

# Complit Range NEW

## CGBS 50 ME



⚡ POWER (PRP / ESP):  
**45 / 50 kVA (36 / 40 kW)**

EU Stage 0 CE Certified

FREQUENCY  
**50Hz**

VOLTAGE  
**400/230V**

⚖️ WEIGHT WITHOUT LIQUIDS AND WITHOUT FUEL (KG):  
**940kg**

📏 DIMENSIONS (BKC):  
**L: 2269 mm  
W: 1006 mm  
H: 1396 mm**

Indicativa image. Dagartech reserves the right to modify the specifications in this technical datasheet without prior notice.

## 1. General technical data

### 1.1. Version, dimensions and weight

| Version                                      | Insonorizado |
|----------------------------------------------|--------------|
| <b>Dimensions</b>                            | <b>BKC</b>   |
| L (mm)                                       | 2269         |
| W (mm)                                       | 1006         |
| H (mm)                                       | 1396         |
| Weight without liquids and without fuel (kg) | 940          |

### 1.2. Main technical data

|                                           |                             |
|-------------------------------------------|-----------------------------|
| <b>Engine</b>                             | <b>BAUDOUIN 4M06G50/5</b>   |
| <b>Alternator</b>                         | <b>MECCALTE ECP32 2S4 C</b> |
| Fuel                                      | Diesel                      |
| Type of execution                         | G3                          |
| Control panel                             | DSE 6120 MKIII              |
| Tank (l)                                  | 120                         |
| Sound level-Lp(A) (dB(A)@1m) <sup>1</sup> | 80                          |
| Sound level-Lp(A) (dB(A)@7m) <sup>1</sup> | 71                          |
| Sound power-LW(A) (dB(A))                 | 96                          |

<sup>1</sup>The sound levels may vary depending on the measurement conditions.

| Voltage  | PRP <sup>2</sup> (KVA/KW) | ESP <sup>2</sup> (KVA/KW) | PRP Amperage (A) | ESP Amperage (A) |
|----------|---------------------------|---------------------------|------------------|------------------|
| 400/230V | <b>45 / 36</b>            | <b>50 / 40</b>            | <b>65</b>        | <b>72,2</b>      |

<sup>2</sup>PRP: Continuous power ("Prime Power"). ESP: Emergency Standby Power according to ISO8528-1.

Tolerance of maximum active power (kW) ±5%

### 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).

# Complit Range NEW

## A complete and seamless solution



**CUSTOM  
ENERGY  
SOLUTIONS**

COMPLETE

INTELLIGENT

SILENT

RELIABLE

Sophistication and simplicity come together to create a unique, reliable, and complete energy solution.

Designed to give you exactly what you need in an emergency application.

Our Complit range is a powerful beam of light in the darkness, a burst of stellar energy with no need for extras.

We are **stellar energy**

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## 2. Engine specifications

### 2.1. General technical data of the engine

|                                  |                                |
|----------------------------------|--------------------------------|
| Make and model                   | BAUDOUIN 4M06G50/5             |
| Emissions                        | EU Stage 0                     |
| r.p.m.                           | 1500                           |
| Maximum ESP power (kWm)          | 46                             |
| Power PRP (kWm)                  | 42                             |
| Fuel                             | Diesel                         |
| No. of cylinders                 | 4                              |
| Cylinder capacity (c.c.)         | 2300                           |
| Compression ratio                | 17,5:1                         |
| Cooling system                   | Water-cooled                   |
| Type of regulation               | Electronic                     |
| Type of engine/injection/suction | Diesel / direct / Turbocharged |

### 2.2. Fuel

|               |        |
|---------------|--------|
| Type of fuel  | Diesel |
| Tank capacity | 120    |

### 2.3. Consumption and autonomy

|             | Consumption (l/h) |      | Autonomy (h) |      |
|-------------|-------------------|------|--------------|------|
|             | PRP               | ESP  | PRP          | ESP  |
| <b>50%</b>  | 5,4               | -    | 22,2         | -    |
| <b>75%</b>  | 8                 | -    | 15           | -    |
| <b>100%</b> | 10,7              | 11,7 | 11,2         | 10,3 |

### 2.4. Cooling system

|                                |     |
|--------------------------------|-----|
| Fan flow (m³/min)              | 68  |
| Radiator back pressure (Pa)    | 50  |
| Fan power consumption (kW)     | 1,2 |
| Total refrigerant capacity (l) | 8,4 |

### 2.5. Lubrication system

|                     |       |
|---------------------|-------|
| Oil capacity (l)    | 9,5   |
| Oil consumption (%) | ≤ 0,4 |

### 2.6. Intake system

|                                     |     |
|-------------------------------------|-----|
| Combustion air intake flow (m³/min) | 2,7 |
|-------------------------------------|-----|

400/230V · 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

|                                      |                         |          |
|--------------------------------------|-------------------------|----------|
| <b>2.7.</b><br><b>Starter system</b> | No. of batteries        | 1        |
|                                      | Battery characteristics | 12V 60Ah |
|                                      | Start-up voltage (V)    | 12V      |

|                                      |                                   |            |           |
|--------------------------------------|-----------------------------------|------------|-----------|
| <b>2.8.</b><br><b>Exhaust system</b> | Exhaust gas flow (m³/min)         | 8,8 [PRP]  | 9,4 [ESP] |
|                                      | Exhaust gas temperature (°C)      | 700 [PRP]  | 700 [ESP] |
|                                      | Exhaust outside diameter (mm)     | 4" (Ø 102) |           |
|                                      | Exhaust attenuation level (dB(A)) | -25        |           |
|                                      | Max. exhaust back pressure (mBar) | 80         |           |

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

### 3. Alternator specifications

|                                                                |                             |                      |            |             |             |
|----------------------------------------------------------------|-----------------------------|----------------------|------------|-------------|-------------|
| <b>3.1.</b><br><b>General technical data of the alternator</b> | Make and model              | MECCALTE ECP32 2S4 C |            |             |             |
|                                                                | No. of poles                | 4                    |            |             |             |
|                                                                | Insulation class            | H                    |            |             |             |
|                                                                | No. of threads              | 12                   |            |             |             |
|                                                                | Mechanical protection index | IP23                 |            |             |             |
|                                                                | Voltage Regulator (AVR)     | M2K                  |            |             |             |
|                                                                | Voltage regulation          | ±1%                  |            |             |             |
|                                                                | ESP power 27°C (kVA)        | 50                   |            |             |             |
|                                                                | Power PRP 40°C (kVA)        | 45                   |            |             |             |
|                                                                | No. of phases               | 3                    |            |             |             |
|                                                                | Power factor (cos φ)        | 0,8                  |            |             |             |
|                                                                |                             | Performance η (%)    |            |             |             |
|                                                                |                             | <b>50%</b>           | <b>75%</b> | <b>100%</b> | <b>110%</b> |
|                                                                |                             | 89,0%                | 88,7%      | 87,6%       | 87,1%       |

**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 · 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

## 4. Bench Specifications

- Unit mounted on **electro-welded high-resistance steel bench**, painted with epoxy-polyester powder paint. **Includes retention bath.**
- 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

- **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 COMPLIT 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** (NBR / PVC). We also incorporated a **silencer attenuation device for the evacuation of gases to the outside**, featuring a rain cap.

*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**.
- 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 | 12V, 6A |
|-------|---------|

#### Protections:

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

### 6.2. Circuit breaker

|       |         |
|-------|---------|
| Model | 100A 4P |
|-------|---------|

### 6.3. Control module



1. Transfer to the generator (manual mode)
2. Start engine (manual mode)
3. Silence alarm
4. Automatic mode
5. Test mode

6. Manual mode
7. Genset stop
8. MAIN NETWORK transfer (manual mode)
9. Navigation keyboard
10. Main status and instrument display

|       |                |
|-------|----------------|
| Model | DSE 6120 MKIII |
|-------|----------------|

DEEP SEA, DSE 6020 MKII control board automatically switches the genset on when an outage is detected in the electrical grid and automatically switches off when the supply of electricity is restored.

It can also operate in manual and signal mode. Makes it possible to monitor a large number of engine parameters and to display information, status and alarm alerts.

The module includes USB communication ports, 4 configurable digital inputs, 3 analogue inputs, 6 configurable outputs, emergency button, 8-35 V battery charger.

Equipped with a 132x64 pixels LCD illuminated display with 4 lines of text, 5 menu navigation keys, programmable clocks and alarms, parameter reading and display with RMS values.

The entire module can be easily set up from a PC using the specific DSE settings software.

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

Other alternative settings available on request extending the options available as part of the work system.

#### 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)

400/230V - 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

### 6.3. Control module


**Standard** ✓

*Model*
**DSE 6120 MKIII**

#### Operating modes

|             |   |
|-------------|---|
| STOP mode   | ✓ |
| MANUAL mode | ✓ |
| TEST mode   | ✓ |
| AUTO mode   | ✓ |

#### Module configuration options

|    |   |
|----|---|
| PC | ✓ |
|----|---|

#### Generator readings

|                                                  |   |
|--------------------------------------------------|---|
| Generator voltage (F-F)                          | ✓ |
| Generator voltage (F-N)                          | ✓ |
| Generator current (A)                            | ✓ |
| Generator frequency                              | ✓ |
| Generator load F-N (kW / kVA / kVAr)             | ✓ |
| Total generator load (kW / kVA / kVAr)           | ✓ |
| Average generator power factor                   | ✓ |
| Accumulated generator load (kW, kVAh, kWh, kVAh) | ✓ |

#### Network readings

|                                      |   |
|--------------------------------------|---|
| Network voltages (ph-N)              | ✓ |
| Network voltages (ph-ph)             | ✓ |
| Grid frequency                       | ✓ |
| Network current (A)                  | □ |
| Network load ph-N (kW / kVA / kVAr)  | □ |
| Total network load (kW / kVA / kVAr) | □ |

#### Engine readings

|                      |   |
|----------------------|---|
| Coolant temperature  | ✓ |
| Oil pressure         | ✓ |
| Engine fuel level    | ✓ |
| Engine battery volts | ✓ |
| Engine speed         | ✓ |
| Engine run time      | ✓ |

#### Caption

|                 |            |
|-----------------|------------|
| ✓ Included      | □ Optional |
| ✗ Not available | ℹ Consult  |

Readings available at control module level.

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

400/230V - 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

### 6.3. Control module


**Standard** ✓

*Model*
**DSE 6120 MKIII**

#### Engine protections

|                                   |   |
|-----------------------------------|---|
| High water temperature            | ✓ |
| Low oil pressure                  | ✓ |
| Low water level                   | ✓ |
| Fuel reserve by sensor            | ✓ |
| Second fuel tank control          | ✓ |
| Shutdown failure                  | ✓ |
| Battery voltage failure           | ✓ |
| Battery charge alternator failure | ✓ |
| Overspeed                         | ✓ |
| Underfrequency                    | ✓ |
| Failure to start                  | ✓ |
| Emergency stop                    | ✓ |
| Maintenance notice                | ✓ |
| Maintenance Alert                 | ✓ |
| Low load operation warning        | ■ |

#### Alternator protections

|                          |   |
|--------------------------|---|
| High frequency           | ✓ |
| Low frequency            | ✓ |
| High voltage             | ✓ |
| Low voltage              | ✓ |
| Short circuit            | ✓ |
| Asymmetry between phases | ■ |
| Incorrect phase sequence | ✗ |
| Reverse power            | ✗ |
| Breaker Trip 4 poles     | ■ |
| Overpressure alarm       | ✓ |

#### Counters

|                 |   |
|-----------------|---|
| Hour meter      | ✓ |
| Kilowatt meter  | ✓ |
| Starter counter | ✓ |

#### Caption

- ✓ Included      ■ Optional
- ✗ Not available      ⓘ Consult

Readings available at control module level.

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

### 6.3. Control module



**Standard** ✓

**Model** DSE 6120 MKIII

#### Communications

|                                |                          |
|--------------------------------|--------------------------|
| RS232                          | ✗                        |
| RS485                          | ✗                        |
| USB communication port         | ✓                        |
| Modbus IP                      | ☐ DSE 855/890/891        |
| Modbus RS 485                  | ☐ DSE 855/890/891        |
| PC Software (Mimic)            | ✓                        |
| GSM/GRPS MODEM                 | ☐ DSE 890                |
| Remote display < 1km           | ✗                        |
| Remote monitoring              | ☐ DSE 855/890            |
| Input expansion                | ☐ DSE 2130 8 inputs      |
| Input expansion (Thermocouple) | ☐ DSE 2133               |
| Output expansion               | ☐ DSE 2152/2157 8 inputs |
| Status LED expansion           | ☐ DSE 2548               |
| SNMP protocol                  | ☐ DSE 892                |

#### Services

|                                      |     |
|--------------------------------------|-----|
| Configurable alarm history           | 250 |
| External start                       | ✓   |
| Start-up inhibition                  | ☐   |
| Network Failure Start                | ✓   |
| Activation of group counter          | ✓   |
| Activation of grid and group counter | ✓   |
| Control of fuel transfer             | ✓   |
| Motor temperature control            | ✓   |
| Forced group operation               | ✓   |
| Free programmable alarms             | ✓   |
| Group start function in test mode    | ✓   |
| Free programmable outputs            | ✓   |
| Multilingual                         | ✓   |

#### Special applications

|                                           |           |
|-------------------------------------------|-----------|
| GPS localisation                          | ☐ DSE 890 |
| Calendar scheduler                        | ✓         |
| DSE configuration suite via PC            | ✓         |
| Front panel module configuration with PIN | ✓         |
| Alternative work                          | ✗         |
| Programmable PLC                          | ✓         |
| Power save mode                           | ✓         |
| Alternative configurations                | ✓         |
| Dummy load control / load shedding        | ✗         |

#### Caption

|                 |            |
|-----------------|------------|
| ✓ Included      | ☐ Optional |
| ✗ Not available | ℹ Consult  |

Readings available at control module level.

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

400/230V - 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

## 7. Detailed supply scope

### Engine

**BAUDOUIN 4M06G50/5, EU STAGE 0, 1500 RPM, WATER-COOLED, WITH ELECTRONIC REGULATION ENGINE.**

- 4-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.
- Residential exhaust silencer of -25 dB(A).
- 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 disconnecter and load alternator driven by the 12V starter, original elements from the engine manufacturer.
- Protection from hot and moving parts.

### Alternator

**MECCALTE ECP32 2S4 C ALTERNATOR OF 12 WIRES AND 4 POLES, BRUSHLESS AND WITH ELECTRONIC VOLTAGE REGULATION TYPE AVR (M2K).**

- With IP23 protection class and H insulation class.
- Brushless 4-pole alternator. Robust mechanical structure with easy access to connections and components. H insulation 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.



400/230V - 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 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 bedplate itself. Equipped with cleaning record to facilitate maintenance work. Includes retention bath.
- 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

- 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 (NBR / PVC).
- 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 6120 MKIII 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.
- **12V, 6A battery charger.**
- **Protections:**
  - 4-pole magnetothermic protection against overloads and short circuits.
  - Protection fuses for the control set.

400/230V · 50Hz (1500 rpm)

BAUDOUIN 4M06G50/5 | MECCALTE ECP32 2S4 C

## 7. Detailed supply scope

### Other equipment

- Engine heater.
- Mechanised fuel nozzle outside with key.
- Prepared for maintenance intervals every 500 hours\*.
- Push button for emergency stop.
- Reinforced pole.
- Thermal sleeves.
- Readings and Alarm Kit:
  - Radiator level alarm sensor.
  - Temperature alarm sensor.
  - Oil pressure alarm sensor.
  - Oil pressure reading sensor.
  - Temperature reading sensor.

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

## 8. Available options

**Opt 1: Engine preheating glow plugs.**

**Opt 2: High-performance fuel filter – PARKER FG 500.**

**Opt 3: Manual oil drain pump.**

**Opt 4: Automatic fuel filling system.**

Available from 90 kVA of power (CKC platform).

**Opt 5: Spring isolators.**

**Opt 6: DSE 890 MKII DSEWebNet® / IoT Gateway Module - 4G (GSM/Ethernet).**

 Check the availability of other communication modules.

**Opt 7: DSE 2157 DSENet® Output Expansion Module (8).**

**Opt 8: Earth Leaking Protection.**

\* Confirm the scope of supply according to the model. Maintenance intervals may vary. Please refer to the engine manufacturer's recommendations.





**DAGARTECH®**  
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**info@dagartech.com**

**T +34 976 141 655**

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**dagartech.com**