Product Environmental Profile

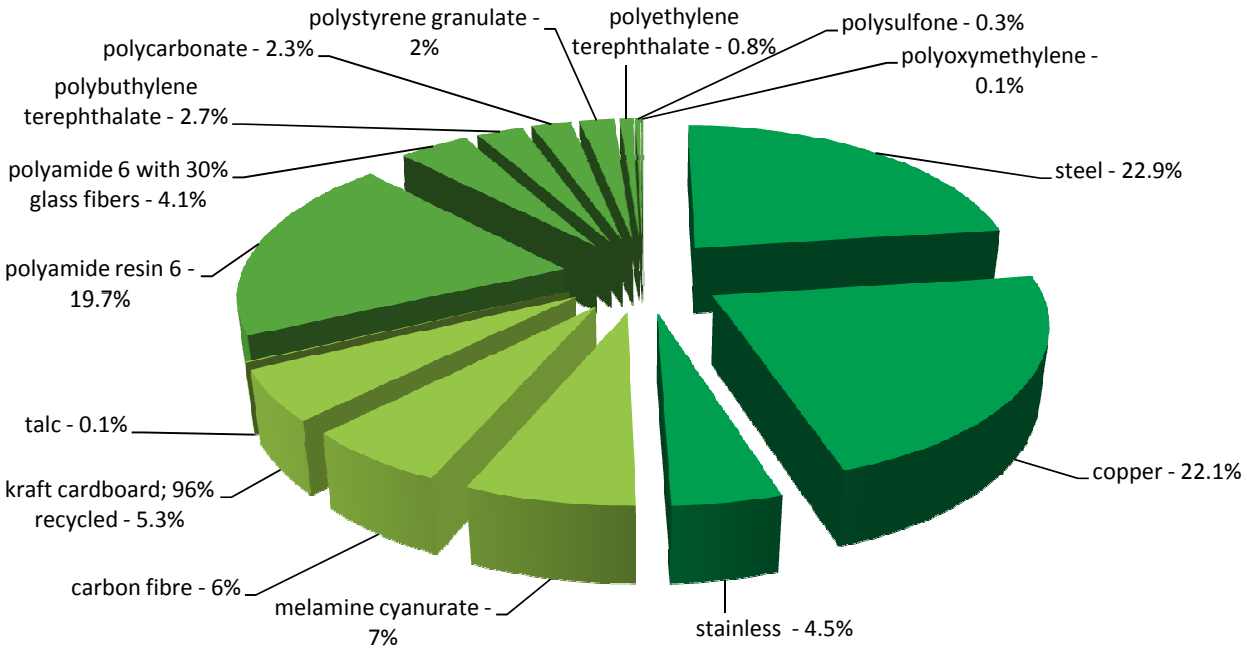
Switch-disconnectors remote tripping types iSW-NA 3P+N 40A

General information

Representative product	Switch-disconnectors remote tripping types iSW-NA 3P+N 40A -A9S70740
Description of the product	The main function of the iSW-NA product range is to control and disconnect an electric network for rates between 40A and 100A, in order to protect the installation from overload and short circuits. It can be operated remotely.
Functional unit	To protect during 20 years the installation against overloads and short-circuits in circuit with assigned 500V AC and rated 40A. This protection is ensured in accordance with the following parameters: - 3 P+ N - Rated breaking capacity 6000A

Constituent materials

Reference product mass	333.33 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

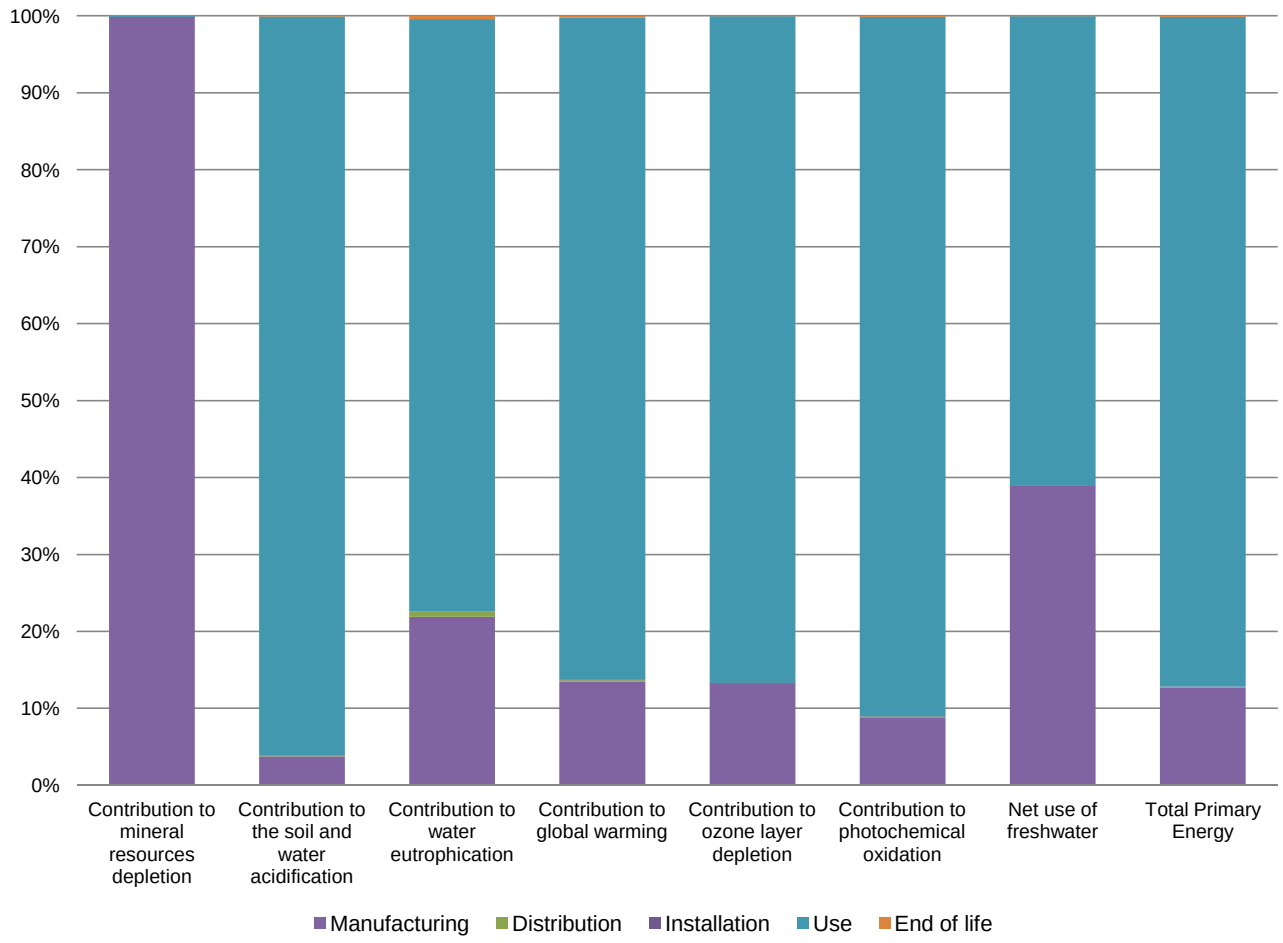
Additional environmental information

The Switch-disconnectors remote tripping types iSW-NA 3P+N 40A presents the following relevent environmental aspects		
Design		
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 17 g, consisting of cardboard (99.9%) and paper (0.1%) Packaging recycled materials is 96% of total packaging mass. Product distribution optimised by setting up local distribution centres	
Installation	A9S70740 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 No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: **47%**	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	Passive products - non-continuous operation			
Installation elements	No special components needed			
Use scenario	Product dissipation is 0.54 W full load, loading rate is 30% and service uptime percentage is 30% PSR0005: load rate / rated current (In): 30% of In and percentage of utilisation time: 100% The dissipated power depends on the conditions under which the product is implemented and used. It is 3W for the iSW-NA 3P+N 40A. It has been considered with worst case with 6W in this analysis. Hence, energy consumption is 30%^2*6=0.54W for assessment.			
Geographical representativeness	Europe			
Technological representativeness	The main function of the iSW-NA product range is to control and disconnect an electric network for rates between 40A and 100A, in order to protect the installation from overload and short circuits. It can be operated remotely.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: Spain	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators		Switch-disconnectors remote tripping types iSW-NA 3P+N 40A - A9S70740					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	6.87E-04	6.86E-04	0*	0*	7.63E-07	0*
Contribution to the soil and water acidification	kg SO_2 eq	1.32E-01	4.97E-03	1.96E-04	0*	1.27E-01	9.27E-05
Contribution to water eutrophication	kg PO_4^{3-} eq	6.17E-03	1.35E-03	4.52E-05	1.14E-06	4.75E-03	2.64E-05
Contribution to global warming	kg CO_2 eq	1.95E+01	2.62E+00	4.30E-02	0*	1.68E+01	5.11E-02
Contribution to ozone layer depletion	kg CFC11 eq	4.70E-06	6.27E-07	0*	0*	4.07E-06	2.11E-09
Contribution to photochemical oxidation	kg C_2H_4 eq	6.59E-03	5.78E-04	1.40E-05	0*	5.99E-03	9.62E-06
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	7.17E-02	2.80E-02	0*	0*	4.37E-02	4.28E-05
Total Primary Energy	MJ	3.90E+02	4.94E+01	6.08E-01	0*	3.39E+02	4.98E-01



Optional indicators		Switch-disconnectors remote tripping types iSW-NA 3P+N 40A - A9S70740					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	2.09E+02	3.49E+01	6.04E-01	2.24E-02	1.73E+02	4.10E-01
Contribution to air pollution	m³	1.39E+03	6.67E+02	1.83E+00	1.73E-01	7.19E+02	3.26E+00
Contribution to water pollution	m³	8.62E+02	1.48E+02	7.07E+00	1.85E-01	7.03E+02	3.97E+00
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	4.40E-02	4.40E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	2.51E+01	8.20E-01	0*	0*	2.43E+01	0*
Total use of non-renewable primary energy resources	MJ	3.65E+02	4.86E+01	6.07E-01	0*	3.15E+02	4.97E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.51E+01	8.06E-01	0*	0*	2.43E+01	0*
Use of renewable primary energy resources used as raw material	MJ	1.37E-02	1.37E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.61E+02	4.47E+01	6.07E-01	0*	3.15E+02	4.97E-01
Use of non renewable primary energy resources used as raw material	MJ	3.92E+00	3.92E+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	1.81E+01	1.76E+01	0*	1.71E-02	0*	4.68E-01
Non hazardous waste disposed	kg	6.31E+01	4.38E-01	0*	0*	6.27E+01	0*
Radioactive waste disposed	kg	5.13E-02	2.41E-04	0*	0*	5.11E-02	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.84E-01	2.33E-02	0*	1.69E-02	0*	1.43E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	8.47E-03	1.08E-03	0*	0*	0*	7.39E-03
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 v5.5, database version 2015-04.

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 N°	SCHN-00001-V01.01-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH08	*Supplemented by*	PSR-0005-ed1-2012 12 11
Date of issue	10/2015	*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)

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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Published by Schneider Electric