

Product Environmental Profile

EASYPACT CVS 100-250 - CVS160B VIGI MH TM160D 4P4D

This range consists of all products of Easypact CVS 100-250A family: 100-250B, 100-250F, 100-250H, and 100-250N range





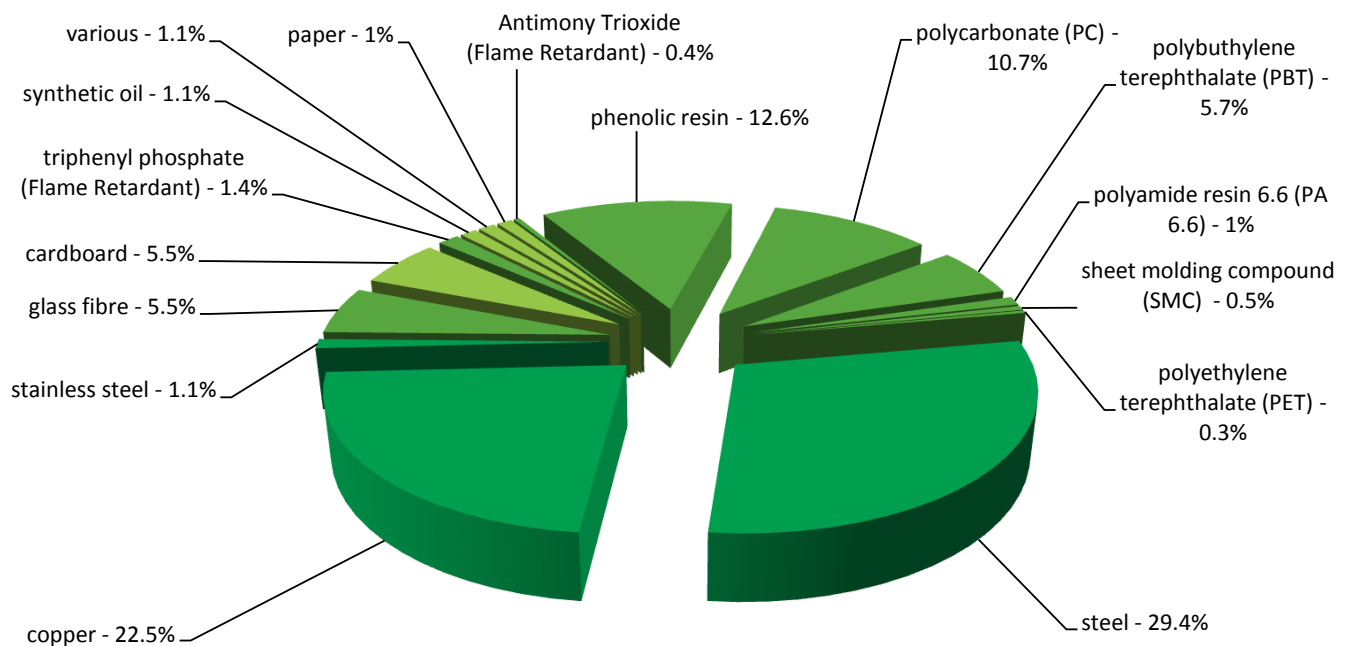
General information

Representative product	EASYPACT CVS 100-250 - CVS160B VIGI MH TM160D 4P4D -LV516383
Description of the product	The Easypact CVS100 to 250 range of circuit breakers with Vigi module and Thermal-Magnetic trip unit technology is designed to guarantee the protection of all low-voltage electrical applications between 100 A and 250 A.
Description of the range	This range consists of all products of Easypact CVS 100-250A family: 100-250B, 100-250F, 100-250H, and 100-250N 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.
Functional unit	The main function of the Easypact CVS product range is to protect the wires and equipments in the circuit with Earth-leakage protection by Vigi module when leak current is over setting in module . The leak current setting range is from 0.1A to 0.5A in accordance with the Standard: IEC60947.2 for period of 20 years.



Constituent materials

Reference product mass 3410 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.

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>

Additional environmental information

The EASYPACT CVS 100-250 - CVS160B VIGI MH TM160D 4P4D presents the following relevant environmental aspects

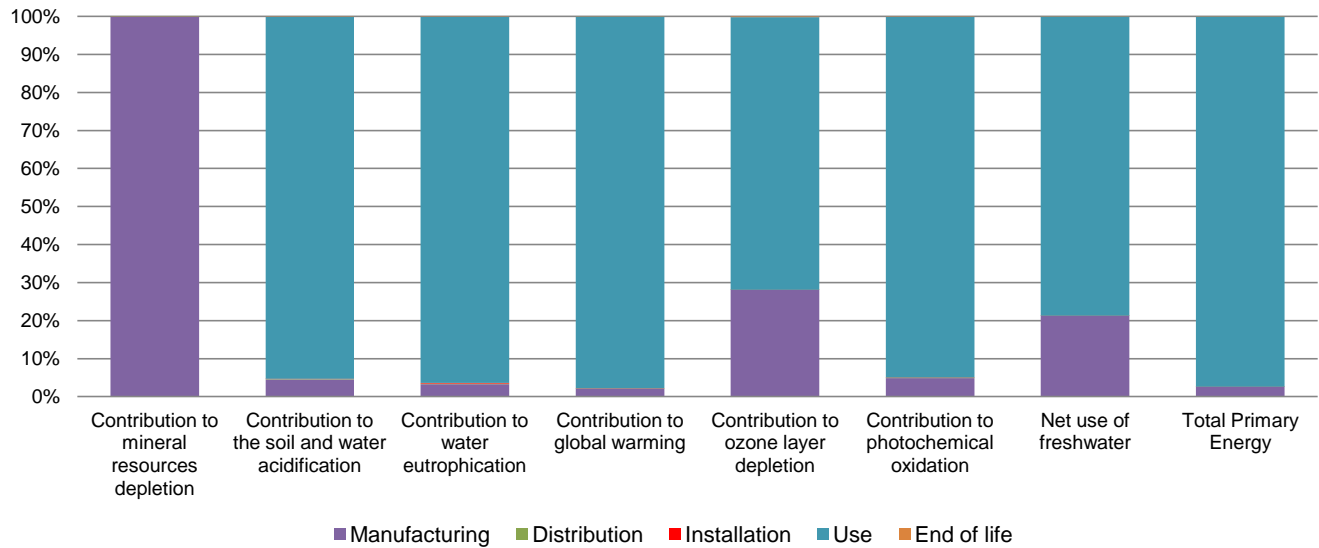
Design	Not in scope
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 232.7 g, consisting of Cardboard (83.6%), Paper (15.9%), PET film (0.5%). Product distribution optimised by setting up local distribution centres
Installation	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	The product does not require special maintenance operations.
End of life	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 brominated FR (329.7), Electronic components (14.6g) that should be separated from the stream of waste so as to optimize end-of-life treatment. 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: 53% Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	20 years			
Product category	Passive products - continuous operation			
Installation elements	No special components needed			
Use scenario	Product dissipation is 5.5548 W, loading rate is 30% and service uptime percentage is 100%			
Geographical representativeness	China			
Technological representativeness	The Easyfact CVS100 to 250 range of circuit breakers with Vigi module and Thermal-Magnetic trip unit technology is designed to guarantee the protection of all low-voltage electrical applications between 100 A and 250 A.			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: SBMLV, China	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN

Compulsory indicators		EASYPACT CVS 100-250 - CVS160B VIGI MH TM160D 4P4D - LV516383					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.53E-02	2.53E-02	0*	0*	4.35E-06	0*
Contribution to the soil and water acidification	kg SO ₂ eq	1.13E+00	5.11E-02	2.01E-03	0*	1.07E+00	1.00E-03
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	2.97E-01	9.69E-03	4.63E-04	5.57E-04	2.86E-01	2.67E-04
Contribution to global warming	kg CO ₂ eq	1.01E+03	2.15E+01	4.40E-01	3.13E-01	9.90E+02	4.71E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.10E-05	3.09E-06	0*	0*	7.88E-06	2.29E-08
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	1.34E-01	6.54E-03	1.43E-04	7.43E-05	1.27E-01	1.05E-04

Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.40E+00	2.99E-01	0*	0*	1.10E+00	4.38E-04
Total Primary Energy	MJ	1.72E+04	4.45E+02	6.22E+00	0*	1.67E+04	5.43E+00



Optional indicators		EASYPACT CVS 100-250 - CVS160B VIGI MH TM160D 4P4D - LV516383					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.58E+04	3.24E+02	6.18E+00	0*	1.55E+04	4.47E+00
Contribution to air pollution	m³	1.10E+05	7.60E+03	1.87E+01	0*	1.03E+05	3.53E+01
Contribution to water pollution	m³	5.28E+04	3.49E+03	7.24E+01	1.63E+01	4.92E+04	4.11E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	3.56E-01	3.56E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	8.39E+02	8.15E+00	0*	0*	8.31E+02	0*
Total use of non-renewable primary energy resources	MJ	1.63E+04	4.37E+02	6.21E+00	0*	1.59E+04	5.43E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	8.39E+02	8.15E+00	0*	0*	8.31E+02	0*
Use of renewable primary energy resources used as raw material	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.63E+04	3.96E+02	6.21E+00	0*	1.59E+04	5.43E+00
Use of non renewable primary energy resources used as raw material	MJ	4.02E+01	4.02E+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	2.61E+02	2.24E+02	0*	0*	3.19E+01	4.94E+00
Non hazardous waste disposed	kg	1.86E+02	5.80E+00	0*	2.33E-01	1.80E+02	0*
Radioactive waste disposed	kg	8.83E-03	2.88E-03	1.11E-05	0*	5.91E-03	2.37E-05
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	2.01E+00	2.55E-01	0*	0*	0*	1.75E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	6.04E-02	7.45E-03	0*	1.39E-03	0*	5.16E-02
Exported Energy	MJ	2.11E-02	0*	0*	2.11E-02	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.5, 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 reserves) (ADPe for EN15804) may be proportionally extrapolated based on the ratio of the product’s and reference product’s mass. 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), Ozone layer depletion ODP steady state (ODP 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.

Registration N°	SCHN-00017-V01.01-EN	Drafting rules	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH25	Supplemented by	PSR-0005-ed1-2012 12 11
Date of issue	06/2016	Information and reference documents	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010			
Internal	External	X	
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			



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