

Emergency Balance Range

POWER (PRP / ESP): 250 / 275 kVA (200 / 220 kW)











1. General technical data

1.1. Version, dimensions and weight

Version	Open	Soundproofed
Dimensions	5K1B-VB	EK1B-VB
L (mm)	2975	3850
W (mm)	1400	1453
H (mm)	2075	2053
Weight with liquids and without fuel (kg)	2300	2945

1.2. Main technical data

Engine	BAUDOUIN 6	6M16G6D0/S	
Alternator	MECCALTE E	MECCALTE ECO38 2M4 C	
Fuel	Die	esel	
Type of execution	G	G3	
Control panel	DSE 73	20 MKII	
Tank (I)	666	666	
Sound level-Lp(A) (dB(A)@1m) ¹	N/A (Indoor)	83	
Sound level-Lp(A) (dB(A)@7m) ¹	N/A (Indoor)	75	
Sound power-LW(A) (dB(A))	N/A (Indoor)	97	

¹The sound levels may vary depending on the measurement conditions.

Voltage	PRP ² (KVA/KW)	ESP ² (KVA/KW)	PRP Amperage (A)	ESP Amperage (A)
400/230V	250 / 200	275 / 220	360,8	396,9

²PRP: Continuous power ("Prime Power"). ESP: Emergency Standby Power according to ISO8528-1. **Tolerance of maximum active power (kW**) ±5%

i Directives and Regulations

ENVIRONMENTAL CONDITIONS STANDARD ISO 8528-1:2018: 25°C, 100kPa and 30% relative humidity:

- **Prime Power (PRP):** Data on electrical power available at variable load without limit of hours per year. An overload of 10% is allowed for 1h out of 12. According to ISO 8528-1:2018.
- Emergency Standby Power (ESP): Data on electrical capacity available at variable load in case of emergency according to ISO 8528-1:2018.

The DAGARTECH Generator bears the CE marking which includes the following directives:

- 2006/42/EC. Machine Safety Directive.
- EN ISO 8528-13:2016. Part 13: Safety. Alternating current generators powered by reciprocating internal combustion engines.
- 2014/30/EU. Electromagnetic Compatibility Directive.
- 2000/14/EC. Noise Emissions Directive. Sound power levels evaluated in accordance with the procedure laid down in the directive.
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2).

* Confirm the height of the equipment. This value may vary depending on whether a lifting beam is included in the standard scope of supply.



2. Engine specifications

400/230V · 50Hz (1500 rpm)				
2.1. General	Version			
technical data Make a				
of the engine				

500 rpm)	BGB 275 ME	BGBS 275 ME
Version	Open	Soundproofed
Make and model	Make and model BAUDOUIN 6M16G6D0/S	
Emissions	EU St	age 0
r.p.m.	150	00
Maximum ESP power (kWm)	2!	51
Power PRP (kWm)	22	27
Fuel	Diesel	
No. of cylinders	6	
Cylinder capacity (c.c.)	9726	
Compression ratio	17:1	
Cooling system	Water-	cooled
Type of regulation	Elect	ronic
Type of engine/injection/suction	Diesel / direct / Turbocharged	
Type of fuel	Diesel	
Tank capacity	666 666	

2.3. Consumption and autonomy

2.2. Fuel

			Op	en	Sound	proofed
Consumption (I/h)		Autonomy (h)		Autonomy (h)		
	PRP	ESP	PRP	ESP	PRP	ESP
50%	28,3	-	23,5	-	23,5	-
75%	42,2	-	15,8	-	15,8	-
100%	56,9	63,4	11,7	10,5	11,7	10,5

Cooling system

Version	Open	Soundproofed
Fan flow (m³/min)	415	415
Radiator back pressure (Pa)	50	50
Fan power consumption (kW)	11	
Total refrigerant capacity (I)	42	
Oil capacity (I)	22	
Oil consumption (%)	≤ (),2

2.6.

Intake system

Lubrication system

2.5.

Combustion air intake flow (m³/min)



400/230V · 50Hz (1500 rpm)		BGB 275 ME	BGBS 275 ME
2.7. Starter system	Version	Open	Soundproofed
No. of batteries Battery characteristics Start-up voltage (V)		2	
		12V 44Ah	
		24V	

2.8. Exhaust system

	Common data for both versions	
Exhaust gas flow (m³/min)	46,8 [PRP]	50,6 [ESP]
Exhaust gas temperature (°C)	700 [PRP]	700 [ESP]
Version	Open	Soundproofed
Exhaust outside diameter (mm)	4" (Ø 101,6)	5" (Ø 127)
Exhaust attenuation level (dB(A))	-10	-25
Max. exhaust back pressure (mBar)	60	

Radiator level sensor not available for Baudouin 4M06 series engines.

3. Alternator specifications

3.1. General technical data of the alternator

Version	Open	Soundproofed
Make and model	MECCALTE EC038 2M4 C	
No. of poles		1
Insulation class	ŀ	1
No. of threads	1:	2
Mechanical protection index	IP23	
Voltage Regulator (AVR)	DSR	
Voltage regulation	±1%	
ESP power 27°C (kVA)	275	
Power PRP 40°C (kVA)	250	
No. of phases	3	
Power factor (cos φ)	0,8	
	Б. "	- /0/\

Performance η (%)			
50%	75%	100%	110%
92,4%	93,7%	93,0%	92,7%

i Standard regulations that the alternator meets:

CEI 2-3 | IEC 34-1 | EN 60034-1 | VDE 0530 | BS 4999-5000 | CAN/CSA-C22.2-No 100-95.

Low wave distortion: THD (100% load) = 2% | THF < 2%

Complies with: EN61000-6-3, EN61000-6-2 regarding radio interference.



400/230V · 50H≥ (1500 rpm) **BGB 275 ME BGBS 275 ME**

4. Bench Specifications

- Unit mounted on electro-welded high-resistance steel bench, painted with epoxy-polyester powder paint.
- Connection of the assembly to the bench by means of anti-vibration dampers.
- Fuel tank located on the bench itself. The engine is equipped with a measuring gauge and fuel system.
- Tested in a salt spray chamber according to ASTM B-117-09, resistance 500h.

5. Soundproof Canopy Specifications



- $oldsymbol{i}$ The canopy is part of the scope of supply of the soundproof generator sets. Open generators do not include a canopy.
- Electro-welded canopy made of high resistance galvanized steel painted with electrostatic epoxy-polyester powder
- Interior soundproofing by means of a lining with soundproofing material.
- Attenuation silencer -25dB(A) for the evacuation of gases to the outside with protective cover.
- Tested in a salt spray chamber according to ASTM B-117-09, resistance 720H. IP44 mechanical protection degree.

THE CANOPIES OF THE EMERGENCY BALANCE RANGE ARE MADE OF HIGH-RESISTANCE GALVANIZED STEEL AND ARE ELECTRO-WELDED AND PAINTED WITH ELECTROSTATIC EPOXY-POLYESTER POWDER PAINT.



In addition, they are equipped with a coating with noise-insulating material (polyurethane foam with outer veil). We also incorporated a silencer attenuation device for the evacuation of gases to the outside, featuring a

Our canopies are tested in a salt spray chamber according to standard **ASTM** B-117-09 (resistance 720H. IP44 mechanical protection grade).



6. Control panel

6.1. Main elements of the control panel

- Protection panel, distribution with automatic control module which allows you to work in manual, automatic or signal mode.
- Push button for emergency stop.
- Deep Sea Electronics battery charger, designed to be permanently connected to the battery and maintain 100% of the charge. The charger switches to float mode when charging is complete:

Model

DSE BC2405 24V, 5A

Protections:

- 4-pole magnetothermic protection against overloads and short circuits.
- Protection fuses for the control set.

Circuit breaker

Model

Chint 400A 4P

6.3. Control module



- 1. 4 configurable indicator LEDS
- 2. Generator on load
- 3. Transfer to the generator (manual mode)
- 4. Start engine (manual mode)
- 5. Silence alarm
- 6. Automatic mode
- 7. Test mode

- 8. Manual mode
- 9. Genset stop
- 10. MAIN NETWORK transfer (manual mode)
- 11. Network on load
- 12. Navigation keyboard
- 13. Main status and instrument display

Model DSE 7320 MKII

DSE 7320 MKII DEEP SEA control card with mains grid monitor. The genset will automatically start up when detecting a fault in the electric power network and it will turn off automatically as well, when the electrical supply is re-established. It can also work in manual mode and by signal. It allows you to monitor a wide range of generator parameters and display information alerts, status and alarms.

The module includes communication ports USB, RS232, RS485, and also DSENet® for system expansion. Possibility of Ethernet networking (plug).

The entire module is easily configurable via PC using the DSE specific software configuration.

It has 132x64p illuminated LCD display with 4 lines of text, 5-key navigation through menus, 9 configurable outputs and 8 configurable inputs, programmable clocks and alarms, reading and displaying parameter values, including

Different operating modes: AUTOMATIC mode, MANUAL mode, SIGNAL mode and TEST mode.

Other alternative configurations are available upon request to extend the capabilities of the operation modes.

Environmental Tests that the module passes:

BS EN 61000-6-2 (electromagnetic compatibility) | BS EN 61000-6-4 (electromagnetic compatibility) | BS EN 60950 (electrical safety) | BS EN 61000-6-2 (temperature) | BS EN 60068-2-6 (vibrations) | BS EN 60068-2-27 (shock)



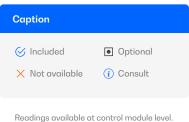


BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

6.3. Control module



	Standard ⊗
Model	DSE 7320 MKII
Operating modes	
STOP mode	\otimes
MANUAL mode	\otimes
TEST mode	\otimes
AUTO mode	\otimes
Module configuration options	
PC	\otimes
Generator readings	
Generator voltage (F-F)	⊗
Generator voltage (F-N)	\otimes
Generator current (A)	\otimes
Generator frequency	\otimes
Generator load F-N (kW / kVA / kVAr)	⊗
Total generator load (kW / kVA / kVAr)	\otimes
Average generator power factor	\otimes
Accumulated generator load (kW, kVAh, kWh, kVAh)	⊗
Network readings	
Network voltages (ph-N)	\otimes
Network voltages (ph-ph)	\otimes
Grid frequency	\otimes
Network current (A)	•
Network load ph-N (kW / kVA / kVAr)	•
Total network load (kW / kVA / kVAr)	•
Engine readings	
Coolant temperature	\otimes
Oil pressure	\otimes
Engine fuel level	\otimes
Engine battery volts	\otimes
Engine speed	\otimes
Engine run time	\otimes



Confirm the availability of these readings for this generator and engine.

Ask us for further readings in

generating sets equipped with electronically managed engines and DSE 7320MKII control module.



DO YOU WANT A SUPERIOR PERFORMANCE CONTROL MODULE?

Contact us and tell us what



BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

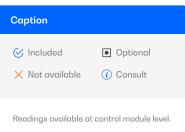
6.3. Control module



Standard \odot

Model	DSE 7320 MKI

Model	DSE 7320 MKII
Engine protections	
High water temperature	\otimes
Low oil pressure	\otimes
Low water level	\otimes
Fuel reserve by sensor	\otimes
Second fuel tank control	\otimes
Shutdown failure	\otimes
Battery voltage failure	\otimes
Battery charge alternator failure	\otimes
Overspeed	\otimes
Underfrequency	\otimes
Failure to start	\otimes
Emergency stop	\otimes
Maintenance notice	\otimes
Maintenance Alert	\otimes
Alternator protections	
High frequency	\otimes
Low frequency	\otimes
High voltage	\otimes
Low voltage	\otimes
Short circuit	\otimes
Asymmetry between phases	•
Incorrect phase sequence	\otimes
Reverse power	\otimes
Breaker Trip 4 poles	•
Overpressure alarm	\otimes
Counters	
Hour meter	\otimes
Kilowatt meter	\otimes
Starter counter	\otimes



Confirm the availability of these readings

for this generator and engine.

Ask us for further readings in

generating sets equipped with electronically managed engines and DSE 7320MKII control module.



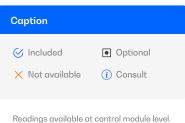
Contact us and tell us what



6.3. Control module



	Standard 🗵	
Model	DSE 7320 MKII	
Communications		
RS232	\otimes	
RS485	\otimes	
USB communication port	\otimes	
Modbus IP	■ DSE 855/890/891	
Modbus RS 485	\otimes	
PC Software (Mimic)	\otimes	
GSM/GRPS MODEM	■ DSE 890	
Remote display < 1km	■ DSE 2520	
Remote monitoring	DSE 855/890	
Input expansion	■ DSE 2130 8 inputs	
Output expansion	 DSE 2157 8 inputs 	
SNMP protocol	■ DSE 892	
Services		
Configurable alarm history	250	
External start	\otimes	
Start-up inhibition	•	
Network Failure Start	\otimes	
Activation of group counter	\otimes	
Activation of grid and group counter	\otimes	
Control of fuel transfer	\otimes	
Motor temperature control	\otimes	
Forced group operation	\otimes	
Free programmable alarms	\otimes	
Group start function in test mode	\otimes	
Free programmable outputs	\otimes	
Multilingual	\otimes	
Special applications		
GPS localisation	■ DSE 890	
Calendar scheduler	\otimes	
DSE configuration suite via PC	\otimes	
Front panel module configuration with PIN	\otimes	
Alternative work	\otimes	
Programmable PLC	\otimes	
Power save mode	\otimes	
Alternative configurations	\otimes	



Confirm the availability of these readings for this generator and engine.

Ask us for further readings in

generating sets equipped with electronically managed engines and DSE 7320MKII control module.



DO YOU WANT A SUPERIOR PERFORMANCE CONTROL MODULE?

Contact us and tell us what

Dummy load control / load shedding



BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

7. Detailed supply scope

Engine

BAUDOUIN 6M16G6D0/S, EU STAGE 0, 1500 RPM, WATER-COOLED, WITH ELECTRONIC REGULATION ENGINE.

- 6-cylinder inline Diesel engine, 4-stroke with Electronic fuel regulation by means of a fuel pump, original from the manufacturer.
- direct injection and Turbocharged suction system. Original manufacturer's particle separator filter.
- Industrial exhaust gas silencer of -10 dB(A). ☐ Ø INCLUDED
- Residential exhaust silencer of -25 dB(A). 📋 ⊗ INCLUDED
- Refrigeration through cooling liquid, fully distributed in the closed circuit run by an engine driven pump, tropicalised radiator, original from the engine manufacturer.
- Crankshaft-driven pump lubrication system. The filter is a full-flow insert cartridge, front housing, original from the engine manufacturer.
- Air intake system for turbo-fed combustion with two-stage filter, original from the engine manufacturer.
- Electric motor starting system, battery (no maintenance) with disconnector and load alternator driven by the 24V starter, original elements from the engine manufacturer.
- Protection from hot and moving parts.

Alternator

MECCALTE ECO38 2M4 C ALTERNATOR OF 12 WIRES AND 4 POLES, BRUSHLESS AND WITH ELECTRONIC VOLTAGE REGULATION TYPE AVR (DSR).

- With IP23 protection class and H insulation class.
- Brushless 4-pole alternator. Robust mechanical structure with easy access to connections and components. Hinsulation class, coil pitch 2/3 and self-excited AVR. IP23 protection degree.
- Protection with premium epoxy resins. High voltage parts are impregnated under vacuum, which always means very good insulation.

Do you have any queries about the supply? Get in touch with us.











BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

Bench

- Bench made of high-strength electro-welded steel.
- Painted with electrostatic epoxy-polyester powder paint.
- Anti-vibration dampers from the engine block to the bedplate.
- Fuel tank included on the bench itself. Equipped with cleaning record to facilitate maintenance work.
- With measuring gauge and installation of fuel to the engine.
- Liquid drainage connection to the outside.
- Bench tested in a salt spray chamber according to ASTM B-117-09 (500h resistance).

Soundproofed canopy (not included in open models)

- Electro-welded canopy of high resistance galvanized steel.
- Painted with electrostatic epoxy-polyester powder paint.
- Interior soundproofing by means of coating with noise-insulating material (polyurethane foam with outer veil).
- With IP44 mechanical protection level.
- Canopy tested in salt spray chamber according to ASTM B-117-09 (resistance 720h).

Control panel

- DeepSea Electronics automatic control module, DSE 7320 MKII which allows you to work in manual, automatic or signal mode.
 - It offers multiple event logging and is fully configurable through DeepSea Electronics' free-access specific configuration software.
 - Three-phase network and group detection with measurement for configurations upon network failure.
- DSE BC2405 24V, 5A DeepSea Electronics battery charger.
 - Designed to be permanently connected to the battery and maintain 100% of the charge. The charger switches to float mode when charging is complete.
- Protections:
 - 4-pole magnetothermic protection against overloads and short circuits.
 - · Protection fuses for the control set.





BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

7. Detailed supply scope

Other equipment

- Interior fuel filling nozzle.
- Tropicalised Radiator for work at 50 °C*
- Prepared for maintenance intervals every 500 hours*.
- Push button for emergency stop.
- Reinforced pole centrally-mounted from 90 kVA (Optional for models below 90kVA).

8. Featured options available



Kit 1: Network failure

Adding an **engine heater** to your generator will ensure that your genset starts smoothly in the event of any failure in the electrical network, and without cold or moisture becoming an issue.



The readings and alarm kit is included within the standard supply scope of the equipment starting from 275kVA of power.

Kit 2: Readings and alarm¹

Your generator can provide you with very useful information in the event of any malfunction, maintenance work, or simply during its operation. If this is an important aspect for you, do not hesitate to include this kit in its equipment, which includes:

- Radiator level alarm sensor.
- Oil pressure reading sensor.
- Temperature reading sensor.



Kit 3: Exhaust installation

If you need a versatile solution for venting gases from your installation to the outside, choose this kit, equipped with 2 clamps and 3 meters of galvanized steel flexible hose.



AVAILABLE FOR OPEN GENERATOR SETS



 * Consult the specification according to the model. 1 Maintenance intervals may vary depending on the climate and working conditions.

Radiator level probe not available for Baudouin 4M06 series engines..



BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C

9. Even more options



24 hour tank



External ROTH tanks DUO SYSTEM

AUTONOMY OPTIONS

Increase the autonomy of your generator up to 48 hours, including special tanks

You can choose between different integrated tanks to increase the autonomy of the unit up to 48 hours of operation. You can also incorporate automatic fuel transfer systems for supply from external tanks.

External tanks:

- External tank 400 I (ROTH DUO SYSTEM).
- External tank 620 I (ROTH DUO SYSTEM).
- External tank 1,000 I (ROTH DUO SYSTEM).
- External tank 1,500 I (ROTH DUO SYSTEM).



Fuel particle separator filter

ENGINE - ALTERNATOR OPTIONS

You can choose between different integrated tanks to increase the autonomy of the unit up to 48 hours of operation. You can also incorporate automatic fuel transfer systems for supply from external tanks.

- Electronic engine regulation/management (for models with mechanical regulation).
- Fuel particle separator filter.
- Manual oil drainage pump.
- 6-way fuel valve kit.
- Alternator anti-condensation heaters.
- Superior generator impregnation systems.
- AVR MX341 + PMG ± 1% STAMFORD.
- $\bullet~$ AVR MX321 + PMG $\pm~0.5\%$ STAMFORD.
- Alternator Extra Prive (for generator sets with MECC ALTE alternator).

Caption:









BAUDOUIN 6M16G6D0/S | MECCALTE ECO38 2M4 C



MECHANICAL OPTIONS

- Retention bath (see change of dimensions).
- Sensor on retention bath (requires retention bath).
- · SilentBlocks for levelling.
- Damping anti-vibration springs.
- Central lifting beam (for generators < 85kVA).
- Non-standard RAL colour.



DSF 2157



DSE 334 network surveillance

COMMUNICATION OPTIONS

- DSE 7320 MKII control card extra price (for models with the DSE 6020 MKII control card in the standard scope of supply).
- DSE 2157 8 potential free output (requires DSE 7320MKII).
- DSE 2130 8 inputs (requires DSE 7320MKII).
- DSE 2548 8 LED diodes (requires DSE 7320MKII).
- DSE 855.
- DSE 890 webnet.
- DSE 7420 module.
- DSE 334 network surveillance.



POWER OPTIONS

- Differential protection.
- As an option, you can include a switch cabinet attached to the generating set.
- Switching with Schneider contactors. 25 to 125 A.
- Socomec motorised switches: ≥ 125A.

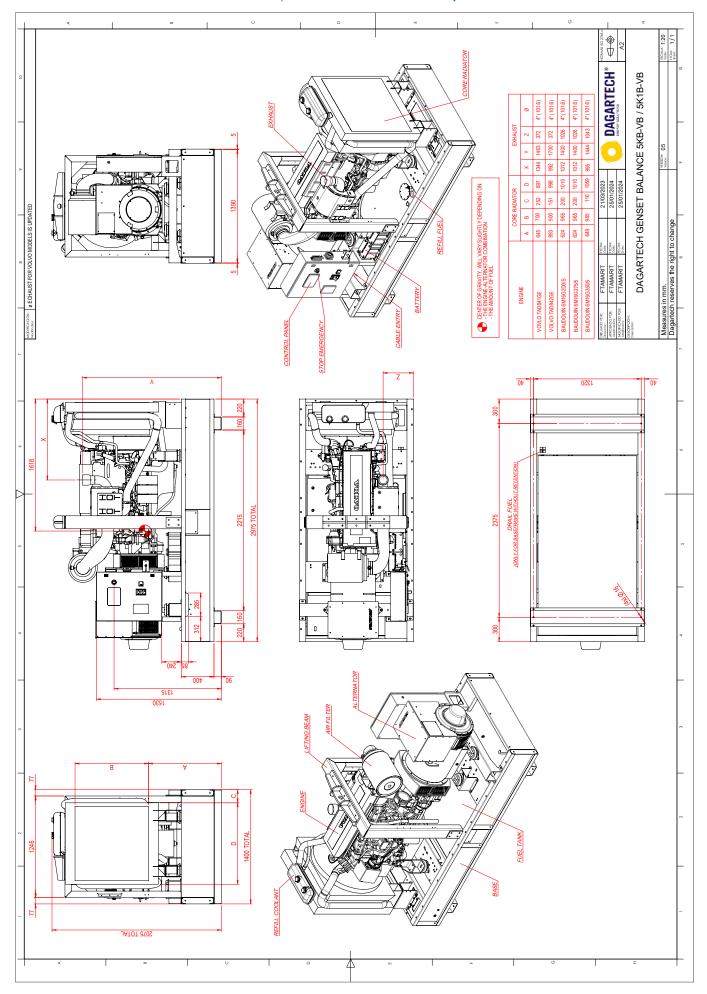
Caption:











¿Necesitas el plano de instalación de la **versión 24 horas**?

Do you need the technical drawing for the **24-hour version**?

Avez-vous besoin du plan d'installation pour la version 24 heures ?

Necessita de plano de instalação em versão com depósito de **48 horas**?

Brauchen Sie die Installationszeichnung für die

T+34 976 141 655 info@dagartech.com



¿Necesitas el plano de instalación de la **versión 24 horas**?

Do you need the technical drawing for the **24-hour version**?

Avez-vous besoin du plan d'installation pour la version 24 heures ?

Necessita de plano de instalação em versão com depósito de **48 horas**?

Brauchen Sie die Installationszeichnung für die **24-Stunden-Version**?

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