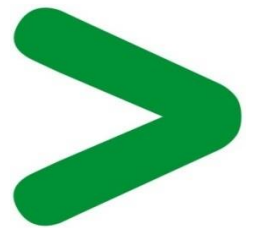


# Product Environmental Profile

## Easergy P3U30

Range of products used for the protection of distribution networks and medium voltage equipment (typically from 1 to 45 KV)





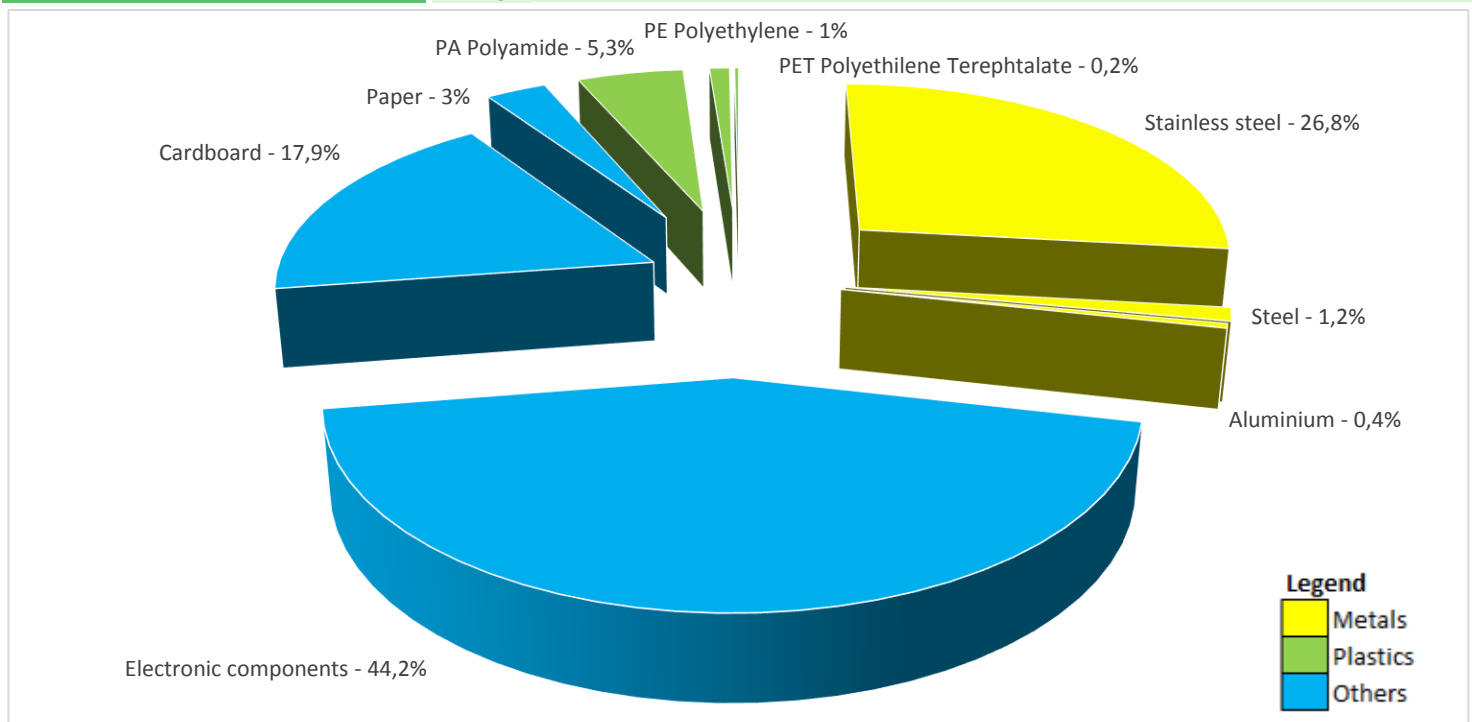
## General information

<b>Representative product</b>	Easergy P3U30
<b>Description of the product</b>	Protect electrical network, medium voltage network - Maximize energy availability and the profits generated by customer installation while protecting life and property.
<b>Description of the range</b>	Range of products used for the protection of distribution networks and medium voltage equipment (typically from 1 to 45 KV) 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.
<b>Functional unit</b>	Protect distribution networks and medium voltage equipment (typically from 1 to 45 KV) like feeder and motor against faults, (short circuit, over load ...) 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 a Easergy P3 Standard products, which is more than 10 years.



## Constituent materials

**Reference product mass** 3058 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

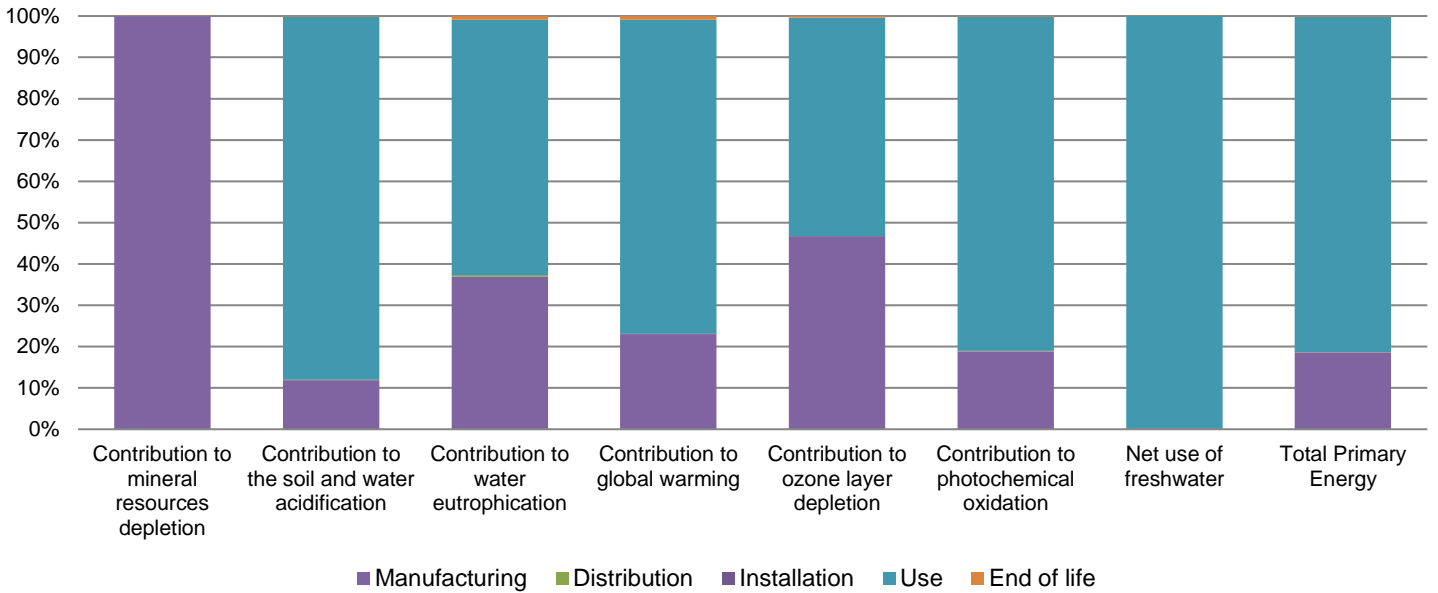
The Easergy P3U30 presents the following relevant environmental aspects

<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 566,3 g, consisting of cardboard (97%), paper (2%), PE film (1%) Packaging recycled materials is 99,3% of total packaging mass. Product distribution optimised by setting up local distribution centres
<b>Installation</b>	This product does not require any installation operations.
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	This product contains electronic cards (1285 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 <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> Recyclability potential: <b>18%</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).

## Environmental impacts

<b>Reference life time</b>	10 years
<b>Product category</b>	Active products
<b>Installation elements</b>	End of life of the packaging
<b>Use scenario</b>	6,6 W 100 % of the time in Standby mode
<b>Geographical representativeness</b>	Europe
<b>Technological representativeness</b>	Protect electrical network, medium voltage network - Maximize energy availability and the profits generated by customer installation while protecting life and property.
<b>Energy model used</b>	<b>Manufacturing</b>
	Energy model used: Finland
	<b>Installation</b>
	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27
	<b>Use</b>
	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27
	<b>End of life</b>
	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators		Easergy P3U30 - P3U30					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3,65E-02	3,65E-02	0*	0*	2,46E-05	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1,35E+00	1,60E-01	1,80E-03	0*	1,18E+00	1,69E-03
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1,15E-01	4,26E-02	4,15E-04	4,10E-05	7,13E-02	1,01E-03
Contribution to global warming	kg CO <sub>2</sub> eq	3,73E+02	8,57E+01	3,95E-01	0*	2,83E+02	3,42E+00
Contribution to ozone layer depletion	kg CFC11 eq	3,49E-05	1,63E-05	0*	0*	1,85E-05	1,17E-07
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	8,04E-02	1,52E-02	1,29E-04	9,94E-06	6,49E-02	1,23E-04
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m <sup>3</sup>	1,03E+03	9,55E-01	0*	0*	1,03E+03	0*
Total Primary Energy	MJ	6,97E+03	1,30E+03	5,58E+00	0*	5,66E+03	6,77E+00



Optional indicators		Easergy P3U30					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4,18E+03	9,56E+02	5,54E+00	4,20E-01	3,22E+03	6,43E+00
Contribution to air pollution	m³	1,97E+04	7,39E+03	1,68E+01	0*	1,22E+04	4,88E+01
Contribution to water pollution	m³	2,08E+04	8,93E+03	6,49E+01	4,76E+00	1,17E+04	1,32E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1,73E-01	1,73E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	7,55E+02	3,52E+01	0*	0*	7,19E+02	0*
Total use of non-renewable primary energy resources	MJ	6,21E+03	1,26E+03	5,57E+00	0*	4,94E+03	6,76E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7,47E+02	2,73E+01	0*	0*	7,19E+02	0*
Use of renewable primary energy resources used as raw material	MJ	7,86E+00	7,86E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6,19E+03	1,24E+03	5,57E+00	0*	4,94E+03	6,76E+00
Use of non renewable primary energy resources used as raw material	MJ	1,92E+01	1,92E+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	1,37E+02	1,31E+02	0*	0*	1,48E-01	6,60E+00
Non hazardous waste disposed	kg	1,08E+03	2,33E+01	0*	0*	1,06E+03	0*
Radioactive waste disposed	kg	8,10E-01	1,05E-01	0*	0*	7,05E-01	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1,08E+00	1,03E-01	0*	5,42E-01	0*	4,36E-01
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	9,84E-01	0*	0*	0*	0*	9,84E-01
Exported Energy	MJ	1,76E-03	2,21E-04	0*	1,54E-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© v5.6.0.1 , database version 2016-11.

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.


Other products in this Easergy P3 Standard family: P3U10 & P3U20.

The difference between all products is mainly firmware.

The firmware does not lead to differences in environmental impacts (the software is not taken into account in the evaluation).

There may be some hardware differences on options such as different input voltage ranges for Digital Input or Power Supply boards, for example, but neither the PCBA dimensions nor the electronic type differ.

*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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Verifier accreditation N°	VH10	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Date of issue	10/2017	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
		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 »			
			

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