Product Environmental Profile

EASYPACT CVS 100-250 - CVS250F TM250D 3P3D

This range consists of all products of Easypact CVS 100-250A family: 100/160/250B, 100/160/250F and 100/160/250NA range.
**General information**

<table>
<thead>
<tr>
<th>Representative product</th>
<th>EASYPACT CVS 100-250 - CVS250F TM250D 3P3D -LV525333</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the product</td>
<td>This product is a moulded case circuit breaker. The main function of the Easypact CVS 100-250A product range is to protect the wires and equipments in the circuit</td>
</tr>
<tr>
<td>Description of the range</td>
<td>This range consists of all products of Easypact CVS 100-250A family: 100/160/250B, 100/160/250F and 100/160/250NA range. The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.</td>
</tr>
<tr>
<td>Functional unit</td>
<td>The main function of the Easypact CVS 100-250A product range is to protect the wires and equipments in the circuit by allowing Off, On and tripped operation with a service period of 20 years.</td>
</tr>
</tbody>
</table>

**Constituent materials**

| Reference product mass | 1890 g including the product, its packaging and additional elements and accessories |

**Substance assessment**

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive.

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

## Additional environmental information

The EASYPACT CVS 100-250 - CVS250F TM250D 3P3D presents the following relevant environmental aspects:

<table>
<thead>
<tr>
<th>Design</th>
<th>Not in scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Manufactured at a Schneider Electric production site ISO14001 certified</td>
</tr>
<tr>
<td>Distribution</td>
<td>Weight and volume of the packaging optimized, based on the European Union's packaging directive</td>
</tr>
<tr>
<td></td>
<td>Packaging weight is 64.8 g, consisting of Cardboard (79.6%), Paper (20.5%)</td>
</tr>
<tr>
<td></td>
<td>Product distribution optimised by setting up local distribution centres</td>
</tr>
<tr>
<td>Installation</td>
<td>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).</td>
</tr>
<tr>
<td>Use</td>
<td>The product does not require special maintenance operations.</td>
</tr>
<tr>
<td>End of life</td>
<td>End of life optimized to decrease the amount of waste and allow recovery of the product components and materials</td>
</tr>
<tr>
<td></td>
<td>This product contains Plastic parts with brominated FR (289.5g) that should be separated from the stream of waste so as to optimize end-of-life treatment.</td>
</tr>
<tr>
<td></td>
<td>The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider Electric Green Premium website: <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a></td>
</tr>
<tr>
<td>Recyclability potential:</td>
<td>56.0%</td>
</tr>
</tbody>
</table>

## Environmental impacts

<table>
<thead>
<tr>
<th>Reference life time</th>
<th>20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product category</td>
<td>Passive products - continuous operation</td>
</tr>
<tr>
<td>Installation elements</td>
<td>No special components needed</td>
</tr>
<tr>
<td>Use scenario</td>
<td>Product dissipation is 5.0625 W, loading rate is 30% and service uptime percentage is 100%</td>
</tr>
<tr>
<td>Geographical representativeness</td>
<td>China</td>
</tr>
<tr>
<td>Technological representativeness</td>
<td>This product is a moulded case circuit breaker. The main function of the Easypact CVS 100-250A product range is to protect the wires and equipments in the circuit</td>
</tr>
<tr>
<td>Energy model used</td>
<td>Energy model used: China</td>
</tr>
</tbody>
</table>

### Impact indicators

<table>
<thead>
<tr>
<th>EASYPACT CVS 100-250 - CVS250F TM250D 3P3D - LV525333</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact indicators</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Contribution to mineral resources depletion</td>
</tr>
<tr>
<td>Contribution to the soil and water acidification</td>
</tr>
<tr>
<td>Contribution to water eutrophication</td>
</tr>
<tr>
<td>Contribution to global warming</td>
</tr>
<tr>
<td>Contribution to ozone layer depletion</td>
</tr>
<tr>
<td>Contribution to photochemical oxidation</td>
</tr>
</tbody>
</table>

Recyclability potential: 56.0% (Based on "ECO'DEE recyclability and recoverability calculation method" version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).
### Resources use

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net use of freshwater</td>
<td>m³</td>
<td>1.17E+00</td>
<td>1.58E-01</td>
<td>0*</td>
<td>0*</td>
<td>1.01E+00</td>
<td>2.46E-04</td>
</tr>
<tr>
<td>Total Primary Energy</td>
<td>MJ</td>
<td>1.55E+04</td>
<td>2.44E+02</td>
<td>3.45E+00</td>
<td>0*</td>
<td>1.52E+04</td>
<td>3.10E+00</td>
</tr>
</tbody>
</table>

### Impact indicators

<table>
<thead>
<tr>
<th>Impact indicators</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to fossil resources depletion</td>
<td>MJ</td>
<td>1.43E+04</td>
<td>1.67E+02</td>
<td>3.43E+00</td>
<td>0*</td>
<td>1.41E+04</td>
<td>2.55E+00</td>
</tr>
<tr>
<td>Contribution to air pollution</td>
<td>m³</td>
<td>9.76E+04</td>
<td>3.90E+03</td>
<td>1.04E+01</td>
<td>0*</td>
<td>9.37E+04</td>
<td>2.01E+01</td>
</tr>
<tr>
<td>Contribution to water pollution</td>
<td>m³</td>
<td>4.60E+04</td>
<td>1.07E+03</td>
<td>4.01E+01</td>
<td>0*</td>
<td>4.49E+04</td>
<td>2.31E+01</td>
</tr>
</tbody>
</table>

### Resources use

<table>
<thead>
<tr>
<th>Resources use</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of secondary material</td>
<td>kg</td>
<td>1.86E-01</td>
<td>1.86E-01</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Total use of renewable primary energy resources</td>
<td>MJ</td>
<td>7.61E+02</td>
<td>3.85E+00</td>
<td>0*</td>
<td>0*</td>
<td>7.57E+02</td>
<td>0*</td>
</tr>
<tr>
<td>Total use of non-renewable primary energy resources</td>
<td>MJ</td>
<td>1.47E+04</td>
<td>2.40E+02</td>
<td>3.44E+00</td>
<td>0*</td>
<td>1.45E+04</td>
<td>3.09E+00</td>
</tr>
<tr>
<td>Use of renewable primary energy excluding renewable primary energy used as raw material</td>
<td>MJ</td>
<td>7.61E+02</td>
<td>3.85E+00</td>
<td>0*</td>
<td>0*</td>
<td>7.57E+02</td>
<td>0*</td>
</tr>
<tr>
<td>Use of renewable primary energy resources used as raw material</td>
<td>MJ</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Use of non renewable primary energy excluding non renewable primary energy used as raw material</td>
<td>MJ</td>
<td>1.47E+04</td>
<td>2.25E+02</td>
<td>3.44E+00</td>
<td>0*</td>
<td>1.45E+04</td>
<td>3.09E+00</td>
</tr>
<tr>
<td>Use of non renewable primary energy resources used as raw material</td>
<td>MJ</td>
<td>1.50E+01</td>
<td>1.50E+01</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Use of non renewable secondary fuels</td>
<td>MJ</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Use of renewable secondary fuels</td>
<td>MJ</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
</tbody>
</table>

### Waste categories

<table>
<thead>
<tr>
<th>Waste categories</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste disposed</td>
<td>kg</td>
<td>1.58E+02</td>
<td>1.26E+02</td>
<td>0*</td>
<td>0*</td>
<td>2.91E+01</td>
<td>2.75E+00</td>
</tr>
<tr>
<td>Non hazardous waste disposed</td>
<td>kg</td>
<td>1.68E+02</td>
<td>3.89E+00</td>
<td>0*</td>
<td>6.65E-02</td>
<td>1.64E+02</td>
<td>0*</td>
</tr>
<tr>
<td>Radioactive waste disposed</td>
<td>kg</td>
<td>7.25E-03</td>
<td>1.84E-03</td>
<td>6.17E-06</td>
<td>0*</td>
<td>5.39E-03</td>
<td>1.35E-05</td>
</tr>
</tbody>
</table>

### Other environmental information

<table>
<thead>
<tr>
<th>Other environmental information</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials for recycling</td>
<td>kg</td>
<td>1.23E+00</td>
<td>1.56E-01</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>1.08E+00</td>
</tr>
<tr>
<td>Components for reuse</td>
<td>kg</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Materials for energy recovery</td>
<td>kg</td>
<td>2.94E-02</td>
<td>3.73E-03</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>2.56E-02</td>
</tr>
<tr>
<td>Exported Energy</td>
<td>MJ</td>
<td>8.29E-03</td>
<td>6.90E-04</td>
<td>0*</td>
<td>7.60E-03</td>
<td>0*</td>
<td>0*</td>
</tr>
</tbody>
</table>

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

Life cycle assessment performed with EIME version EIME v5.5, database version 2015-04.
The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

"Depending on the impact analysis, for the products in this family the impact of the Abiotic depletion (elements, ultimate ultimate reserves) (ADPe for EN15804) may be proportionally extrapolated based on the ratio of the product’s and reference product’s mass.

For the impacts of the Ozone layer depletion ODP steady state (ODP for EN15804), half of the impacts may be proportionally extrapolated based on the ratio of the product’s and reference product’s mass, and half may be proportionally extrapolated based on the ratio of the product’s and reference product’s electricity use.

For all remaining impact categories (Acidification potential of soil and water (total average for Europe) (A for PEP), Eutrophication (fate not incl.) (EP for EN15804), Global warming (GWP100) (GWP for EN15804), Photochemical oxidation (high NOx) (POCP for EN15804), Net use of freshwater (NUFW) and Total Primary Energy (TPE)) the impacts may be proportionally extrapolated based on the ratio of the product’s and reference product’s electricity use”.

Grouping of range done as per the function (Circuit breaking and tripping).

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.

<table>
<thead>
<tr>
<th>Registration N°</th>
<th>Drafting rules</th>
<th>PCR-ed3-EN-2015 04 02</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHK-00013-V01-EN</td>
<td>Supplemented by</td>
<td>PSR-0005-ed1-2012 12 11</td>
</tr>
<tr>
<td>VH08</td>
<td>Information and reference documents</td>
<td><a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a></td>
</tr>
<tr>
<td>06/2016</td>
<td>Validity period</td>
<td>5 years</td>
</tr>
</tbody>
</table>

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN).

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »

Environmental data in alignment with EN 15804 : 2012 + A1 : 2013

Schneider Electric Industries SAS

CATHERINE COLIN

catherine.colin@fr.schneider-electric.com

35, rue Joseph Monier
CS 30323
F- 92506 Rueil Malmaison Cedex
RCS Nanterre 954 503 439
Capital social 896 313 776 €

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