

Product Environmental Profile

VAMP 221





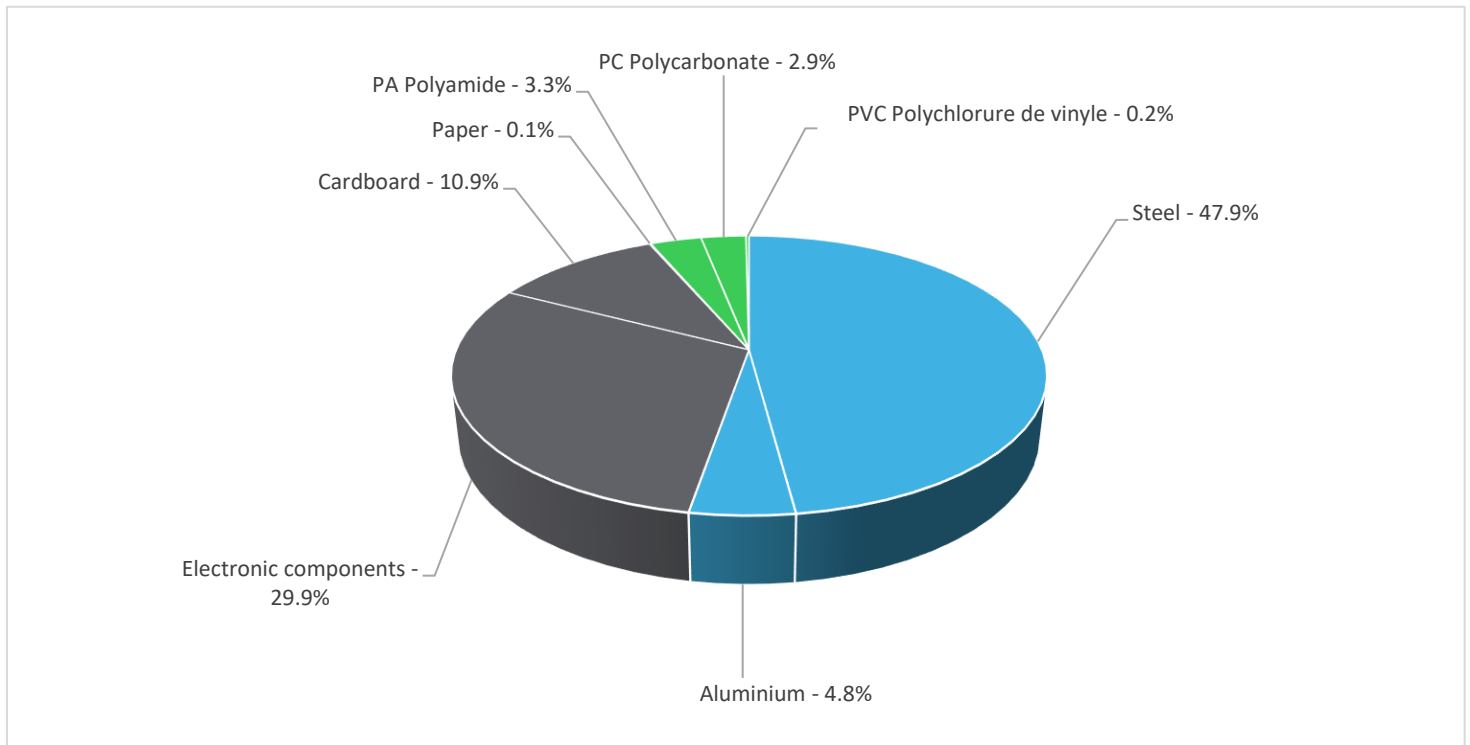
General information

Representative product	VAMP 221 - VAMP 221
Description of the product	Protect electrical systems against arc flash - Maximize energy availability and the profits generated by customer installation while protecting life and property.
Functional unit	Protect electrical systems against arc flash 24h per day, for 10 years of continuous operations in Europe. The 10 years of operations in this document are defined for calculation purposes only, and are not representative of the effective lifetime of this product, which is more than 10 years.



Constituent materials

Reference product mass	4853 g including the product, its packaging and additional elements and accessories
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Plastics	6.4%
Metals	52.7%
Others	40.9%



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, 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 VAMP 221 presents the following relevant environmental aspects

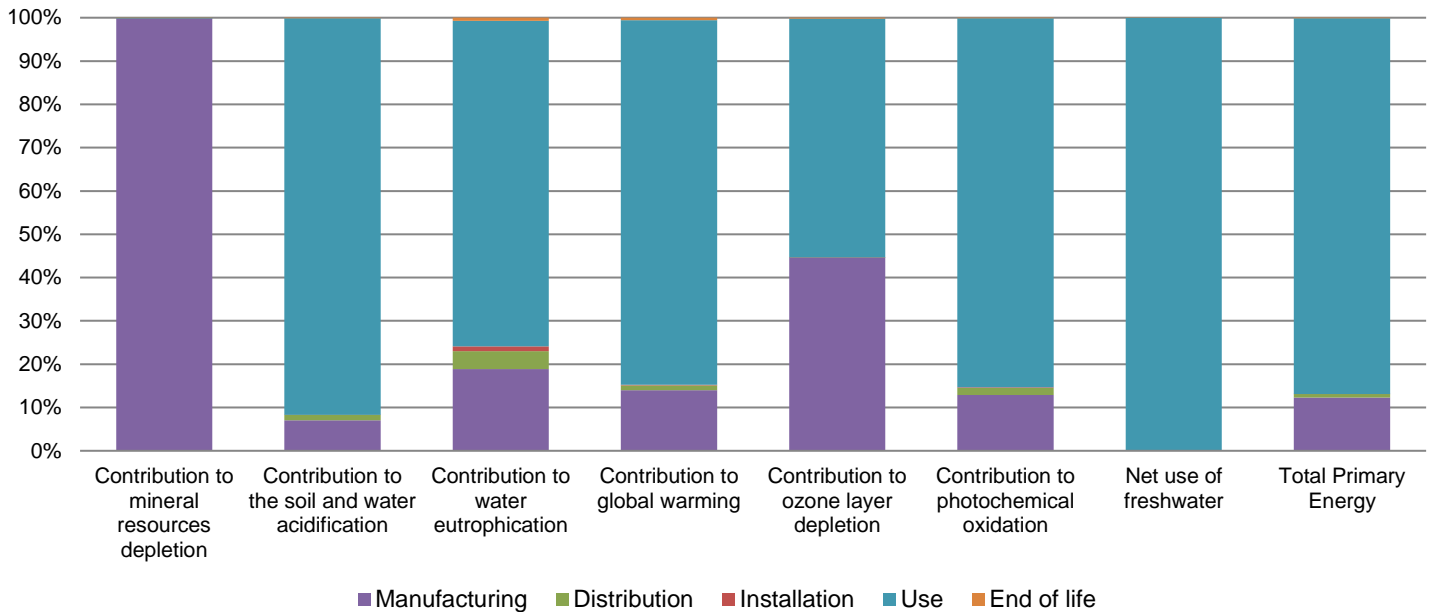
Manufacturing	Manufactured at an European production site ISO14001 certified.
Distribution	Weight and volume of the packaging is optimized, based on the European Union's packaging directive. Packaging weight is 542,3 g, consisting of cardboard (99.89%) and paper. (0.11%) Packaging recycled materials is 99% of total packaging mass.
Installation	This product does not require any installation operations.
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 electronics boards (1471 g) 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: 61% 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	10 years								
Product category	Other equipments - Active product								
Installation elements	End of life of the packaging.								
Use scenario	Only standby mode (9,1W) is considered as 100% of the time, because consumed power in active mode is negligible. No Sleep mode nor Off mode.								
Geographical representativeness	Worldwide								
Technological representativeness	Protect electrical systems against arc flash - Maximize energy availability and the profits generated by customer installation while protecting life and property.								
Energy model used	<table border="1"> <thead> <tr> <th>Manufacturing</th> <th>Installation</th> <th>Use</th> <th>End of life</th> </tr> </thead> <tbody> <tr> <td>Energy model used: Finland</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> </tr> </tbody> </table>	Manufacturing	Installation	Use	End of life	Energy model used: Finland	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27
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Compulsory indicators		VAMP 221 - VAMP 221					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.14E-02	2.14E-02	0*	0*	3.40E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	1.78E+00	1.25E-01	2.33E-02	0*	1.63E+00	1.99E-03
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	1.31E-01	2.47E-02	5.38E-03	1.45E-03	9.85E-02	9.04E-04
Contribution to global warming	kg CO ₂ eq	4.65E+02	6.51E+01	5.04E+00	7.49E-01	3.91E+02	2.70E+00
Contribution to ozone layer depletion	kg CFC11 eq	4.62E-05	2.06E-05	1.02E-08	0*	2.55E-05	9.95E-08
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	1.05E-01	1.36E-02	1.67E-03	1.79E-04	8.96E-02	1.72E-04
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m ³	1.42E+03	9.18E-01	0*	0*	1.42E+03	0*
Total Primary Energy	MJ	8.99E+03	1.11E+03	7.12E+01	0*	7.81E+03	8.75E+00



Optional indicators		VAMP 221 - VAMP 221					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	5.25E+03	7.37E+02	7.08E+01	0*	4.44E+03	8.16E+00
Contribution to air pollution	m³	2.69E+04	9.78E+03	2.21E+02	0*	1.68E+04	6.26E+01
Contribution to water pollution	m³	2.44E+04	7.31E+03	8.29E+02	4.03E+01	1.61E+04	1.24E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.11E-01	2.11E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.02E+03	2.81E+01	0*	0*	9.93E+02	0*
Total use of non-renewable primary energy resources	MJ	7.97E+03	1.08E+03	7.12E+01	0*	6.82E+03	8.74E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.01E+03	2.04E+01	0*	0*	9.93E+02	0*
Use of renewable primary energy resources used as raw material	MJ	7.66E+00	7.66E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7.95E+03	1.05E+03	7.12E+01	0*	6.82E+03	8.74E+00
Use of non renewable primary energy resources used as raw material	MJ	2.24E+01	2.24E+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	2.84E+02	2.76E+02	0*	0*	2.04E-01	7.72E+00
Non hazardous waste disposed	kg	1.48E+03	2.62E+01	1.79E-01	5.43E-01	1.46E+03	0*
Radioactive waste disposed	kg	1.05E+00	7.58E-02	1.28E-04	0*	9.74E-01	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.00E+00	3.22E-01	0*	0*	0*	2.67E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	7.05E-01	0*	0*	0*	0*	7.05E-01
Exported Energy	MJ	3.33E-04	1.61E-04	0*	1.72E-04	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.6.0.1, database version 2016-11 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).

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.

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<i>Independent verification of the declaration and data, in compliance with ISO 14025 : 2010</i>			
Internal	External	X	
<i>The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)</i>			
<i>PEP are compliant with XP C08-100-1 :2014</i>			
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »</i>			



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