

# Product Environmental Profile

## 12-Channel Voltage Free Relay





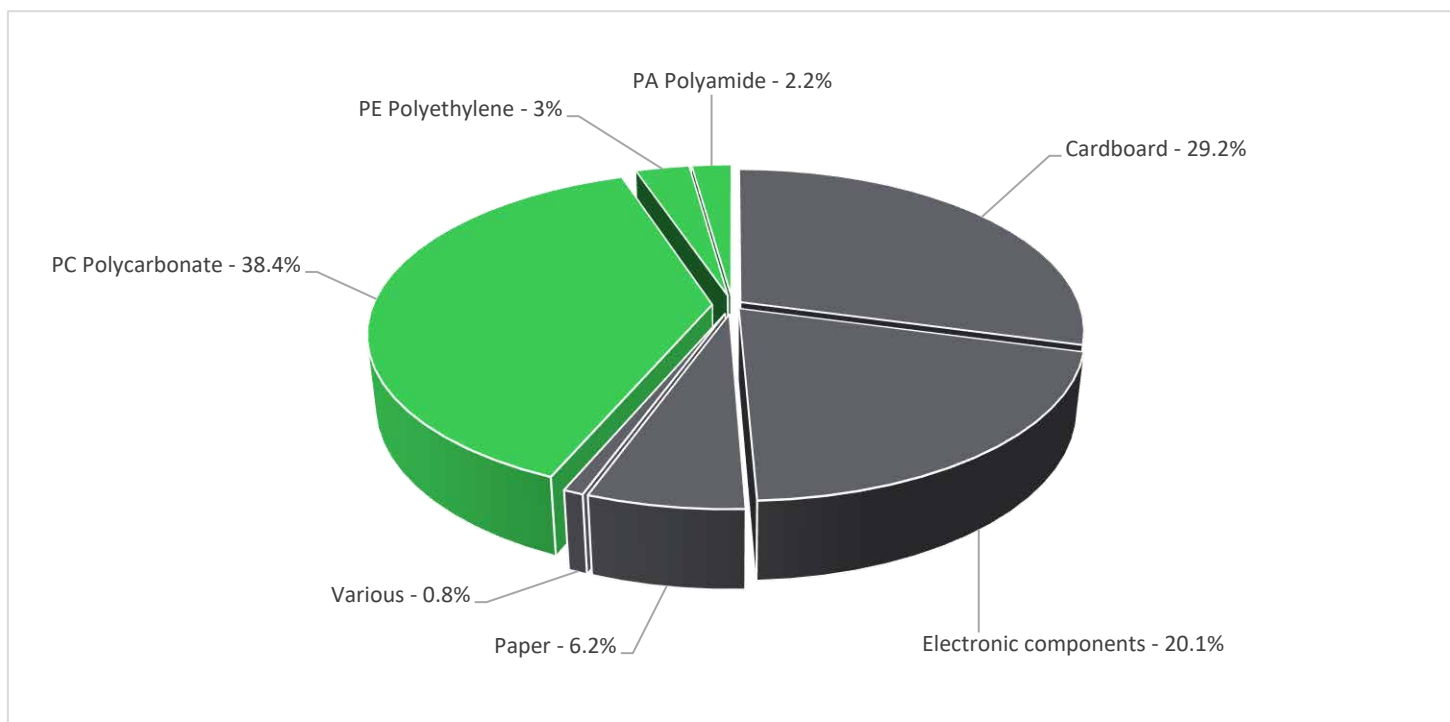
## General information

<b>Representative product</b>	12-Channel Voltage Free Relay - L5512RVF
<b>Description of the product</b>	The main purpose of the C-Bus Relay Switch is to provide for general switching.
<b>Functional unit</b>	The product provides twelve independent voltage free relay contacts in an 12M wide DIN rail enclosure. Units available with 10A rated relays (resistive, inductive or fluorescent loads) and separate units with relays rated at 10A resistive and 1A fluorescent.



## Constituent materials

**Reference product mass** 720 g including the product, its packaging and additional elements and accessories



Plastics	43.6%
Metals	0.0%
Others	56.3%



## 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 EU 2015/863) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium, flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE), or phthalates (Bis(2-ethylhexyl) phthalate - DEHP, Butyl benzyl phthalate -BBP, Dibutyl phthalate – DBP, Diisobutyl 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>



## Additional environmental information

The 12-Channel Voltage Free Relay presents the following relevant environmental aspects

<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 155.7 g, consisting of cardboard(91.6%), PE bag(8.4%)
<b>Installation</b>	Ref L5512RVF does not require any installation operations
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	<p>End of life optimized to decrease the amount of waste and allow recovery of the product components and materials</p> <p>This product contains electronic card (369g) that should be separated from the stream of waste so as to optimize end-of-life treatment.</p> <p>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</p> <p><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></p> <p>Recyclability potential: <b>58%</b> 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).</p>

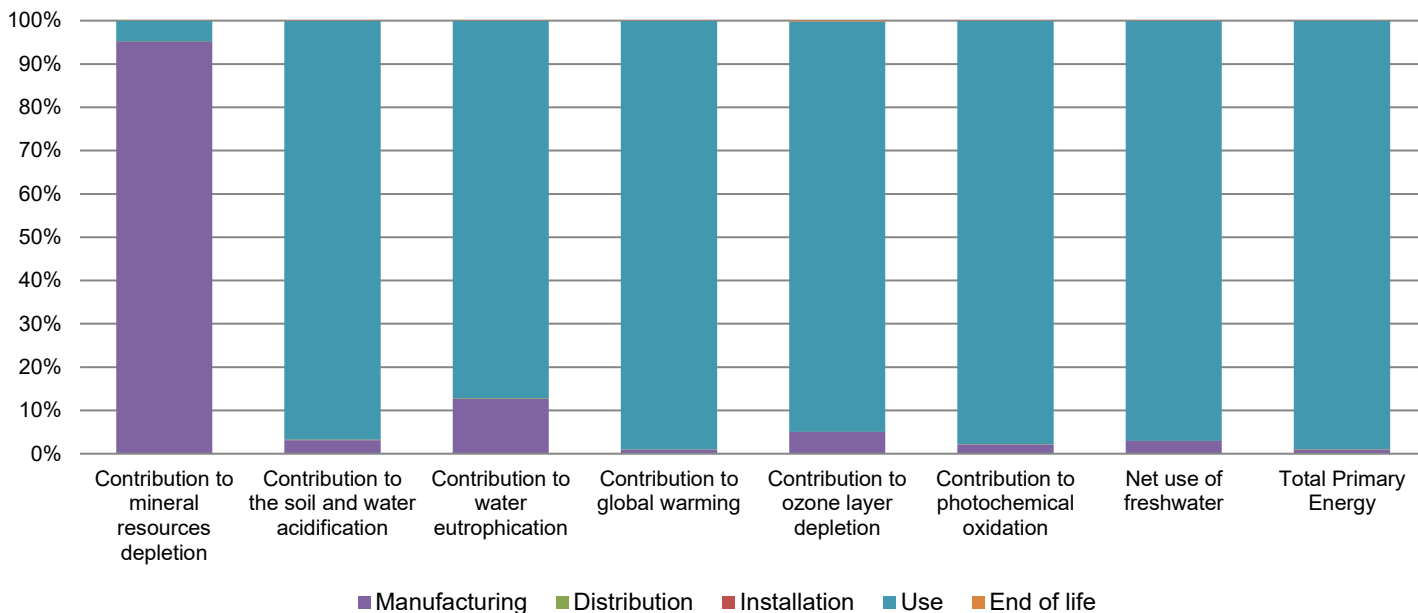


## Environmental impacts

<b>Reference life time</b>	10 years			
<b>Product category</b>	Other equipments - Active product			
<b>Installation elements</b>	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging (except for warranty card) is accounted for during installation.			
<b>Use scenario</b>	The product is in active mode 30% of the time with a power use of 7.2W and in stand-by mode 70% of the time with a power use of 0.65w, for 10 years			
<b>Geographical representativeness</b>	Asia			
<b>Technological representativeness</b>	All the technologies pertaining to product manufacturing are represented in manufacturing phase properly.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: 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		12-Channel Voltage Free Relay - L5512RVF					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.13E-05	2.03E-05	3.72E-09	0*	1.02E-06	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	2.63E-01	8.16E-03	4.24E-04	3.71E-05	2.54E-01	1.10E-04
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	7.71E-02	9.76E-03	9.77E-05	1.25E-05	6.71E-02	4.91E-05
Contribution to global warming	kg CO <sub>2</sub> eq	2.40E+02	2.22E+00	9.29E-02	0*	2.37E+02	1.46E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.21E-06	1.11E-07	0*	0*	2.10E-06	5.22E-09
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	3.17E-02	6.89E-04	3.03E-05	0*	3.10E-02	9.60E-06
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.68E-01	7.96E-03	0*	0*	2.60E-01	7.85E-05
Total Primary Energy	MJ	3.84E+03	3.84E+01	1.31E+00	0*	3.80E+03	4.84E-01

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Optional indicators		12-Channel Voltage Free Relay - L5512RVF					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	3.56E+03	3.25E+01	1.31E+00	0*	3.52E+03	3.94E-01
Contribution to air pollution	m³	2.43E+04	8.82E+01	3.95E+00	0*	2.42E+04	3.48E+00
Contribution to water pollution	m³	1.22E+04	5.38E+02	1.53E+01	1.32E+00	1.16E+04	6.76E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.79E-02	2.79E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.78E+02	1.52E+00	0*	0*	1.76E+02	0*
Total use of non-renewable primary energy resources	MJ	3.66E+03	3.69E+01	1.31E+00	0*	3.62E+03	4.83E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.76E+02	1.34E-01	0*	0*	1.76E+02	0*
Use of renewable primary energy resources used as raw material	MJ	1.38E+00	1.38E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.66E+03	3.09E+01	1.31E+00	0*	3.62E+03	4.83E-01
Use of non renewable primary energy resources used as raw material	MJ	6.02E+00	6.02E+00	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	8.00E+00	1.46E-02	0*	0*	7.55E+00	4.38E-01
Non hazardous waste disposed	kg	4.59E+01	3.71E+00	0*	1.07E-02	4.21E+01	0*
Radioactive waste disposed	kg	2.79E-03	1.31E-03	2.35E-06	5.42E-07	1.48E-03	3.00E-06
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.21E-01	3.14E-02	0*	1.46E-01	0*	1.44E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	3.78E-02	0*	0*	0*	0*	3.78E-02
Exported Energy	MJ	4.54E-04	4.27E-05	0*	4.11E-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 v5.8.1, 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.

Registration number	ENVPEP111268EN_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	06/2020	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
<i>Independent verification of the declaration and data</i>			
Internal	X	External	
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i>			

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