



# **Industrial Range**

**Baudouin Series** 

## **Model SB25 Generator set**

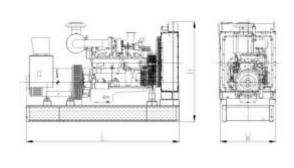


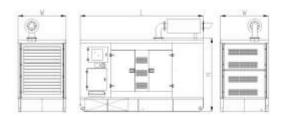


General Performance Data				
Prime Power	23KVA/18KW	Engine	Brand	Baudouin
Stand by Power	25KVA/20KW		Model	4M06G25/5
Frequency/Speed	50Hz/1500rpm	Control module	Deepse	ea 6120
Rated Power Factor(cosφ)	0.8	Rated Current	32	2A
Standard Voltage	230V/400V	Capacity of Breaker	63	3A
Phases	3	Starting Voltage	DC.	12V

Fuel consumption		
Rated output	put Fuel consumption rate	
100%Standby	238 <b>g/KW.h</b>	7.1L/h
100%Prime	224g/KW.h	6.1L/h
75%Prime	218 <b>g/KW.</b> h	4.5L/h
50%Prime	230g/KW.h	3.2L/h
25%Prime	289g/KW.h	2L/h

Standards followed	
ISO9001	ISO14001
ISO8528	ISO12100
ISO13849	EN12601
GB12786	GB/T2820
IEC60034	IEC60204
CE	RETIE





Dimensions and Weights			
Туре	Open	Silent	
Length(mm)			
Width(mm)			
Height(mm)			
Weight(kg)			
Base fuel tank volume (L)			



## **Engine specification**

Basic parameter	
Manufacturer	Baudouin
Model	4M06G25/5
No. of cylinder	4
Туре	In-line
Prime Power	23Kw /31HP
Standby Power	25kw /34HP
Induction system	Naturally Aspirated
Governor	Electronic
Bore x Stroke	89x92mm
Displacement	2.3L
Compression ratio	17.5:1
Oil Capacity(Total)	11.5L
Coolant Capacity(Engine only)	5L
Cranking Motor Voltage	DC12V
Fuel System	
Type Injection system	Mechanical Pump
Fuel supply flow	40.2 L/h

Air induction system	
Maximum allowable intake air restriction	
with clean filter element	≤35mBar
with dirty filter element	≤60mBar
Air intake temperature rise	≤5°C
Exhaust system	
Max. allowable back pressure	80mBar
Standard exhaust pipe diameter	50mm

Cooling system	
Coolant capacity	
Engine only	5L
Total system	8.6 L
With heat exchanger	3.6L
Standard thermostat(modulating) range	72-82 ℃
System designed for ambient temperature up to	50°C
Coolant alarm (shutdown) temperature	105℃

Lubrication system		
Oil Pressure		
Idle speed	≥1 Bar	
Rated speed	2-5 Bar	
Max. allowable oil temperature	115℃	
Offset sump oil capacity: low/high	7.1 /9.5L	
Total system capacity	11.5L	

Electric system	
Min. recommended battery capacity (24V)	
Starter power	3KW
Battery charger current	35A
Battery charger absorbed power	0.5KW
Max. allowable resistance of Starting circuit	0.004ohm
Electrical system voltage (negative to ground)	DC12V
Min. cold start temperature without auxiliary starting device	-5℃

Alternator specification		
Phases	3	_
Poles	4	
Power factor(cosφ)	0.8	
Winding connection	Star	
Winding pitch	2/3	
Voltage regulator type	AVR	

Coating	Vacuum impregnation	
Insulation class	Н	
Protection	IP23	
Excitation system	Self-excited	
Bearing	Single Bearing	
Coupling	Flexible disc	



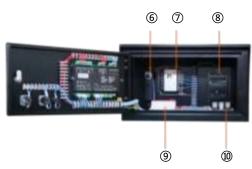
### **Control system Introduction**

## Deepsea 6120 Auto start & auto mains failure control panel

Deepsea 6120 is an auto mains failure controller for single generator, it can monitor and protect the generator working all the time. it has a LCD display which clearly shows the status of the engine. this controller include seven inputs and six outputs. This controller can also be programmed using the front panel or by using DSE configuration Suite PC software



- ①Emergency stop button
- ②Power switch
- ③Power indicator
- **⑤LCD** display



- **6** Voltage and frequency trimmer

(7)Governor

Relay

®Charger

#### **Key Features:**

- Auto start/stop, load transfer and alarming of generator
- Remote start on or off load
- With hierarchical loading function
- Multiple start/stop cycles can be preset
- 3 phase generator and mains voltage monitoring.
- Generator/load power detection(kW, kVA, kVAr PF)
- Overload protection (kW)
- Load current monitoring and protection
- Engine speed protection
- Engine pre-heat
- Engine start idle & stop idle
- Battery voltage monitoring
- Start under the low battery
- 4 active outputs
- 4 digital inputs and 3 analogue inputs.
- 6 Custom digital input
- 6 outputs(4 configurable on magnetic pick-up,
   6 configurable on Canbus version)
- DSE2130,DSE2157,DSE2548 expansion module can be connected
- Support 0-10V or 4-20mA oil pressure sensor

#### Main features:

- Multi language display
- Mains failure self starting
- The running time of the engine can be recorded to facilitate the maintenance and repair of the unit
- User-friendly set-up and button layout
- LCD display can display multiple parameters at the same time
- Support EFI engine
- IP65 rating (with optional gasket)
- PC and front panel configuration
- 100 event records
- Data recording and trend analysis

#### **Protection:**

- Two sets of protection parameters can be preset
- Normal alarm, electrical trip and shutdown alarm can be set to effectively monitor the engine speed,oil pressure, water temperature and oil level, as well as the frequency, voltage, current and power of the alternator, for complete engine/alternator protection
- Low Oil Pressure
- High water Temperature
- High voltage and low voltage
- Overspeed
- Emergency stop
- Fail to start



## **Soundproof Canopy Introduction:**

### Standard Type:

- The arc angle structure makes the appearance beautiful and not easy to bump
- High quality coating powder, chemical surface treatment & 100-120um coating thickness greatly improving the anticorrosion and anti rust level
- Stainless steel hinge & door lock are beautiful and anti-rust
- 2.0mm cold rolled plate used makes the body more solid
- The bottom forklift and loading port design enables easy loading and unloading
- The drainage outlets are all connected to the outside for easy operation

- The sufficient air in & out design ensure long-term and stable operation of the unit
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- High density foam used inside effectively reduces noise
- Ceiling Lighting is equipped for easy operation
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Models above medium power range are designed with top hoisting mechanism to facilitate transportation of the unit.

#### Imitated container type:

- The shell is made of 3.0mm hot rolled steel plate so as to withstand the lifting capacity of 15-ton without deformation
- The switch cabinet and control panel are respectively set on both sides of the shell for easy maintenance & operation
- The shell looks similar to standard container, and can be loaded into 40HQ container for transportation, which is convenient for shipping
- The lifting eye holes are designed on the top same as the standard container for easy handling
- High density foam used inside effectively reduces noise
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Double emergency stop button set on different surfaces enables quick response to operation requirements

- The shell base is independent from the unit with 3mm thick checkered steel plate floor, which is beautiful & antiskid, and is convenient for overhaul & maintenance of the unit
- The door handle, lock and hinge are all made of stainless steel to avoid rusting
- The air out louver made of the mesh plate with podwer coating and pasted with high-density glass fiber is beautiful and not easy to rust, and can further reduce the noise
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- The sufficient air in & out design ensure long-term and stable operation of the unit
- The drainage outlets are all connected to the outside for easy operation
- Ceiling Lighting is equipped for easy operation

#### Standard container type:

- Can be shipped on board directly during transportation
- The mesh plate with podwer coating and inner pasted with high-density glass fiber is installed inside the shell, which is beautiful and anti-rust, and can further reduce the noise
- 3mm thick checkered steel plate floor is beautiful & antiskid, and is convenient for overhaul & maintenance of the unit
- Double emergency stop button set on different surfaces enables quick response to operation requirements
- The independent daily fuel tank can be designed to put inside to meet requirements of continuous operation
- The fuel filler is set on the shell to facilitate refueling

- The switch cabinet and control panel are respectively set on both sides of the shell for easy maintenance & operation
- The air in & out louver made of the mesh plate with podwer coating and pasted with high-density glass fiber is beautiful and not easy to rust, and can further reduce the noise
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- The sufficient air in & out design ensure long-term and stable operation of the unit
- The drainage outlets are all connected to the outside for easy operation
- Ceiling Lighting is equipped for easy operation













## **Decomposition diagram introduction of Typical Canopy**



## **Standard supply scope:**



- ① Engine
- ② AC Alternator
- 3 Cooling Radiator
- 4 Auto Start Control Panel
- S Main Ciruit Breaker
- 6 Built in Shock Pad
- High Strength Frame
- 8 Exhaust silencer
- Bellow
- Starting battery

## **Optional supply scope:**

Genset	Engine	Alternator	Control system
<ul><li>Tool box</li><li>Base fuel tank</li><li>External daily fuel tank</li><li>Trailer</li></ul>	<ul><li>Fuel heater</li><li>Fuel and water separator</li></ul>	<ul> <li>Temp. detector for winding and bearing</li> <li>PMG</li> <li>Antirust, mildew and salt fog treatment</li> <li>Anti condensation heater</li> </ul>	<ul> <li>ATS</li> <li>Synchronization System</li> <li>Adjustable earth relay</li> </ul>
Breaker	Fuel system	Lub-oil system	Cooling system
<ul><li>ABB</li><li>Schneider</li></ul>	<ul><li>Low fuel level alarm</li><li>Auto Fuel Pump</li><li>T Vlave</li></ul>	<ul><li>Lub oil heater</li><li>Tempsensor</li><li>Oil drain Pump</li></ul>	• Elec.coolant Heater





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