Product Environmental Profile

Acti9 Combi SPU 3PN C 25A SPD

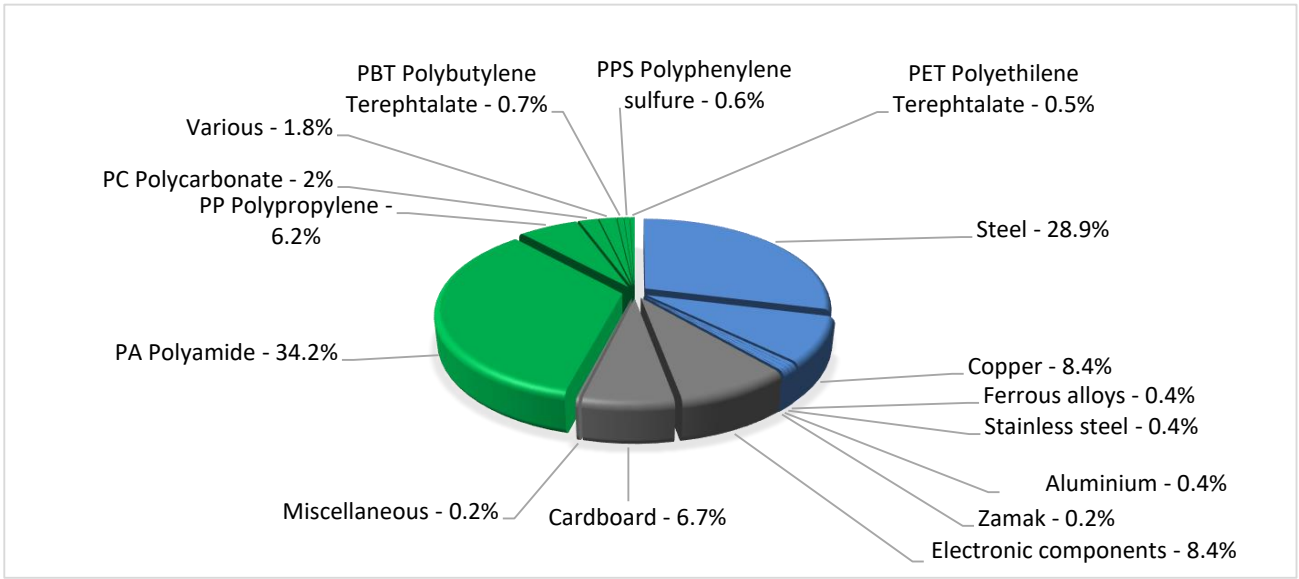


General information

Representative product	Acti9 Combi SPU 3PN C 25A SPD - A9L20725
Description of the product	Circuit breaker device with function of overvoltage and surge current protection function in low voltage power system.
Functional unit	The function of the product is to provide for 20 years the following protections in low voltage power system with operational voltage Ue = 230 / 400 VAC and rated current In=25A: 1. SPD (Surge Protection Device): Protect during against direct or indirect effects of lightning or against transient overvoltages electrical equipements connected to electrical networks; 2. POP (Power Frequency Overvoltage Protection): Detect power frequency overvoltage and trigger MCB and indicate overvoltage fault; 3. MCB (Miniature Circuit Breaker): Protect the installation against overloads and short-circuits in circuit (with assigned voltage 230 / 400 VAC (Ue) and rated current 25A (In)). This protection is ensured in accordance with the following parameters: - Number of poles 3P+N - Rated breaking capacity 10kA - Tripping curve C Type

Constituent materials

Reference product mass	1050 g	including the product, its packaging and additional elements and accessories



Plastics	46.0%
Metals	38.7%
Others	15.3%

Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl 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

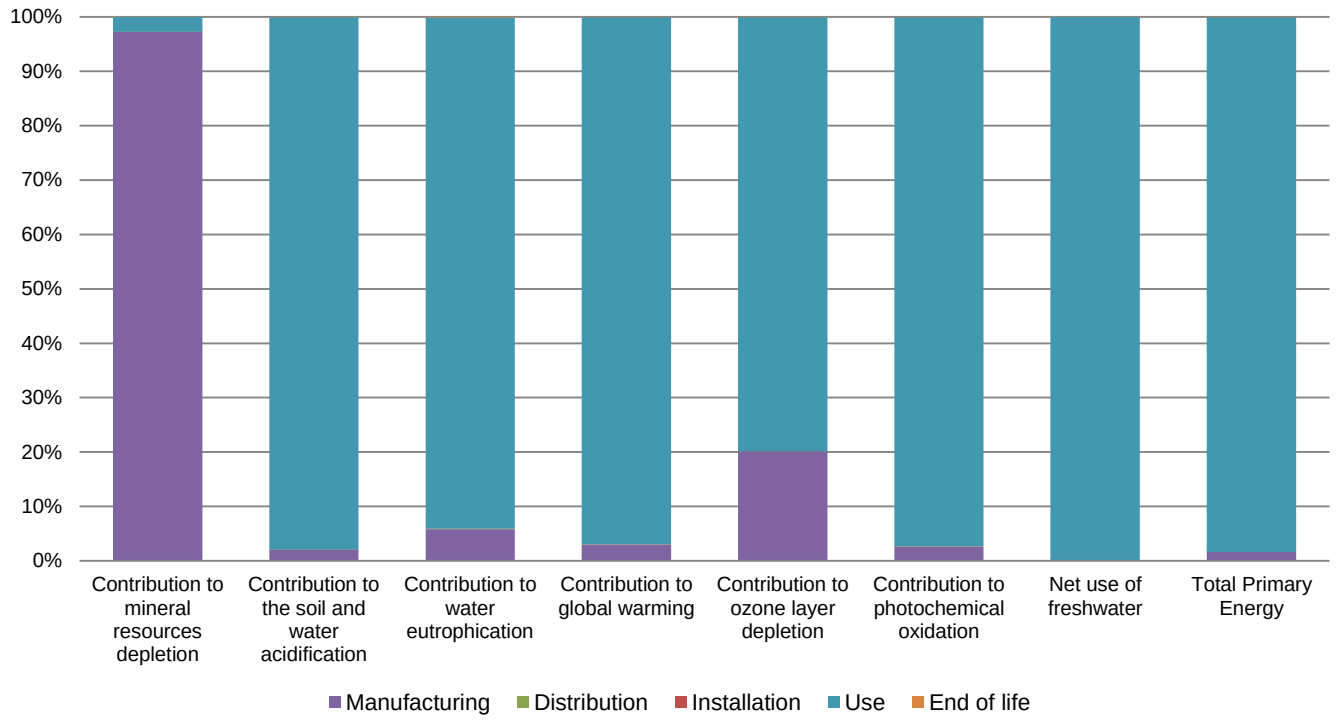
The Acti9 Combi SPU 3PN C 25A SPD presents the following relevent environmental aspects	
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 70 g, consisting of cardboard (98%), paper (2%) Product distribution optimised by setting up local distribution centres
Installation	Ref A9L20725 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 electronic card (14.4g) 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: **46%** 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	Combination of functions
Installation elements	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 scenario	SPD Product consumption is 3.8 W, Load rate: 100% of Ic, Use rate: 100% of the RLT; POP Product consumption is 0.4 W, Use rate: 100% of the RLT; MCB Product dissipation is 8.1 W at rated current In, Load rate: 50% of In, Use time rate: 30% of RLT
Geographical representativeness	Spain
Technological representativeness	All the technologies pertaining to product manufacturing are represented in manufacturing phase properly.

Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: China	Electricity grid mix; AC; consumption mix, at consumer; 230V; ES	Electricity grid mix; AC; consumption mix, at consumer; 230V; ES	Electricity grid mix; AC; consumption mix, at consumer; 230V; ES

Compulsory indicators	**Acti9 Combi SPU 3PN C 25A SPD - A9L20725**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	1.02E-03	9.95E-04	0*	0*	2.77E-05	0*
Contribution to the soil and water acidification	kg SO_2 eq	1.90E+00	3.92E-02	6.19E-04	0*	1.86E+00	3.27E-04
Contribution to water eutrophication	kg PO_4^{3-} eq	1.24E-01	7.22E-03	1.42E-04	0*	1.16E-01	1.13E-04
Contribution to global warming	kg CO_2 eq	3.90E+02	1.16E+01	1.35E-01	0*	3.78E+02	2.73E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.61E-05	3.24E-06	0*	0*	1.28E-05	1.04E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1.14E-01	2.98E-03	4.41E-05	0*	1.10E-01	3.20E-05
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.37E+02	8.01E-02	0*	0*	1.37E+02	0*
Total Primary Energy	MJ	8.14E+03	1.31E+02	1.92E+00	0*	8.00E+03	1.53E+00



Optional indicators		Acti9 Combi SPU 3PN C 25A SPD - A9L20725					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4.90E+03	9.34E+01	1.90E+00	0*	4.80E+03	1.23E+00
Contribution to air pollution	m³	1.47E+04	1.81E+03	5.76E+00	0*	1.29E+04	1.11E+01
Contribution to water pollution	m³	1.14E+04	2.36E+03	2.23E+01	0*	8.98E+03	1.62E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.59E-02	1.59E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.50E+03	4.33E+00	0*	0*	1.49E+03	0*
Total use of non-renewable primary energy resources	MJ	6.64E+03	1.27E+02	1.91E+00	0*	6.51E+03	1.53E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.50E+03	2.97E+00	0*	0*	1.49E+03	0*
Use of renewable primary energy resources used as raw material	MJ	1.36E+00	1.36E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6.63E+03	1.14E+02	1.91E+00	0*	6.51E+03	1.53E+00
Use of non renewable primary energy resources used as raw material	MJ	1.33E+01	1.33E+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	4.37E+01	4.16E+01	0*	0*	5.49E-01	1.56E+00
Non hazardous waste disposed	kg	5.33E+02	6.30E+00	0*	0*	5.26E+02	0*
Radioactive waste disposed	kg	7.07E-01	2.74E-03	0*	0*	7.04E-01	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	6.02E-01	9.29E-02	0*	6.97E-02	0*	4.39E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	5.78E-02	0*	0*	0*	0*	5.78E-02
Exported Energy	MJ	2.21E-04	2.08E-05	0*	2.01E-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 v5.9.1, database version 2016-11 in compliance with ISO14044.

The manufacturing phase is the life cycle phase which has the greatest impact on ADPe. The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators except ADPe (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	ENVPEP2101029_V1	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	8/2021	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »

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