GENERATOR KING

GKB-550

BAUDOUIN 500KVA

500kVA Prime / **550kVA** Standby

Comprehensive Specification Sheet
Electrical and Mechanical Data

MOTEURS Baudouin

3ph

BAUDOUIN, SINCE 1918

For over 100 years, Baudouin has manufactured the highest quality engines for marine and power generation applications. In the hostile environment of a marine operator, reliability and durability are paramount, and Baudouin has been successfully serving this market since 1918.

Today, Baudouin is proud to offer one of the most comprehensive lines of power generation engines available on the market.

Cassis, France

Through the 1960's and 1970's Baudouin manufactured complete generator sets and engines for power generation applications for some of the most prominent generator manufacturers in the world.

Leading European engine manufacturer

Certified Quality Management ISO 9001: 2015

Certified Environmental Management ISO 14001: 2015

Certified Occupational Health & Safety OHSAS 18001: 2007

HERITAGE

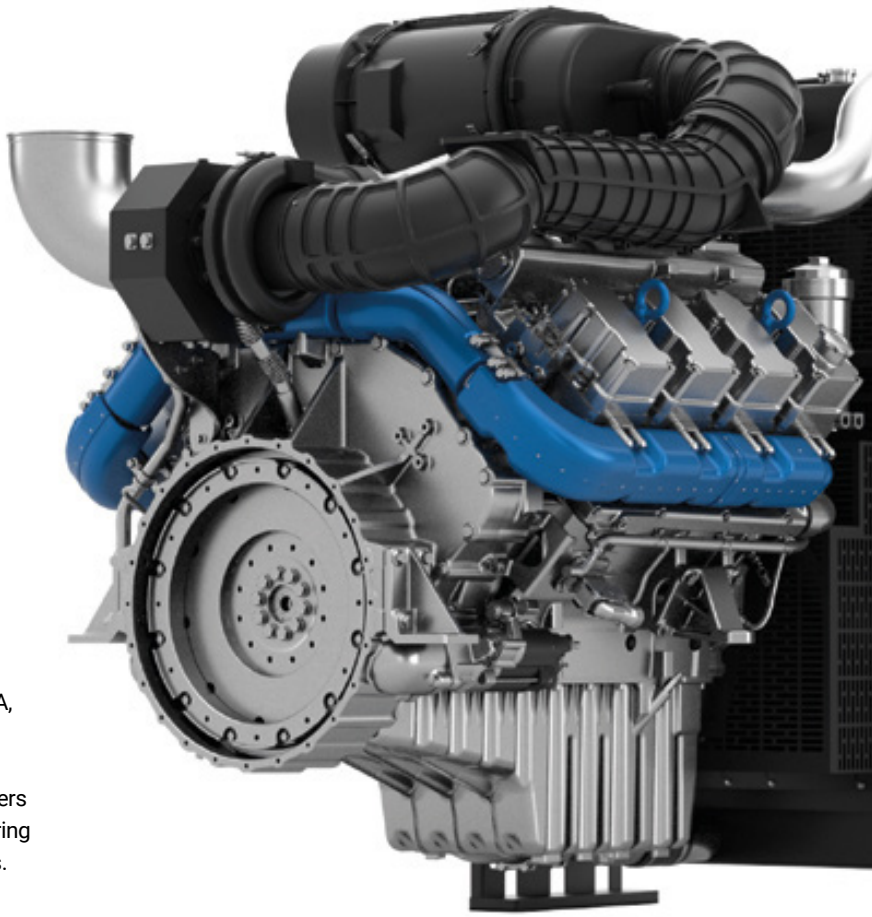
100 years experience in design, manufacturing, support and quality goes into every generator set. You can expect reliability, durability and excellent total cost of ownership from the range of products. Over the life of every generator set, dependability is guaranteed by the strong European quality standards, robust components, and best-in-class warranties.

DESIGN OPTIMISED FOR SERVICE

Easy, fast and cost-effective maintenance and servicing are imperative in heavy industry – and the engines are designed to meet those same requirements. They are economical to run, (thanks to longer intervals between overhauls) and easy to maintain, giving customers a competitive edge.

POWER RANGE

The full range of Baudouin generators spans from 18 to 3,125kVA, a range that few engine manufacturers can match. Baudouin achieves excellence in fuel consumption, load acceptance and power density, making it the range of choice. With nine R&D centers across the world, Baudouin are continuously improving and tailoring their range based on local customer and regulatory requirements.



The Generator King (Pty) Ltd | www.genking.co.za | sales@genking.co.za
+27 11 312 4673 | 50 Falcon Lane, Lanseria Corporate Estate, Lanseria, 1739

GKB-550
BAUDOUIN 500KVA

500kVA Prime / **550kVA** Standby / **Three Phase**

FEATURES & BENEFITS

- 550kVA standby power at 230/400v @ 50Hz 1500rpm
- High-quality and reliable six-cylinder 12.54l turbocharged Baudouin diesel engine
- Ideal for commercial and business applications
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger included
- H-specification insulation, brushless alternator with AVR provides stable output
- High-temperature and oil pressure sensor to protect against engine damage
- Easy to use digital controller with auto/manual start options
- All sets undergo a comprehensive testing/pre-delivery inspection prior to delivery
- Peace of mind of earlier of one year/1000 hour warranty

CANOPY

- Ventilation parts are designed with modular principles
- Weather resistant and lined with sound reducing foam
- All metal canopy parts are painted with powder paint
- Panel window
- Lockable doors on each side
- Easy maintenance and operation
- Easy lifting and moving
- Thermally insulated engine exhaust system
- Exterior emergency stop push button
- Sound attenuated

CHASSIS

- The complete generator set is mounted as a whole on a heavy duty fabricated, steel base frame
- Steel chassis and anti-vibration pads
- Base frame design incorporates an integral fuel tank
- The generator can be lifted or carefully pushed/pulled by the base frame
- Dial type fuel gauge on the fuel tank

Overview

Standby power	**550kVA**
Prime power	**500kVA**
Phase	**Three**
Dry weight	**5520kg**
Length	**3800mm**
Width	**1500mm**
Height	**2200mm**
Fuel tank capacity	**1000l**

CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

AUTO MAINS FAILURE CONTROL PANEL

- Controller with Smartgen automatic transfer switch
- Smartgen HGM7220CAN electronic controller
- Emergency stop push button
- Static battery charger
- Four-pole electrically and mechanically interlocked ATS

GENERATING SET CONTROL MODULE SMARTGEN HGM7220CAN FEATURES

- This module is used to monitor a mains supply and automatically start a standby generating set
- Shutdown alarms
- STOP/RESET-MANUAL-AUTO-TEST-START

METERING VIA LCD DISPLAY

- Mains volts (L-L/L-N)
- Generator amps (L1, L2, L3)
- Generator frequency; generator (cos)
- Engine hours run; plant battery (volts)
- Engine oil pressure (psi and bar)
- Engine speed (rpm)
- Engine temperature (degrees C)

AUTOMATIC SHUTDOWN AND FAULT CONDITIONS

- Under/over speed; fail to start
- High engine temperature; fail to stop
- Low oil pressure; charge fail
- Under/over generator volts
- Under/over generator frequency
- Emergency stop/start failure
- Under/over mains voltage
- Charge failure

The Generator King (Pty) Ltd | www.genking.co.za | sales@genking.co.za
+27 11 312 4673 | 50 Falcon Lane, Lanseria Corporate Estate, Lanseria, 1739

GKB-550
BAUDOUIN 500KVA

500kVA Prime / **550kVA** Standby / **Three Phase**

TECHNICAL SPECIFICATIONS

*All ratings are quoted at maximum ratings at sea level and derating will be applicable for altitude and power factor.

Engine

Engine make	**Baudouin**
Engine model	**6M21G550/5**
Displacement	**12.54l**
Cylinder bore/Stroke	**127mm x 165mm**
Fuel system	**Common rail**
Governor	**ECU**
Cylinders	**Six cylinders water cooled**
Engine output power (1500rpm)	**436kW**
Turbocharged/normally aspirated	**Turbocharged**
Cycle	**Four stroke**
Combustion system	**Direct injection**
Compression ratio	**15.2:1**
Fuel tank capacity	**1000l**
Fuel consumption 100%	**109.5 l/h**
Fuel consumption 75%	**75.3 l/h**
Fuel consumption 50%	**51 l/h**
Fuel consumption 25%	**27.8 l/h**
Oil type	**15W-40**
Engine oil capacity	**34l**
Cooling method	**Water-cooled radiator/fan**
Coolant capacity	**62l**
Starter	**24v DC charge alternator**
Engine speed	**1500rpm**
Filters	**Replaceable fuel filter/oil filter/dry element air filter**
Battery	**Maintenance-free battery including rack and cables**
Silencer	**Exhaust silencer**

Alternator

Alternator make	**StromerPower**
Standby power output	**550kVA**
Prime power output	**500kVA**
Insulation class	**Class-H with circuit breaker protection**
Type	**Brushless**
Phase and connection	**Three phase/four wire**
AVR	**Included**
AVR model	**SX440**
Voltage regulation	**± 1%**
Voltage	**230/400v**
Rated frequency	**50Hz**
Voltage regulate change	**≤ ±10% UN**
Phase change rate	**± 1%**
Power factor	**0.8φ**
Protection class	**IP23 standard/screen protected/drip-proof**
Stator	**2/3 pitch**
Rotor	**Single bearing**
Excitation	**Self-exciting**
Regulation	**Self-regulating**

General

Structure type	**Silent weather resistant enclosure**
Dimensions Length x Width x Height	**3800mm x 1500mm x 2200mm**
Dry weight	**5520kg**
ATS unit included	**Included**
Four-way protection system included	**Included**

The Generator King (Pty) Ltd | www.genking.co.za | sales@genking.co.za
+27 11 312 4673 | 50 Falcon Lane, Lanseria Corporate Estate, Lanseria, 1739

The Generator King (Pty) Ltd reserves the right to change generator information without prior notice. Information is double checked to ensure that it is correct, however The Generator King (Pty) Ltd will not be held responsible for clerical errors. (E&OE)