### VNG660BS



# POWER YOUR FUTURE

VNGPOW

660kVA/528kW <u>POWE</u>RED by BAUDOUIN

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

	MODEL		VNG660BS
Power Pf. 0.8	Standby	kVA	660
		kW	528
	Prime	kVA	600
		kW	480

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 hour 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
- ✓ Fully engineered with a wide range of options and accessories: Canopy, sound proof canopy and on-road trailer





Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

# ENGINE

BAUDOUIN						
Model			6M21G550/5			
Engine Power Output	kW m		587			
at rated rpm	HP		787			
Aspiration and Cooling			Turbocharged & Aftercooled			
Total Displacement	Litre		19.6			
Thermodynamic Cycle			Diesel 4 stroke			
Engine Speed	rpm		1500			
Bore and Stroke	mmxmm		150 x 185			
Compression Ratio			15:1			
Governor			Electronic			
Fuel Consumption at full load	L/hr		126.5			
Fuel Tank Capacity	Litre		N/A			
Fuel System			Mechanical Pump			
Aspiration			ТА			
Coolant capacity	Litre		115			
Oil capacity Low / High (L)			36/61			
Exhaust Gas Flow	m³/min		129.7			

✓ Heavy duty Cummins diesel engine

- ✓ Four stroke, water cooled, turbocharged & aftercooled
- Direct injection fuel system
- ✓ Electronic Governor system
- ✓ 12/24 V D.C. starter and charge alternator
- ✓ Replaceable fuel filter, oil filter and dry element air filter
- $\checkmark$  Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables
- ✓ Flexible fuel connection hoses and manual oil sump drain valve

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- ✓ 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 IP21 (\*IP22/IP23 is available.)
- ✓ Self-exciting and self-regulating

- $\checkmark$  Impregnation with tropicalised epoxy varnish
- ✓ Solid state Automatic Voltage Regulator
- ✓ Stator winding with 2/3 pitch for improved harmonics

### **DEEPSEA 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 DSE7320 MKII features:

- The module is used to monitor a mains supply and starts and stops a
- standby generating set
- Micro-processor based design
- ✓ Automatic control of mains and generator contactors
- ✓ Monitors engine performance and AC power output
- ✓ LED alarm indication
- ✓ Front panel configuration of timers and alarm trip points
- ✓ Easy push button control STOP/RESET - MANUAL -TEST- AUTO - MUTE ALARM - START

#### b) Metering via LED display:

- ✓ Generator Volts (L-L / L-N)
- ✓ 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)
- ✓ Generator kVA, kWh
- ✓ Generator kW as % of rated kW setting
- ✓ Generator Cos ( $\sigma$ )

#### 2. Power Outlet Terminal Board Mounted on the Genset Base Frame

### **OPTIONAL EQUIPMENTS**

#### **Diesel Engine**

✓ Oil heater

#### **Alternator**

- ✓ 3/4 Pole Output Circuit Breaker
- ✓ Anti-condensation Heater
- Panel
- Charge ammeter
- Transfer Switch 3 Pole
- Transfer Switch 4 Pole
- Earth Fault ,single set

#### **Accessories**

- Bulk fuel tank
- Automatic filling system
- Fuel-water separator filter 1
- Low fuel level alarm
- ✓ Residential silencer
- ✓ Enclosure or sound proof canopy Trailer
- 1 Manual oil drain pump
- Tool kit for maintenance

DSE 7320 MKII

#### 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
- ✓ kW overload
- ✓ Unbalanced load
- ✓ Independent earth fault trip

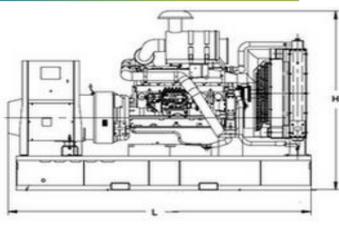
#### d) LED indications

- Four configurable LED's like:
- ✓ Mains available
- ✓ Generator available
- ✓ Mains on load
- ✓ Generator on load



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### CHASSIS



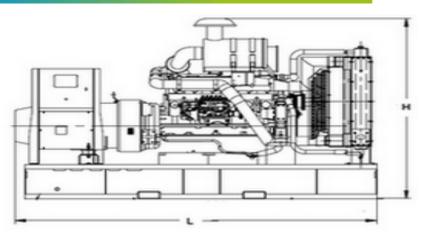
 $\checkmark$  The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame

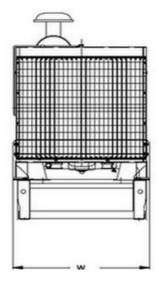
- $\checkmark$  Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 750 kVA)
- $\checkmark$  The generating set can be lifted or carefully pushed / pulled by the base frame
- ✓ Dial type fuel gauge and drain plug on the fuel tank
- ✓ Forklift pockets within base frame (up to 500kVA)

### DIMENSIONS

OPEN TYPE							
DIMENSIONS (LxWxH)	mm	3531x1680x2055					
DRY WEIGHT	kg	4200					
SOUND ATTENUATED TYPE							
DIMENSIONS (LxWxH)	mm	5206x1850x2453					
DRY WEIGHT	kg	5900					

# CANOPY





NGPOV

✓ All canopy parts are designed with modular principles

- ✓ Without welding assembly
- ✓ 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
- $\checkmark\,$  Emergency stop push button is installed outside of the canopy
- ✓ Easy lifting and moving
- ✓ Easy maintenance and operation

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