Product Environmental Profile

QOVS RCBO 6KA 0.03A VD AC C 20A 230/240V

QOvs







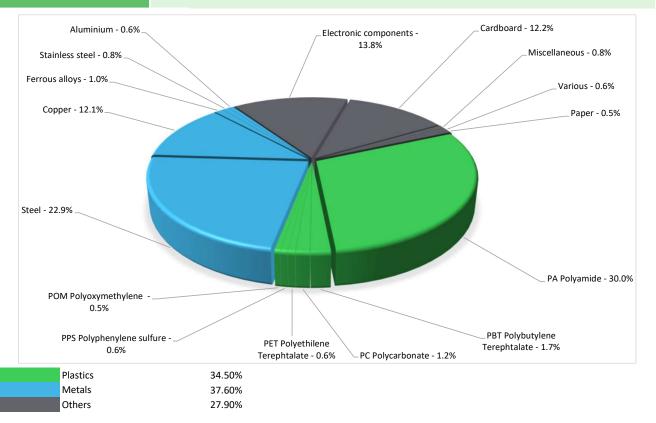
General information

| Reference product | QOVS RCBO 6KA 0.03A VD AC C 20A 230/240V - QO120C06RCBO30 | | | | | |
|----------------------------|--|--|--|--|--|--|
| Description of the product | The main function of this product is to provide a protection of final circuit combining protection against overcurrent and protect against insulation faults. | | | | | |
| Description of the range | This range consists of RCBO of 6A to 50A, 1P+N, the representative product used for the analysis is QOVS RCBO 6KA 0.03A VD AC C 20A 230/240V (commercial reference: QO120C06RCBO30). The linked references are all 1P+N, mass of these products is same, the weight of these products is 213.5g including packaging. | | | | | |
| | 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 and protect people and premises at risk of fire or explosion against insulation defects in circuit with assigned voltage 230V/240V and rated current 20A. This protection is ensured in accordance with the following parameters:Number of poles: 1P+NRated breaking capacity Icn:6kASensitivity S:30mAType of differential protection Tp:ACTripping curve Cd: CDegree of protection: IP20Followed standards:BS EN/IEC 61009-1 IEC 61009-2-2 | | | | | |

Constituent materials

Reference product mass

213.5 g including the product, its packaging and additional elements and accessories



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/

(19) Additional environmental information

Recyclability potential:

42%

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%

Tenvironmental impacts

| Reference service life time | 20 years | | | | | | |
|----------------------------------|---|---|---|--|--|--|--|
| Product category | Differential circuit breaker | | | | | | |
| Installation elements | The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal). | | | | | | |
| Use scenario | Load rate: 50% of In Use time rate: 30% of RLT | | | | | | |
| Technological representativeness | The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production. | | | | | | |
| 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 | QOVS RCBO 6KA 0.03A VD AC C 20A 230/240V - QO120C06RCBO30 | | | | | | | |
|--|---|----------|---------------|--------------|--------------|-----------|-------------|-----------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life | Benefits |
| impact mulcators | Oille | Total | [A1 - A3] | [A4] | [A5] | [B1 - B7] | [C1 - C4] | [D] |
| Contribution to climate change | kg CO2 eq | 6.12E+01 | 3.08E+00 | 6.15E-02 | 5.01E-02 | 5.76E+01 | 4.30E-01 | -1.34E+00 |
| Contribution to climate change-fossil | kg CO2 eq | 6.11E+01 | 3.07E+00 | 6.15E-02 | 4.79E-02 | 5.75E+01 | 4.25E-01 | -1.32E+00 |
| Contribution to climate change-biogenic | kg CO2 eq | 1.12E-01 | 1.08E-02 | 0* | 2.23E-03 | 9.39E-02 | 5.37E-03 | -1.46E-02 |
| Contribution to climate change-land use and land use change | kg CO2 eq | 9.16E-08 | 2.05E-09 | 0* | 0* | 0* | 8.96E-08 | 0.00E+00 |
| Contribution to ozone depletion | kg CFC-11 eq | 6.27E-07 | 4.05E-07 | 5.43E-08 | 3.32E-09 | 1.60E-07 | 4.44E-09 | -2.03E-07 |
| Contribution to acidification | mol H+ eq | 2.69E-01 | 2.46E-02 | 2.67E-04 | 1.99E-04 | 2.43E-01 | 1.32E-03 | -1.20E-02 |
| Contribution to eutrophication, freshwater | kg (PO4)³¯eq | 2.13E-04 | 2.12E-05 | 0* | 3.62E-07 | 7.55E-07 | 1.91E-04 | -2.98E-06 |
| Contribution to eutrophication marine | kg N eq | 3.32E-02 | 2.35E-03 | 1.23E-04 | 5.27E-05 | 3.04E-02 | 2.25E-04 | -8.30E-04 |
| Contribution to eutrophication, terrestrial | mol N eq | 5.34E-01 | 2.53E-02 | 1.33E-03 | 3.98E-04 | 5.04E-01 | 2.69E-03 | -9.37E-03 |
| Contribution to photochemical ozone formation - human health | kg COVNM eq | 1.07E-01 | 9.14E-03 | 4.37E-04 | 1.06E-04 | 9.66E-02 | 7.61E-04 | -3.44E-03 |
| Contribution to resource use, minerals and metals | kg Sb eq | 3.21E-04 | 3.14E-04 | 0* | 0* | 1.46E-06 | 5.38E-06 | -3.52E-04 |
| Contribution to resource use, fossils | MJ | 9.64E+02 | 4.78E+01 | 7.47E-01 | 5.22E-01 | 9.03E+02 | 1.20E+01 | -2.71E+01 |
| Contribution to water use | m3 eq | 2.23E+00 | 3.58E-01 | 3.12E-03 | 2.14E-02 | 1.63E+00 | 2.17E-01 | -7.10E-01 |

Additional indicators for the French regulation are available as well

| Inventory flows Indicators | | | QOVS RCBO 6KA 0.03A VD AC C 20A 230/240V - QO120C06RCBO30 | | | | | |
|---|---------|----------|---|--------------|--------------|-----------|-------------|-----------|
| Inventory flows | Unit | Total | Manufact. | Distribution | Installation | Use | End of Life | Benefits |
| | | | [A1 - A3] | [A4] | [A5] | [B1 - B7] | [C1 - C4] | [D] |
| Contribution to use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 6.75E+01 | 3.96E-01 | 0* | 3.74E-02 | 6.70E+01 | 1.30E-01 | -1.08E-01 |
| Contribution to use of renewable primary energy resources used as raw material | MJ | 5.45E-01 | 5.45E-01 | 0* | 0* | 0* | 0* | -4.96E-01 |
| Contribution to total use of renewable primary energy resources | MJ | 6.81E+01 | 9.40E-01 | 0* | 3.74E-02 | 6.70E+01 | 1.30E-01 | -6.04E-01 |
| Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 9.61E+02 | 4.53E+01 | 7.47E-01 | 5.22E-01 | 9.03E+02 | 1.20E+01 | -2.71E+01 |
| Contribution to use of non renewable primary energy resources used as raw material | MJ | 2.47E+00 | 2.47E+00 | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to total use of non-renewable primary energy resources | MJ | 9.64E+02 | 4.78E+01 | 7.47E-01 | 5.22E-01 | 9.03E+02 | 1.20E+01 | -2.71E+01 |
| Contribution to use of secondary material | kg | 3.31E-06 | 3.31E-06 | 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 | 5.19E-02 | 8.35E-03 | 7.27E-05 | 4.98E-04 | 3.79E-02 | 5.06E-03 | -1.65E-02 |
| Contribution to hazardous waste disposed | kg | 1.16E+01 | 1.07E+01 | 0* | 0* | 6.72E-01 | 2.24E-01 | -2.82E+01 |
| Contribution to non hazardous waste disposed | kg | 9.09E+00 | 1.39E+00 | 0* | 1.63E-01 | 7.46E+00 | 7.52E-02 | -1.83E+00 |
| Contribution to radioactive waste disposed | kg | 2.87E-03 | 3.67E-04 | 1.22E-05 | 2.19E-05 | 2.47E-03 | 3.72E-06 | -6.40E-04 |
| Contribution to components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to materials for recycling | kg | 1.08E-01 | 0* | 0* | 2.75E-02 | 0* | 8.05E-02 | 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 : | ENVPEP1306051_V3 | Drafting rules | PEP-PCR-ed4-2021 09 06 | | | | |
|--|------------------|-------------------------------------|-------------------------|--|--|--|--|
| Verifier accreditation N° | | Supplemented by | PSR-0005-ed2-2016 03 29 | | | | |
| Date of issue | 2023/09/01 | Information and reference documents | 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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