# Product Environmental Profile



## Green Motion DC 30

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|---|---|
| **Representative product** | Green Motion DC 30kW 1xCCS2 80A + DC MID + POS<br>(GMD3005BBAH00D00)<br>Product Category: Electric Vehicle Charging Infrastructure (EVCI) |
| **Description of the product** | The Green Motion DC 30 is a compact and high-performance DC fast charger designed for private, public, and semi-public environments such as commercial and industrial buildings. Delivering up to 30 kW of output power, it supports a wide range of electric vehicles and is equipped for bi-directional energy flow with V2G and V2B readiness. Its flexible installation options—wall or floor-mounted—combined with remote diagnostics, OTA updates, and integrated protection features ensure efficient operation and easy maintenance. With dimensions of 580 x 700 x 240 mm, the charger maintains a compact footprint while supporting ISO15118-2 Plug & Charge for seamless user authentication. It also offers connectivity with third-party EMS and CSMS platforms, making it a future-proof solution for smart charging infrastructure. |
| **Product Specifications** | |

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| Product family | Active product : Green Motion DC 30 |
| Station type | Public station on a base and running on direct current (DC) |
| Installation type | Installed in public areas |
| Charging type | DC Fast charging |
| Number of charging points | 1 |

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|---|---|
| Charging mode | Mode 4 |
| Presence of connected sockets | CCS2 80A DC Connector + Charging Cable |
| Reference power | 400VAC – 47A – 32kW – Three Phase |
| Current type | DC |
| Reference service life (RSL) | 10 yrs (as per PSR) |

This is a multistranded charging station for a multi-user environment installed in a public area (company car park, petrol station, motorway services, etc.) that runs on direct current.
This type of station is connected and monitored.
It runs for fast charging, in mode 4.
It is composed of:
• 1 cable with a CCS2 Plug
• Controllers
• Electrical protection systems.
• Communication device
• Payment device
• Metering devices
• Access control system (RFID or key)

The elements used for connecting the station to the mains grid and to the monitoring and communication network are excluded.

**Homogenous Environmental family covered**

| Product Family | Product Number | Weight (kg) | Classification |
|---|---|---|---|
| Green Motion DC 30 | Green Motion DC 30 (Reference) GMD3005BBAH00D00 | 60 | Green Motion DC 30kW 1xCCS2 80A + DC MID + POS |
| | Green Motion DC 30 (Homogenous 1) GMD3005ABAG00D00 | 59.2 | Green Motion DC 30KW 1xCCS2 80A |
| | Green Motion DC 30 (Homogenous 2) GMD3005BBAG00D00 | 59.7 | Green Motion DC 30KW 1xCCS2 80A + DC MID |
| | Green Motion DC 30 (Homogenous 3) GMD3005ABAH00D00 | 59.4 | Green Motion DC 30KW 1xCCS2 80A + POS |

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| **Functional unit** | Supply 1 kWh to one vehicle in accordance with the reference use scenario at the charging point |
| **Declared unit** | To ensure the recharging of electric vehicles or rechargeable hybrids through one recharging points during a reference lifetime of 10 years |
| **Company information** | Eaton Industries Manufacturing GmbH \| Route de la Longeraie 7 \| 1110 Morges, Switzerland<br>Email: productstewardship-es@eaton.com |

| Constituent Materials | | | |
|---|---|---|---|
| Reference product mass | 1.01E+02 Kg (With Packaging) | | |
| Category PEP Material | Materials | Mass (kg) | Percentage (%) |
| Other | Wood | 2.53E+01 | 25.2% |
| Metals | Steel | 2.44E+01 | 24.3% |
| Metals | Stainless steel | 1.77E+01 | 17.6% |
| Other | Cardboard | 1.41E+01 | 14.0% |
| Other | Cable | 6.56E+00 | 6.5% |
| Other | Electronics | 4.78E+00 | 4.8% |
| Plastics | Acrylonitrile butadiene styrene | 1.29E+00 | 1.3% |
| Plastics | Polyamide | 1.15E+00 | 1.1% |
| Other | Paper | 1.10E+00 | 1.1% |
| Metals | Copper | 8.30E-01 | 0.8% |
| Other | PWB | 6.35E-01 | 0.6% |
| Plastics | Polyvinyl chloride | 6.16E-01 | 0.6% |
| Metals | Aluminium | 4.96E-01 | 0.5% |
| Plastics | Polyester | 3.49E-01 | 0.3% |
| Plastics | Polybutylene Terephthalate | 3.27E-01 | 0.3% |
| Other | Miscellaneous | 8.58E-01 | 0.9% |
| Total | | 1.01E+02 | 100.0% |

| Substance Assessment |
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| The representative product is compliant with the EU-RoHS Directive (2011/65/EU) by application of exemptions and the product contains Lead, Lead monoxide, Di boron trioxide, Tetrabromobisphenol-A, Bis(α,α-dimethylbenzyl) peroxide in Electronic component which is listed as Substance-of-Very-High-Concern (SVHC) on the Candidate List of the EU-REACH Regulation (1907/2006/EC). |

| Additional Environmental Information | |
|---|---|
| Manufacturing | Eaton is committed to reducing its overall manufacturing footprint by leveraging innovative technologies and sustainable practices to minimize energy use, emissions, materials, and waste. |
| Distribution | Eaton is committed to minimizing weight and volume of product and its associated packaging material with focus to optimize transport efficiency. |
| Installation | During installation of the product only standard tools are needed. During installation the energy required screwing/ hardware fittings is excluded as per PCR requirement. |
| Use | Product to charge Electrical Vehicle during useful life, which is 10 years (as per real scenario) |
| End of life | Recyclability of product is equal to 72.98% based on the method described in IEC/TR 62635, Edition 1.0/2012-10 "Guidelines for end-of-life information provided by manufacturers and recyclers and for recyclability rate calculation of electrical and electronic equipment". |

| Environmental Impacts | |
|---|---|
| The calculation of the environmental impacts is the result of the Product's Life Cycle Analysis in accordance with ISO 14040/44, covering the entire lifecycle, i.e. "Cradle-to-Grave" including the following life cycle phases: production, distribution, installation, use and end of life.<br>System modelling was carried out using the commercial LCA software EIME v6.3.1 with database version CODDE-2025-04. Indicators Set used: PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v2.0 | |
| **Manufacturing Phase** | Product is assembled and prepared for shipment at the Syrma SGS Technology Limited, India.<br>Assembly energy is 145.54kWh.<br>Energy model used: India |
| **Distribution Phase** | Distribution of the product from the Eaton's last logistics platform to the installation place in Europe is considered as road transport of 1000 km (Local transport) by lorry.<br>Energy model used: Europe. |
| **Installation Phase** | Product is installed in Europe. There is no energy consumption for reference product.<br>Energy model used: Europe |
| **Use Phase** | Use phase calculation for reference product is as follows:<br>Terminal reference power: 30kW<br>Current type: three phases<br>Reference service life: 10 years<br>Number of charges: 10 per day<br>Terminal consumption associated with losses/Power dissipated for the declared unit (product): 43800 kWh.<br>Intrinsic consumption of the station: 2224 kWh<br>Conversion factors between declared unit and functional unit:<br>Total life cycle consumption for the product: 4.60E+04 kWh<br>Total life cycle consumption for the functional unit: 4.20E-02 kWh<br>As per PSR 18, there is no mandatory/regulatory maintenance scheme for electric vehicle charging infrastructures. However, preventive maintenance programmes are carried out for this product. In most cases, these programmes involve visual checks, which involve a site visit and travel by an engineer. Thus, car travel for 1 person for 200km is considered for maintenance check.<br>Energy model used: Europe |
| **End of life Phase** | Product disposed according to European WEEE guidelines.<br>Energy model used: Europe |
| **Module-D** | Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario.<br>It expresses the net benefits and loads beyond the boundaries of the system and are not to be included in the life cycle totals. |

All environmental impacts are calculated for the declared unit, then data should be divided by the Factor calculated with below formulas to get functional unit result.

Environmental impact of the FU = Environmental impact of the reference product (declared unit) / Quantity of energy supplied to one or more vehicles by the station over its RL

Environmental impact of the FU = Environmental impact of the reference product (declared unit) / 1095000 (kWh) * 1 charging points

Environmental impact of the FU = Environmental impact of the reference product (declared unit) / 1095000

## Environmental Impact considering for Functional Unit

### Environmental Impact Indicators: Mandatory

| Mandatory environmental impact indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B1-B7 - Use | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| **Climate change - total** | kg $CO_2$ eq. | 1.71E-02 | 8.86E-04 | 5.89E-06 | 7.67E-05 | 1.61E-02 | 5.18E-05 | 1.97E-05 | 1.60E-02 | -1.06E-04 |
| **Climate change - fossil fuels** | kg $CO_2$ eq. | 1.67E-02 | 9.36E-04 | 5.89E-06 | 2.08E-05 | 1.57E-02 | 5.11E-05 | 1.93E-05 | 1.57E-02 | -1.53E-04 |
| **Climate change - biogenics** | kg $CO_2$ eq. | 3.62E-04 | -4.94E-05 | 2.41E-11 | 5.59E-05 | 3.55E-04 | 6.64E-07 | 3.76E-07 | 3.54E-04 | 4.67E-05 |
| **Climate change - land use and land use transformation** | kg $CO_2$ eq. | 2.35E-10 | 8.88E-11 | 8.91E-12 | 5.12E-13 | 1.20E-10 | 1.67E-11 | 1.20E-10 | 0.00E+00 | 0.00E+00 |
| **Ozone depletion** | kg eq. CFC-11 | 2.16E-10 | 1.42E-10 | 7.15E-14 | 2.52E-13 | 7.04E-11 | 3.07E-12 | 1.73E-12 | 6.87E-11 | -3.15E-11 |
| **Acidification (AP)** | mole of H+ eq. | 9.08E-05 | 6.19E-06 | 9.31E-09 | 5.48E-08 | 8.41E-05 | 4.88E-07 | 1.34E-07 | 8.39E-05 | -9.40E-07 |
| **Freshwater eutrophication** | kg P eq. | 4.16E-08 | 2.58E-09 | 2.20E-11 | 2.37E-10 | 3.85E-08 | 2.61E-10 | 7.59E-11 | 3.84E-08 | -5.65E-10 |
| **Marine aquatic eutrophication** | kg of N eq. | 1.08E-05 | 7.40E-07 | 1.69E-09 | 2.38E-08 | 9.83E-06 | 1.99E-07 | 1.37E-08 | 9.82E-06 | -1.08E-07 |
| **Terrestrial eutrophication** | mole of N eq. | 1.67E-04 | 8.38E-06 | 1.85E-08 | 1.69E-07 | 1.58E-04 | 4.79E-07 | 1.86E-07 | 1.57E-04 | -1.15E-06 |
| **Photochemical ozone formation** | kg of NMVOC eq. | 3.40E-05 | 2.64E-06 | 5.99E-09 | 3.98E-08 | 3.12E-05 | 1.44E-07 | 5.12E-08 | 3.11E-05 | -3.99E-07 |
| **Depletion of abiotic resources - elements** | kg eq. Sb | 2.58E-07 | 2.52E-07 | 2.10E-12 | 9.90E-13 | 5.29E-09 | 7.39E-12 | 8.76E-11 | 5.20E-09 | -3.95E-08 |
| **Depletion of abiotic resources - fossil fuels** | MJ | 4.00E-01 | 1.35E-02 | 1.05E-04 | 1.82E-04 | 3.85E-01 | 8.08E-04 | 6.63E-04 | 3.85E-01 | -2.78E-03 |
| **Water scarcity** | $m^3$ of eq. deprivation worldwide | 4.63E-03 | 4.36E-04 | 2.12E-07 | 1.45E-06 | 1.22E-03 | 2.97E-03 | 5.37E-06 | 1.22E-03 | -6.56E-05 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

## Inventory Flow Indicators: Mandatory

| Inventory flow indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B6 only – Use* | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| Use of renewable primary energy, excluding renewable primary energy resources used as raw materials | MJ | 9.12E-02 | 7.00E-04 | 3.30E-07 | 3.20E-04 | 9.01E-02 | 5.70E-05 | 6.81E-05 | 9.00E-02 | 2.43E-05 |
| Use of renewable primary energy resources used as raw materials | MJ | 7.56E-04 | 7.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -6.13E-04 |
| Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) | MJ | 9.19E-02 | 1.46E-03 | 3.30E-07 | 3.20E-04 | 9.01E-02 | 5.70E-05 | 6.81E-05 | 9.00E-02 | -5.89E-04 |
| Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials | MJ | 3.99E-01 | 1.31E-02 | 1.05E-04 | 1.82E-04 | 3.85E-01 | 8.08E-04 | 6.63E-04 | 3.85E-01 | -2.77E-03 |
| Use of non-renewable primary energy resources used as raw materials | MJ | 3.40E-04 | 3.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -9.43E-06 |
| Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) | MJ | 4.00E-01 | 1.35E-02 | 1.05E-04 | 1.82E-04 | 3.85E-01 | 8.08E-04 | 6.63E-04 | 3.85E-01 | -2.78E-03 |
| Use of secondary materials | kg | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Use of renewable secondary fuels | MJ | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Use of non-renewable secondary fuels | MJ | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Net use of fresh water | m3 | 1.17E-04 | 1.01E-05 | 4.94E-09 | 1.10E-07 | 2.85E-05 | 7.78E-05 | 1.25E-07 | 2.84E-05 | -1.53E-06 |
| Hazardous waste disposed of | kg | 2.69E-03 | 2.19E-03 | 2.47E-08 | 1.19E-06 | 4.47E-04 | 5.29E-05 | 4.54E-06 | 4.43E-04 | -2.45E-03 |
| Non-hazardous waste disposed of | kg | 2.88E-03 | 4.03E-04 | 5.47E-07 | 6.98E-06 | 2.43E-03 | 4.39E-05 | 9.19E-06 | 2.42E-03 | -9.54E-05 |
| Radioactive waste disposed of | kg | 7.64E-07 | 1.83E-07 | 4.33E-10 | 1.17E-09 | 5.77E-07 | 2.30E-09 | 7.12E-09 | 5.70E-07 | -4.66E-08 |
| Components for re-use | kg | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Materials for recycling | kg | 6.48E-05 | 3.27E-08 | 0.00E+00 | 3.29E-05 | 0.00E+00 | 3.18E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Materials for energy recovery | kg | 5.99E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.99E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Exported energy | MJ by energy vector | 3.10E-06 | 2.00E-06 | 0.00E+00 | 1.11E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Biogenic carbon content of the product | kg of C. | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Biogenic carbon content of the associated packaging | kg of C. | 1.51E-05 | 1.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -1.34E-05 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

## Environmental Impact Indicators: Optional

| Optional Environmental impact indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B6 only – Use* | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| Emission of fine particles | incidence of diseases | 7.26E-10 | 6.51E-11 | 7.99E-14 | 3.26E-13 | 6.58E-10 | 2.09E-12 | 9.50E-13 | 6.57E-10 | -5.43E-11 |
| Ionizing radiation, human health | kBq of U235 eq. | 2.12E-02 | 1.51E-04 | 2.09E-07 | 2.39E-06 | 2.11E-02 | 1.16E-05 | 7.67E-05 | 2.10E-02 | -2.08E-05 |
| Ecotoxicity, fresh water | CTUe | 6.82E-02 | 4.08E-02 | 1.72E-04 | 2.55E-04 | 2.63E-02 | 6.65E-04 | 2.30E-03 | 2.40E-02 | -8.01E-04 |
| Human toxicity, cancer effects | CTUh | 1.68E-10 | 1.65E-10 | 1.15E-15 | 1.81E-12 | 2.12E-12 | 2.30E-14 | 1.37E-13 | 1.98E-12 | -3.44E-10 |
| Human toxicity, non-cancer effects | CTUh | 6.66E-11 | 1.70E-11 | 2.20E-14 | 5.44E-14 | 4.73E-11 | 2.22E-12 | 3.15E-13 | 4.70E-11 | -5.91E-12 |
| Impacts related to land use/soil quality | - | 4.65E-04 | 6.38E-06 | 2.52E-08 | 5.83E-08 | 4.26E-04 | 3.31E-05 | 6.24E-07 | 4.25E-04 | -6.72E-12 |
| Total use of primary energy during the life cycle | MJ | 4.92E-01 | 1.49E-02 | 1.05E-04 | 5.02E-04 | 4.75E-01 | 8.65E-04 | 7.31E-04 | 4.75E-01 | -3.37E-03 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

## Environmental Impact considering for Declared Unit

## Environmental Impact Indicators: Mandatory

| Mandatory environmental impact indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B1-B7 - Use | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| Climate change - total | kg $CO_2$ eq. | 1.87E+04 | 9.71E+02 | 6.45E+00 | 8.40E+01 | 1.76E+04 | 5.67E+01 | 2.15E+01 | 1.76E+04 | -1.16E+02 |
| Climate change - fossil fuels | kg $CO_2$ eq. | 1.83E+04 | 1.02E+03 | 6.45E+00 | 2.28E+01 | 1.72E+04 | 5.59E+01 | 2.11E+01 | 1.72E+04 | -1.67E+02 |
| Climate change - biogenics | kg $CO_2$ eq. | 3.96E+02 | -5.41E+01 | 2.64E-05 | 6.12E+01 | 3.88E+02 | 7.27E-01 | 4.12E-01 | 3.88E+02 | 5.12E+01 |
| Climate change - land use and land use transformation | kg $CO_2$ eq. | 2.57E-04 | 9.73E-05 | 9.76E-06 | 5.60E-07 | 1.31E-04 | 1.83E-05 | 1.31E-04 | 0.00E+00 | 0.00E+00 |
| Ozone depletion | kg eq. CFC-11 | 2.36E-04 | 1.56E-04 | 7.83E-08 | 2.76E-07 | 7.71E-05 | 3.36E-06 | 1.90E-06 | 7.52E-05 | -3.45E-05 |
| Acidification (AP) | mole of H+ eq. | 9.94E+01 | 6.77E+00 | 1.02E-02 | 6.00E-02 | 9.20E+01 | 5.34E-01 | 1.47E-01 | 9.19E+01 | -1.03E+00 |
| Freshwater eutrophication | kg P eq. | 4.55E-02 | 2.82E-03 | 2.41E-05 | 2.60E-04 | 4.21E-02 | 2.86E-04 | 8.31E-05 | 4.20E-02 | -6.18E-04 |
| Marine aquatic eutrophication | kg of N eq. | 1.18E+01 | 8.10E-01 | 1.85E-03 | 2.61E-02 | 1.08E+01 | 2.17E-01 | 1.50E-02 | 1.08E+01 | -1.18E-01 |
| Terrestrial eutrophication | mole of N eq. | 1.83E+02 | 9.17E+00 | 2.03E-02 | 1.85E-01 | 1.73E+02 | 5.25E-01 | 2.03E-01 | 1.72E+02 | -1.26E+00 |
| Photochemical ozone formation | kg of NMVOC eq. | 3.72E+01 | 2.89E+00 | 6.56E-03 | 4.36E-02 | 3.41E+01 | 1.57E-01 | 5.60E-02 | 3.41E+01 | -4.37E-01 |
| Depletion of abiotic resources - elements | kg eq. Sb | 2.82E-01 | 2.76E-01 | 2.30E-06 | 1.08E-06 | 5.79E-03 | 8.09E-06 | 9.59E-05 | 5.69E-03 | -4.32E-02 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Depletion of abiotic resources - fossil fuels** | MJ | 4.38E+05 | 1.48E+04 | 1.15E+02 | 1.99E+02 | 4.22E+05 | 8.85E+02 | 7.26E+02 | 4.21E+05 | -3.04E+03 |
| **Water scarcity** | $m^3$ of eq.. deprivation worldwide | 5.07E+03 | 4.77E+02 | 2.32E-01 | 1.59E+00 | 1.34E+03 | 3.25E+03 | 5.88E+00 | 1.33E+03 | -7.18E+01 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

## Inventory Flow Indicators: Mandatory

| Inventory flow indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B6 only – Use* | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| **Use of renewable primary energy, excluding renewable primary energy resources used as raw materials** | MJ | 9.98E+04 | 7.66E+02 | 3.61E-01 | 3.50E+02 | 9.87E+04 | 6.24E+01 | 7.46E+01 | 9.86E+04 | 2.66E+01 |
| **Use of renewable primary energy resources used as raw materials** | MJ | 8.27E+02 | 8.27E+02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -6.71E+02 |
| **Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)** | MJ | 1.01E+05 | 1.59E+03 | 3.61E-01 | 3.50E+02 | 9.87E+04 | 6.24E+01 | 7.46E+01 | 9.86E+04 | -6.45E+02 |
| **Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials** | MJ | 4.37E+05 | 1.44E+04 | 1.15E+02 | 1.99E+02 | 4.22E+05 | 8.85E+02 | 7.26E+02 | 4.21E+05 | -3.03E+03 |
| **Use of non-renewable primary energy resources used as raw materials** | MJ | 3.73E+02 | 3.73E+02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -1.03E+01 |
| **Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)** | MJ | 4.38E+05 | 1.48E+04 | 1.15E+02 | 1.99E+02 | 4.22E+05 | 8.85E+02 | 7.26E+02 | 4.21E+05 | -3.04E+03 |
| **Use of secondary materials** | kg | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Use of renewable secondary fuels** | MJ | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Use of non-renewable secondary fuels** | MJ | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Net use of fresh water** | m3 | 1.28E+02 | 1.11E+01 | 5.41E-03 | 1.21E-01 | 3.12E+01 | 8.52E+01 | 1.37E-01 | 3.11E+01 | -1.67E+00 |
| **Hazardous waste disposed of** | kg | 2.94E+03 | 2.39E+03 | 2.70E-02 | 1.31E+00 | 4.90E+02 | 5.79E+01 | 4.97E+00 | 4.85E+02 | -2.68E+03 |
| **Non-hazardous waste disposed of** | kg | 3.15E+03 | 4.41E+02 | 5.99E-01 | 7.65E+00 | 2.66E+03 | 4.81E+01 | 1.01E+01 | 2.65E+03 | -1.04E+02 |
| **Radioactive waste disposed of** | kg | 8.37E-01 | 2.01E-01 | 4.74E-04 | 1.28E-03 | 6.31E-01 | 2.52E-03 | 7.79E-03 | 6.24E-01 | -5.10E-02 |
| **Components for re-use** | kg | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Materials for recycling** | kg | 7.09E+01 | 3.58E-02 | 0.00E+00 | 3.60E+01 | 0.00E+00 | 3.48E+01 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Materials for energy recovery** | kg | 6.56E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.56E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Exported energy** | MJ by energy vector | 3.40E+00 | 2.19E+00 | 0.00E+00 | 1.21E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| **Biogenic carbon content of the product** | kg of C. | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Biogenic carbon content of the associated packaging** | kg of C. | 1.65E+01 | 1.65E+01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | | -1.47E+01 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

## Environmental Impact Indicators: Optional

| Optional Environmental impact indicators | Units | Sum | A1-A3 - Manufacturing | A4 - Distribution | A5 - Installation | B6 only – Use* | C1-C4 - End of life | B2 - Maintenance | B6 - Operational energy use | D - Benefits and loads beyond the system boundaries |
|---|---|---|---|---|---|---|---|---|---|---|
| **Emission of fine particles** | incidence of diseases | 7.95E-04 | 7.12E-05 | 8.75E-08 | 3.57E-07 | 7.21E-04 | 2.29E-06 | 1.04E-06 | 7.19E-04 | -5.95E-05 |
| **Ionizing radiation, human health** | kBq of U235 eq. | 2.32E+04 | 1.66E+02 | 2.28E-01 | 2.62E+00 | 2.31E+04 | 1.27E+01 | 8.40E+01 | 2.30E+04 | -2.28E+01 |
| **Ecotoxicity, fresh water** | CTUe | 7.47E+04 | 4.46E+04 | 1.88E+02 | 2.79E+02 | 2.88E+04 | 7.28E+02 | 2.52E+03 | 2.63E+04 | -8.77E+02 |
| **Human toxicity, cancer effects** | CTUh | 1.84E-04 | 1.80E-04 | 1.26E-09 | 1.98E-06 | 2.32E-06 | 2.52E-08 | 1.51E-07 | 2.17E-06 | -3.77E-04 |
| **Human toxicity, non-cancer effects** | CTUh | 7.29E-05 | 1.86E-05 | 2.41E-08 | 5.95E-08 | 5.18E-05 | 2.43E-06 | 3.45E-07 | 5.14E-05 | -6.47E-06 |
| **Impacts related to land use/soil quality** | - | 5.09E+02 | 6.98E+00 | 2.76E-02 | 6.39E-02 | 4.66E+02 | 3.62E+01 | 6.84E-01 | 4.66E+02 | -7.36E-06 |
| **Total use of primary energy during the life cycle** | MJ | 5.38E+05 | 1.64E+04 | 1.15E+02 | 5.49E+02 | 5.20E+05 | 9.47E+02 | 8.00E+02 | 5.20E+05 | -3.69E+03 |

*__Note__: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Extrapolation factors for homogenous family:

| Product Number | Phases | GWP | GWP-f | GWP-b | GWP-lu | ODP | AP | EP-fw | EP-m | EP-t | POCP | ADP-e | ADP-f | WDP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reference: GMD3005BBAH00D00 | A1-A3 - Manufacturing | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | A4 - Distribution | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | A5 - Installation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | B6 - Energy Requirement | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | C1-C4 - End of life | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Homogenous 1: GMD3005ABAG00D00 | A1-A3 - Manufacturing | 0.98 | 0.98 | 1.00 | 0.98 | 0.98 | 0.99 | 0.97 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 |
| | A4 - Distribution | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| | A5 - Installation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | B6 - Energy Requirement | 0.97 | 0.97 | 0.97 | 1.00 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| | C1-C4 - End of life | 0.98 | 0.99 | 0.98 | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 |
| Homogenous 2: GMD3005BBAG00D00 | A1-A3 - Manufacturing | 1.00 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 |
| | A4 - Distribution | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 |
| | A5 - Installation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | B6 - Energy Requirement | 0.98 | 0.99 | 0.99 | 1.00 | 0.99 | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.99 | 0.99 | 0.98 |
| | C1-C4 - End of life | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 0.99 | 0.99 | 1.00 |
| Homogenous 3: GMD3005ABAH00D00 | A1-A3 - Manufacturing | 0.99 | 0.99 | 1.00 | 0.98 | 0.99 | 0.99 | 0.97 | 0.99 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 |
| | A4 - Distribution | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| | A5 - Installation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | B6 - Energy Requirement | 0.99 | 0.99 | 0.99 | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| | C1-C4 - End of life | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |

## Disclaimer

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| *Registration number:* | EATO-00450-V01.01-EN | *Drafting rules* | PCR-ed4-EN-2021 09 06 |
| *Verifier accreditation number:* | VH56 | Supplemented by | PSR-0018-ed1.3-EN-2024 09 26 |
| *Date of issue* | 09-2025 | *Information and reference documents* | www.pep-ecopassport.org |
| | | *Validity period* | 5 years |
| Independent verification of the declaration and data, in compliance with ISO 14025: 2006 | | | |
| Internal | X | External | |
| The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain) | | | |
| *PEPs are compliant with XP C08-100-1:2016 or EN 50693:2019*<br>*The components of the present PEP may not be compared with components from any other program.* | | | |
| *Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"* | | | |