# Product Environmental Profile

## EasyPact EZC100 N 15kA Circuit Breaker 3P/3T 100A

## EasyPact EZC

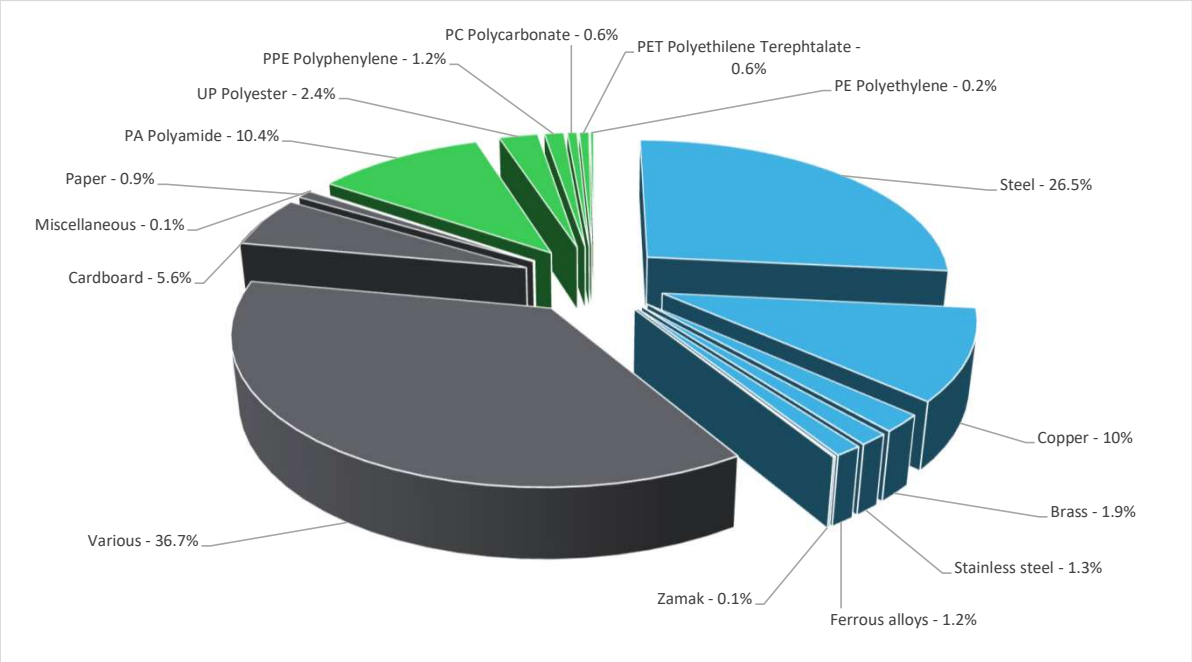


## General information

| | |
|---|---|
| **Reference product** | EasyPact EZC100 N 15kA Circuit Breaker 3P/3T 100A - EZC100N3100 |
| **Description of the product** | EasyPact EZC100N is a 3 poles fixed circuit breaker designed for the protection of low voltage electrical installations. It is used for standard applications in industries and buildings, offering good performance at competitive price.The breaking capacity (Icu) is 15kA rms at 415VAC 50/60Hz. The operational voltage is 550VAC 50/60Hz or 250VDC. |
| **Description of the range** | EasyPact EZC 100A Molded-case circuit breaker<br>The environmental impacts of this reference product are representative of the impacts of the other products of the range which are developed with a similar technology. |
| **Functional unit** | Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 550V and rated current 100A. This protection is ensured in accordance with the following parameters:<br>- Number of poles 3P<br>- Rated breaking capacity 15kA<br>- Tripping curve long time, short time and instantanous protections |

## Constituent materials

| | | |
|---|---|---|
| **Reference product mass** | 836.5 g | including the product, its packaging and additional elements and accessories |




| | | |
|---|---|---|
| | Plastics | 15.43% |
| | Metals | 41.13% |
| | Others | 43.44% |

## Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

## Additional environmental information

| | | | |
|---|---|---|---|
| **End Of Life** | Recyclability potential: | **43%** | Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability). |

## Environmental impacts

| | | | | |
|---|---|---|---|---|
| **Reference service life time** | 20 years | | | |
| **Product category** | Circuit-breakers | | | |
| **Installation elements** | Thailand | | | |
| **Use scenario** | Load rate: 50% of In<br>Use time rate: 30% of RLT | | | |
| **Technological representativeness** | EasyPact EZC100N is a 3 poles fixed circuit breaker designed for the protection of low voltage electrical installations. It is used for standard applications in industries and buildings, offering good performance at competitive price.The breaking capacity (Icu) is 15kA rms at 415VAC 50/60Hz. The operational voltage is 550VAC 50/60Hz or 250VDC. | | | |
| **Geographical representativeness** | Thailand | | | |
| **Energy model used** | **[A1 - A3]** | **[A5]** | **[B6]** | **[C1 - C4]** |
| | Electricity Mix; Production mix; Low voltage; TH | Electricity Mix; Production mix; Low voltage; TH | Electricity Mix; Production mix; Low voltage; TH | Electricity Mix; Production mix; Low voltage; TH |

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

| **Mandatory Indicators** | | **EasyPact EZC100 N 15kA Circuit Breaker 3P/3T 100A - EZC100N3100** | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Impact indicators** | **Unit** | **Total** | **Manufacturing** [A1 - A3] | **Distribution** [A4] | **Installation** [A5] | **Use** [B1 - B7] | **End of Life** [C1 - C4] | **Benefits** [D] |
| Contribution to climate change | kg CO2 eq | 2.67E+02 | 6.76E+00 | 2.41E-01 | 1.01E-01 | 2.59E+02 | 1.22E+00 | -8.51E+00 |
| Contribution to climate change-fossil | kg CO2 eq | 2.65E+02 | 5.14E+00 | 2.41E-01 | 9.70E-02 | 2.59E+02 | 1.20E+00 | -8.44E+00 |
| Contribution to climate change-biogenic | kg CO2 eq | 2.06E+00 | 1.62E+00 | 0* | 4.50E-03 | 4.23E-01 | 1.71E-02 | -6.94E-02 |
| Contribution to climate change-land use and land use change | kg CO2 eq | 2.96E-07 | 0* | 0* | 1.01E-08 | 0* | 2.86E-07 | 0.00E+00 |
| Contribution to ozone depletion | kg CFC-11 eq | 2.28E-06 | 1.33E-06 | 2.13E-07 | 6.76E-09 | 7.18E-07 | 1.48E-08 | -1.38E-06 |
| Contribution to acidification | mol H+ eq | 1.16E+00 | 5.63E-02 | 1.05E-03 | 4.03E-04 | 1.09E+00 | 5.04E-03 | -8.80E-02 |
| Contribution to eutrophication, freshwater | kg $(PO4)^{3-}$ eq | 6.40E-04 | 2.61E-05 | 0* | 7.77E-07 | 3.40E-06 | 6.09E-04 | -1.44E-05 |
| Contribution to eutrophication marine | kg N eq | 1.45E-01 | 6.62E-03 | 4.82E-04 | 1.07E-04 | 1.37E-01 | 8.76E-04 | -5.24E-03 |
| Contribution to eutrophication, terrestrial | mol N eq | 2.36E+00 | 7.18E-02 | 5.22E-03 | 8.09E-04 | 2.27E+00 | 1.02E-02 | -6.07E-02 |
| Contribution to photochemical ozone formation - human health | kg COVNM eq | 4.64E-01 | 2.42E-02 | 1.71E-03 | 2.16E-04 | 4.35E-01 | 3.05E-03 | -2.33E-02 |
| Contribution to resource use, minerals and metals | kg Sb eq | 1.38E-03 | 1.36E-03 | 0* | 0* | 6.57E-06 | 1.72E-05 | -2.71E-03 |
| Contribution to resource use, fossils | MJ | 4.27E+03 | 1.46E+02 | 2.93E+00 | 1.05E+00 | 4.06E+03 | 5.66E+01 | -1.86E+02 |
| Contribution to water use | m3 eq | 1.04E+01 | 2.22E+00 | 1.22E-02 | 4.58E-02 | 7.33E+00 | 7.52E-01 | -5.28E+00 |

*Additional indicators for the French regulation are available as well*

| Inventory flows Indicators | | EasyPact EZC100 N 15kA Circuit Breaker 3P/3T 100A - EZC100N3100 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Inventory flows | Unit | Total | Manufact. [A1 - A3] | Distribution [A4] | Installation [A5] | Use [B1 - B7] | End of Life [C1 - C4] | Benefits [D] |
| Contribution to use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 3.03E+02 | 1.11E+00 | 0* | 7.76E-02 | 3.01E+02 | 4.13E-01 | -1.85E+00 |
| Contribution to use of renewable primary energy resources used as raw material | MJ | 1.09E+00 | 1.09E+00 | 0* | 0* | 0* | 0* | -9.45E-01 |
| Contribution to total use of renewable primary energy resources | MJ | 3.04E+02 | 2.19E+00 | 0* | 7.76E-02 | 3.01E+02 | 4.13E-01 | -2.80E+00 |
| Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 4.26E+03 | 1.40E+02 | 2.93E+00 | 1.05E+00 | 4.06E+03 | 5.66E+01 | -1.86E+02 |
| Contribution to use of non renewable primary energy resources used as raw material | MJ | 5.72E+00 | 5.72E+00 | 0* | 0* | 0* | 0* | -8.59E-02 |
| Contribution to total use of non-renewable primary energy resources | MJ | 4.27E+03 | 1.46E+02 | 2.93E+00 | 1.05E+00 | 4.06E+03 | 5.66E+01 | -1.86E+02 |
| Contribution to use of secondary material | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to use of renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to use of non renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to net use of freshwater | m³ | 2.41E-01 | 5.17E-02 | 2.85E-04 | 1.07E-03 | 1.71E-01 | 1.75E-02 | -1.23E-01 |
| Contribution to hazardous waste disposed | kg | 4.36E+01 | 3.98E+01 | 0* | 0* | 3.03E+00 | 7.99E-01 | -2.18E+02 |
| Contribution to non hazardous waste disposed | kg | 3.78E+01 | 3.78E+00 | 0* | 3.29E-01 | 3.36E+01 | 1.04E-01 | -7.54E+00 |
| Contribution to radioactive waste disposed | kg | 1.24E-02 | 1.24E-03 | 4.79E-05 | 4.42E-05 | 1.11E-02 | 8.59E-06 | -2.87E-03 |
| Contribution to components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to materials for recycling | kg | 3.97E-01 | 0* | 0* | 5.73E-02 | 0* | 3.39E-01 | 0.00E+00 |
| Contribution to materials for energy recovery | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to exported energy | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to biogenic carbon content of the product | kg de C | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to biogenic carbon content of the associated packaging | kg de C | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |

** represents less than 0.01% of the total life cycle of the reference flow*

*Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.*

*Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact*

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request

*Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.*

| | | | |
|---|---|---|---|
| *Registration number :* | ENVPEP1407009_V4 | *Drafting rules* | PEP-PCR-ed4-2021 09 06 |
| *Verifier accreditation N°* | | *Supplemented by* | PSR-0005-ed2-2016 03 29 |
| *Date of issue* | 2023/12/5 | *Information and reference* | www.pep-ecopassport.org |
| | | *Validity period* | 5 years |
| *Independent verification of the declaration and data, in compliance with ISO 14021 : 2016* | | | |
| Internal X External | | | |
| *The PCR review was conducted by a panel of experts chaired by Julie ORGELET (Ddemain)* | | | |
| *PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019* | | | |
| *The elements of the present PEP cannot be compared with elements from another program.* | | | |
| *Document in compliance with ISO 14021 : 2016 « Environmental labels and declarations. Type II environmental declarations »* | | | |

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Published by Schneider Electric

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