# **Product Environmental Profile**

### CVS630F Vigi TM500D circuit breaker - 3P/3d

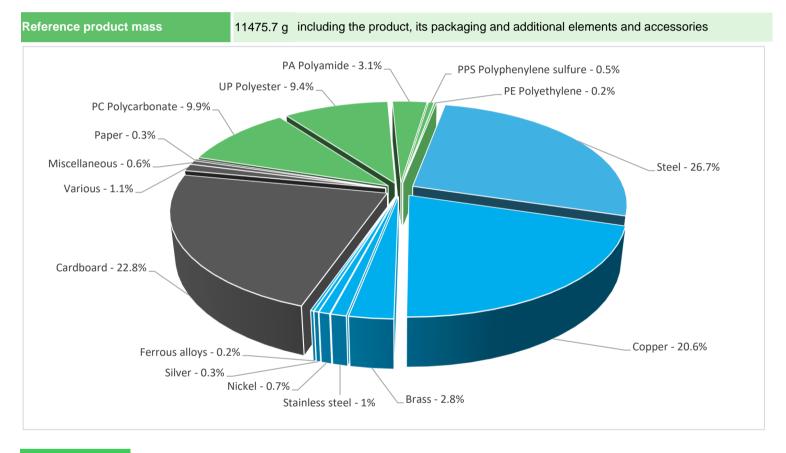




#### General information

| Representative product     | CVS630F Vigi TM500D circuit breaker - 3P/3d - LV563335   |
|----------------------------|--|
| Description of the product | The Easypact CVS630F Vigi TM500D circuit breakers is designed to guarantee the protection of low-<br>voltage electrical applications   |
| Functional unit            | Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 440V and rated current 500A. This protection is ensured in accordance with the following parameters:<br>- Number of poles 3p<br>- Tripping curve long time, short time and instantanous protections |

### Constituent materials



| Plastics | 23.1% |
|----------|-------|
| Metals   | 52.3% |
| Others   | 24.6% |

## E Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate– BBP, Dibutyl phthalate - DBP, Disobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page

#### ENVPEP2211039\_V1

# D Additional environmental information

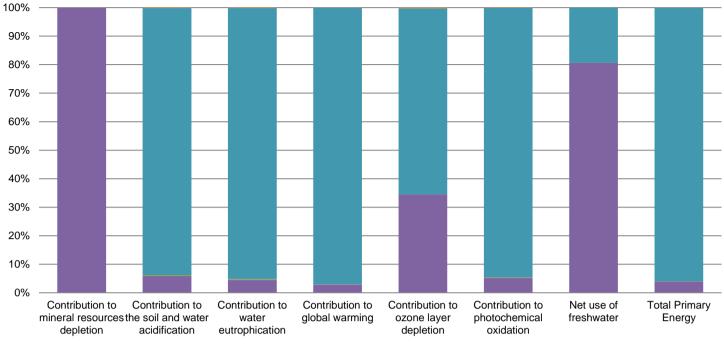
| The CVS630F Vigi TM500D circuit breaker - 3P/3d presents the following relevent environmental aspects |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Manufacturing   | Manufactured at a Schneider Electric production site ISO14001 certified  |  |  |  |  |  |
|   | Weight and volume of the packaging optimized, based on the European Union's packaging directive  |  |  |  |  |  |
| Distribution  | Packaging weight is 2675.7 g, consisting of Paper (1%), cardboard (98%), PE (1%)   |  |  |  |  |  |
|   | Product distribution optimised by setting up local distribution centres  |  |  |  |  |  |
| Installation  | LV563335 does not require any installation operations  |  |  |  |  |  |
| Use   | The product does not require special maintenance operations.   |  |  |  |  |  |
|   | End of life optimized to decrease the amount of waste and allow recovery of the product components and materials   |  |  |  |  |  |
|   | This product contains Plastic parts with FR17 (17.018g), electronic card (18.513g) that should be separated from the stream of waste so as to optimize end-of-life treatment.                                    |  |  |  |  |  |
| End of life   | 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                                  |  |  |  |  |  |
|   | http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page   |  |  |  |  |  |
|   | Recyclability potential:60%Based on "ECO'DEEE recyclability and recoverability calculation method"<br>(version V1, 20 Sep. 2008 presented to the French Agency for Environment<br>and Energy Management: ADEME). |  |  |  |  |  |

# **D** Environmental impacts

| Reference life time              | 20 years   |   |   |   |  |  |  |
|----------------------------------|--|---|---|---|--|--|--|
| Product category                 | Circuit-breakers   |   |   |   |  |  |  |
| Installation elements            | No special components needed   |   |   |   |  |  |  |
| Use scenario                     | Load rate: 50% of In<br>Use time rate: 30% of RLT  |   |   |   |  |  |  |
| Geographical representativeness  | China  |   |   |   |  |  |  |
| Technological representativeness | The Easypact CVS630F Vigi TM500D circuit breakers is designed to guarantee the protection of low-voltage electrical applications |   |   |   |  |  |  |
|                                  | Manufacturing  | Installation  | Use   | End of life   |  |  |  |
| Energy model used                | Energy model used: China   | Electricity mix; AC;<br>consumption mix, at<br>consumer; 220V; CN | Electricity mix; AC;<br>consumption mix, at<br>consumer; 220V; CN | Electricity mix; AC;<br>consumption mix, at<br>consumer; 220V; CN |  |  |  |

| Compulsory indicators                            | CVS630F Vigi TM500D circuit breaker - 3P/3d - LV563335 |          |               |              |              |          |             |
|--|--|----------|---------------|--------------|--------------|----------|-------------|
| Impact indicators                                | Unit   | Total    | Manufacturing | Distribution | Installation | Use      | End of Life |
| Contribution to mineral resources depletion      | kg Sb eq   | 2.69E-02 | 2.69E-02      | 0*           | 0*           | 7.54E-06 | 0*          |
| Contribution to the soil and water acidification | $kg SO_2 eq$   | 1.99E+00 | 1.16E-01      | 6.76E-03     | 6.08E-04     | 1.86E+00 | 2.61E-03    |
| Contribution to water eutrophication             | kg PO4 <sup>3-</sup> eq                                | 5.17E-01 | 2.31E-02      | 1.56E-03     | 1.56E-04     | 4.91E-01 | 6.65E-04    |
| Contribution to global warming                   | $kg CO_2 eq$   | 1.77E+03 | 5.01E+01      | 1.48E+00     | 0*           | 1.72E+03 | 1.08E+00    |
| Contribution to ozone layer depletion            | kg CFC11<br>eq   | 2.10E-05 | 7.23E-06      | 3.00E-09     | 0*           | 1.37E-05 | 5.93E-08    |
| Contribution to photochemical oxidation          | kg $C_2H_4$ eq   | 2.33E-01 | 1.21E-02      | 4.82E-04     | 4.55E-05     | 2.20E-01 | 2.76E-04    |
| Resources use                                    | Unit   | Total    | Manufacturing | Distribution | Installation | Use      | End of Life |
| Net use of freshwater                            | m3   | 9.91E+00 | 7.99E+00      | 0*           | 0*           | 1.92E+00 | 1.10E-03    |
| Total Primary Energy                             | MJ   | 2.93E+04 | 1.14E+03      | 2.09E+01     | 0*           | 2.81E+04 | 1.29E+01    |

ENVPEP2211039\_V1



Manufacturing Distribution Installation Use End of life

| Optional indicators   |      | CVS630F Vigi TM500D circuit breaker - 3P/3d - LV563335 |               |              |              |          |             |
|---|------|--|---------------|--------------|--------------|----------|-------------|
| Impact indicators   | Unit | Total  | Manufacturing | Distribution | Installation | Use      | End of Life |
| Contribution to fossil resources depletion  | MJ   | 2.65E+04   | 5.58E+02      | 2.08E+01     | 0*           | 2.60E+04 | 1.04E+01    |
| Contribution to air pollution   | m³   | 2.00E+05   | 2.12E+04      | 6.30E+01     | 0*           | 1.78E+05 | 9.21E+01    |
| Contribution to water pollution   | m³   | 9.44E+04   | 8.66E+03      | 2.43E+02     | 2.21E+01     | 8.54E+04 | 1.04E+02    |
| Resources use   | Unit | Total  | Manufacturing | Distribution | Installation | Use      | End of Life |
| Use of secondary material   | kg   | 3.03E+00   | 3.03E+00      | 0*           | 0*           | 0*       | 0*          |
| Total use of renewable primary energy resources   | MJ   | 1.57E+03   | 1.32E+02      | 0*           | 0*           | 1.44E+03 | 0*          |
| Total use of non-renewable primary energy resources   | MJ   | 2.77E+04   | 1.01E+03      | 2.09E+01     | 0*           | 2.67E+04 | 1.29E+01    |
| Use of renewable primary energy excluding renewable primary energy used as raw material         | MJ   | 1.56E+03   | 1.21E+02      | 0*           | 0*           | 1.44E+03 | 0*          |
| Use of renewable primary energy resources used as raw material                                  | MJ   | 1.09E+01   | 1.09E+01      | 0*           | 0*           | 0*       | 0*          |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ   | 2.76E+04   | 9.21E+02      | 2.09E+01     | 0*           | 2.67E+04 | 1.29E+01    |
| Use of non renewable primary energy resources used as raw material                              | MJ   | 8.62E+01   | 8.62E+01      | 0*           | 0*           | 0*       | 0*          |
| Use of non renewable secondary fuels  | MJ   | 0.00E+00   | 0*            | 0*           | 0*           | 0*       | 0*          |
| Use of renewable secondary fuels  | MJ   | 0.00E+00   | 0*            | 0*           | 0*           | 0*       | 0*          |
| Waste categories  | Unit | Total  | Manufacturing | Distribution | Installation | Use      | End of Life |
| Hazardous waste disposed  | kg   | 6.73E+02   | 6.05E+02      | 0*           | 0*           | 5.54E+01 | 1.24E+01    |
| Non hazardous waste disposed  | kg   | 3.39E+02   | 2.77E+01      | 5.26E-02     | 4.21E-02     | 3.12E+02 | 3.95E-02    |
| Radioactive waste disposed  | kg   | 2.15E-02   | 1.11E-02      | 3.75E-05     | 4.61E-06     | 1.03E-02 | 6.23E-05    |
| Other environmental information   | Unit | Total  | Manufacturing | Distribution | Installation | Use      | End of Life |
| Materials for recycling   | kg   | 8.90E+00   | 1.00E+00      | 0*           | 2.64E+00     | 0*       | 5.26E+00    |
| Components for reuse  | kg   | 0.00E+00   | 0*            | 0*           | 0*           | 0*       | 0*          |
| Materials for energy recovery   | kg   | 8.36E-02   | 0*            | 0*           | 0*           | 0*       | 8.36E-02    |
| Exported Energy   | MJ   | 8.37E-03   | 7.87E-04      | 0*           | 7.58E-03     | 0*       | 0*          |

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

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

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

#### ENVPEP2211039\_V1 - Product Environmental Profile - CVS630F Vigi TM500D circuit breaker - 3P/3d

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.

| assessment of an instal                                | lation.                       |  |                                 |
|--|-------------------------------|--|---------------------------------|
| Registration number                                    | ENVPEP2211039_V1              | Drafting rules                                 | PCR-ed3-EN-2015 04 02           |
| Date of issue  | 12/2022                       | Supplemented by                                | PSR-0005-ed2-EN-2016 03 29      |
| Validity period  | 5 years                       | Information and reference<br>documents         | www.pep-ecopassport.org         |
| Independent verificatior                               | of the declaration and data   |  |                                 |
| Internal X   | External                      |  |                                 |
| The elements of the pre                                | sent PEP cannot be compared v | vith elements from another program.            |                                 |
| Document in complianc<br>environmental labelling       |                               | nmental labels and declarations - Self-declare | d environmental claims (Type II |
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