                       |
|                                       |
|                                       |

*Specifications are subject to change without notice.*