Product Environmental Profile

FLITE 116-SA

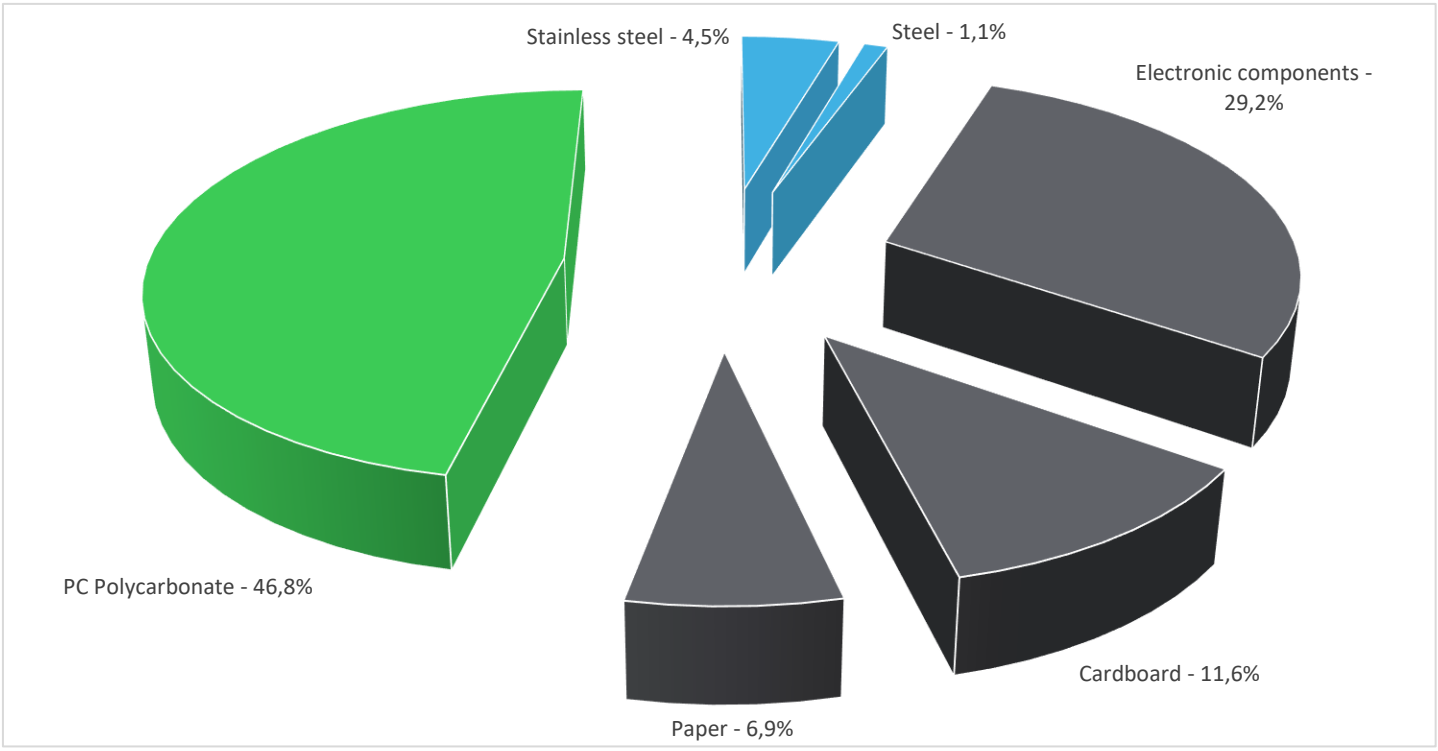
Easergy Flite

General information

Representative product	FLITE 116-SA - EMS58200
Description of the product	Fault Passage Indicator for MV overhead lines
Description of the range	Range of products used for control & monitoring of electrical distribution networks. 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	Detects the passage of a fault current on an overhead line of an electrical network from 7 to 36 kV, signals it by the emission of a light signal and a radio message, 24 hours a day, for 10 years of continuous operations in Europe. The 10 years of operation of this document are defined solely for calculation purposes and are not representative of the effective life of the product, which is greater than 10 years.

Constituent materials

Reference product mass	596,2 g including the product and its packaging.



	Plastics	46,8%
	Metals	5,6%
	Others	47,6%

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

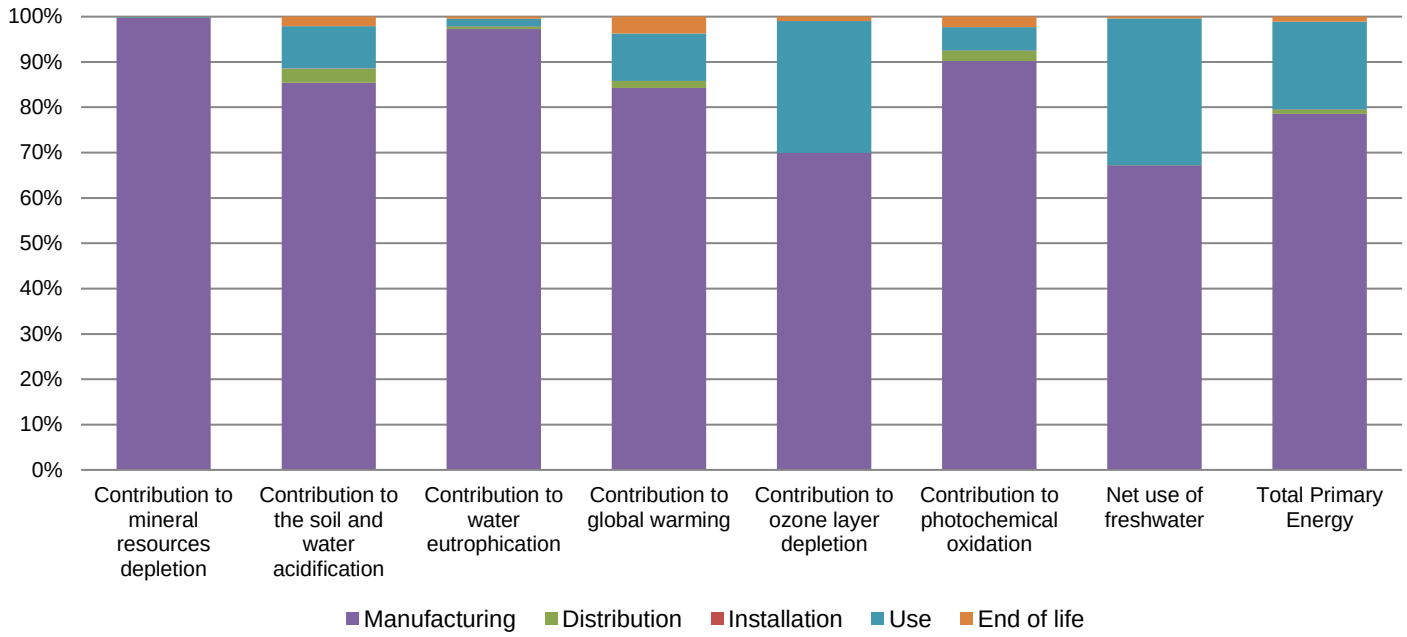
The FLITE 116-SA presents the following relevent environmental aspects	
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 109,5g, consisting of paper/cardboard 100%. Packaging recycled materials is 99,5% of total packaging mass. Product distribution optimised by setting up local distribution centres
Installation	The installation of a Flite 11x-SA does not generate any additional material or energy consumption.
Use	After 5 years of operation, the 100g lithium battery must be replaced. For this replacement, the manufacturing, transportation and end-of-life phases have been taken into account.
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 one electronic card (80g) and one battery Lithium (100g) 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: **71%** 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	No special components needed
Use scenario	The product is autonomous and uses a lithium battery to ensure its detection and reporting function. For a period of 10 years of continuous service, the battery will be changed once, after 5 years of operation.
Geographical representativeness	Europe, Asia / Pacific, Australia, South America
Technological representativeness	Fault Passage Indicator for MV overhead lines

Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: France	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Powered with the Lithium battery	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators		**FLITE 116-SA - EMS58200**					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4,19E-04	4,19E-04	0*	0*	7,42E-07	0*
Contribution to the soil and water acidification	kg SO_2 eq	1,11E-02	9,49E-03	3,51E-04	2,46E-06	1,04E-03	2,34E-04
Contribution to water eutrophication	kg PO_4^{3-} eq	1,55E-02	1,50E-02	8,09E-05	0*	2,60E-04	7,83E-05
Contribution to global warming	kg CO_2 eq	5,01E+00	4,22E+00	7,69E-02	5,46E-04	5,23E-01	1,88E-01
Contribution to ozone layer depletion	kg CFC11 eq	1,20E-06	8,38E-07	1,56E-10	0*	3,48E-07	1,19E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1,08E-03	9,76E-04	2,51E-05	1,74E-07	5,57E-05	2,48E-05
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4,33E-02	2,91E-02	6,88E-06	0*	1,40E-02	1,81E-04
Total Primary Energy	MJ	1,16E+02	9,11E+01	1,09E+00	0*	2,25E+01	1,26E+00



Optional indicators		FLITE 116-SA - EMS58200					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	7,70E+01	6,63E+01	1,08E+00	0*	8,17E+00	1,53E+00
Contribution to air pollution	m³	5,32E+02	4,38E+02	3,27E+00	0*	7,95E+01	1,09E+01
Contribution to water pollution	m³	8,87E+02	8,14E+02	1,27E+01	8,98E-02	4,57E+01	1,38E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1,26E-01	1,26E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	3,84E+00	3,84E+00	1,45E-03	0*	4,09E-03	1,16E-03
Total use of non-renewable primary energy resources	MJ	1,12E+02	8,72E+01	1,09E+00	0*	2,25E+01	1,26E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3,76E+00	3,75E+00	1,45E-03	0*	4,09E-03	1,16E-03
Use of renewable primary energy resources used as raw material	MJ	8,32E-02	8,32E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,00E+02	7,57E+01	1,09E+00	0*	2,23E+01	1,26E+00
Use of non renewable primary energy resources used as raw material	MJ	1,17E+01	1,16E+01	0*	0*	1,70E-01	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	4,73E+00	2,89E+00	0*	5,47E-04	1,03E+00	8,07E-01
Non hazardous waste disposed	kg	2,75E+00	2,62E+00	2,73E-03	0*	1,11E-01	1,82E-02
Radioactive waste disposed	kg	3,23E-03	2,98E-03	1,95E-06	0*	2,41E-04	7,89E-06
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	5,10E-01	5,81E-02	0*	1,09E-01	0*	3,43E-01
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	3,66E-02	1,97E-03	0*	0*	0*	3,47E-02
Exported Energy	MJ	0,00E+00	0*	0*	0*	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 manufacturing 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.

The environmental impacts of the other products in this homogeneous environmental family, except for the mineral resources depletion indicator, can be extrapolated proportionally to the energy consumption values. On the other hand, the impact on the mineral resources depletion can be extrapolated proportionally to the mass of the reference product.
Other products in this family: 59938, EMS58202, EMS58201

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 :	SCHN-00338-V01.01-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH26	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Date of issue	06/2018	*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)

PEP are compliant with XP C08-100-1 :2014

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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