Product Environmental Profile

iST 65r 3P+N

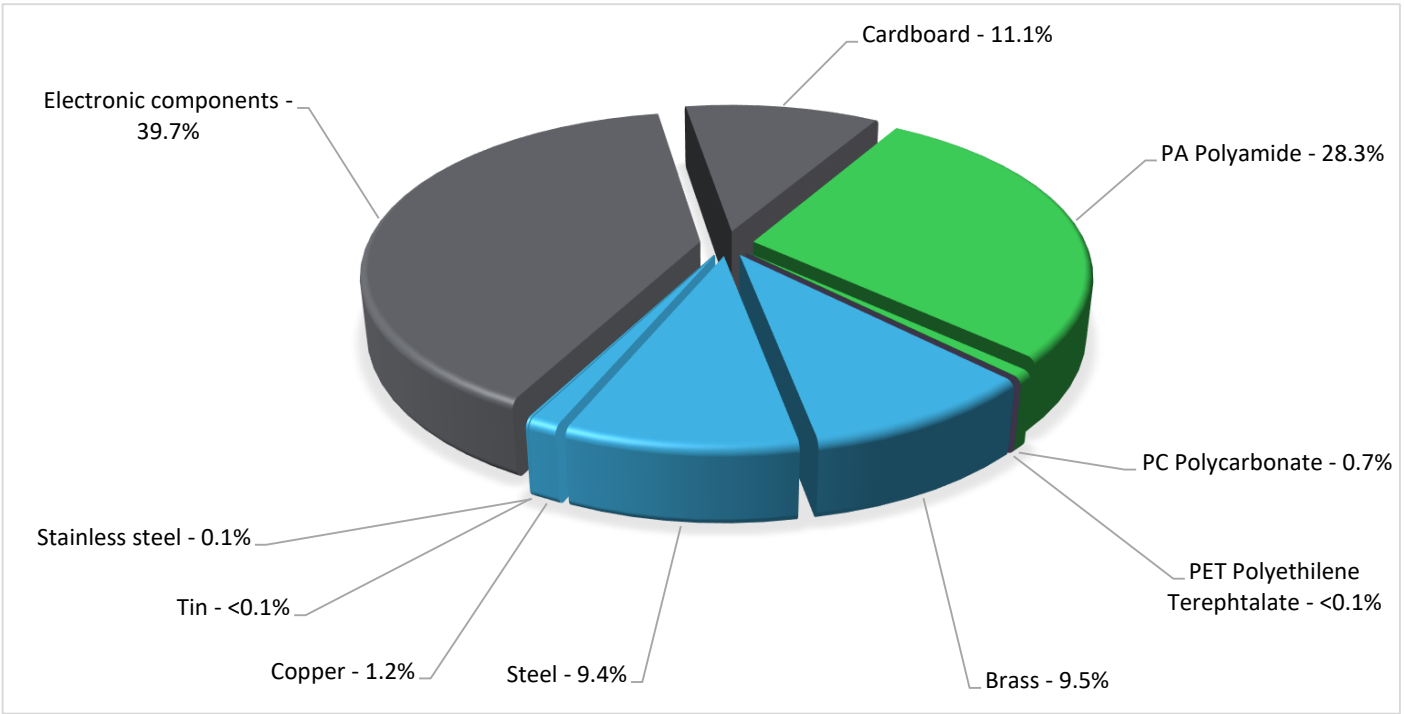
Acti9 SPD

General information

Representative product	iST 65r 3P+N - A9L916605
Description of the product	Protect electrical equipment against the direct or indirect effects of lighting or against transient overvoltage
Description of the range	This range consists of SPD of 20k A to 65k A, 1 P to 4P, The representative product used for the analysis isActi9 IST 65R 3P+N (commercial reference:A9L916005). The mass range of the product is from158 g and 524.1 g including packaging. 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	Protect during 20 years against direct or indirect effects of lightning or against transient overvoltages electrical equipements connected to electrical networks with a rated operational voltage up to 1000 V AC or 1500 V DC -Number of poles:3P+N -Uc = 350V AC(L-N)/260V AC(N-PE) -In = 35kA -Up = L/N: 2.0kV N/PE: 1.5kV L/PE:2.1kV -Ipe <1mA Followed standard: GB/T 18802.11

Constituent materials

Reference product mass	500.1 g	including the product, its packaging and additional elements and accessories



Plastics	29.0%
Metals	20.2%
Others	50.8%

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

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

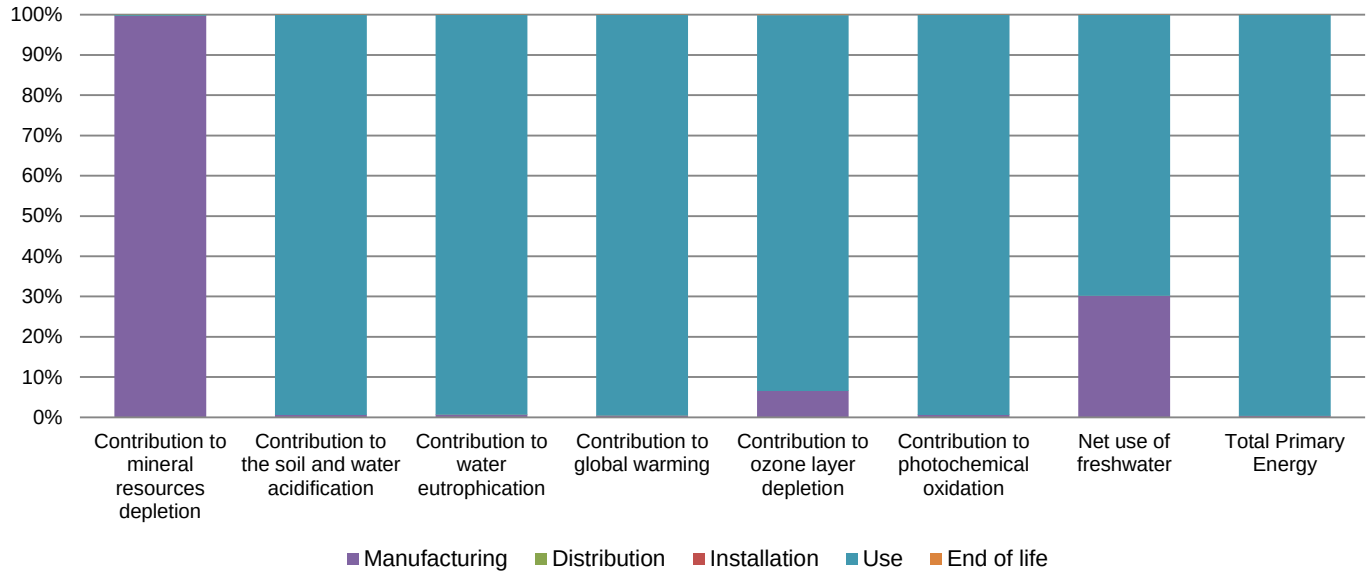
Additional environmental information

The iST 65r 3P+N 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 54.1 g, consisting of cardboard(99.9%),plastic(0.1%)
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(7.3g) 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: **25%** 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	Surge arresters and Surge protective devices type 1, 2 or 3 connected to low voltage power systems			
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	Load factor : 100% of Ic Use rate: 100 % of the RLT			
Geographical representativeness	China			
Technological representativeness	Protect electrical equipment against the direct or indirect effects of lighting or against transient overvoltage			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	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	**iST 65r 3P+N - A9L916605**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.12E-03	2.12E-03	0*	0*	5.48E-06	0*
Contribution to the soil and water acidification	kg SO_2 eq	1.36E+00	7.74E-03	2.95E-04	0*	1.35E+00	2.15E-04
Contribution to water eutrophication	kg PO_4^{3-} eq	3.59E-01	2.32E-03	6.79E-05	0*	3.57E-01	1.06E-04
Contribution to global warming	kg CO_2 eq	1.25E+03	5.40E+00	0*	0*	1.25E+03	3.32E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.06E-05	6.94E-07	0*	0*	9.93E-06	1.15E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1.61E-01	9.54E-04	2.10E-05	0*	1.60E-01	1.78E-05
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.00E+00	6.03E-01	0*	0*	1.39E+00	0*
Total Primary Energy	MJ	2.05E+04	8.01E+01	0*	0*	2.04E+04	0*



Optional indicators		iST 65r 3P+N - A9L916605					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.89E+04	6.16E+01	0*	0*	1.89E+04	0*
Contribution to air pollution	m³	1.30E+05	8.34E+02	0*	0*	1.29E+05	0*
Contribution to water pollution	m³	6.30E+04	9.63E+02	1.06E+01	0*	6.20E+04	1.43E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	5.69E-02	5.69E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.05E+03	1.87E+00	0*	0*	1.05E+03	0*
Total use of non-renewable primary energy resources	MJ	1.94E+04	7.83E+01	0*	0*	1.94E+04	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.05E+03	1.71E+00	0*	0*	1.05E+03	0*
Use of renewable primary energy resources used as raw material	MJ	1.61E-01	1.61E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.94E+04	7.46E+01	0*	0*	1.94E+04	0*
Use of non renewable primary energy resources used as raw material	MJ	3.65E+00	3.65E+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	5.72E+01	1.60E+01	0*	0*	4.02E+01	9.50E-01
Non hazardous waste disposed	kg	2.28E+02	2.13E+00	0*	0*	2.26E+02	0*
Radioactive waste disposed	kg	8.45E-03	9.87E-04	1.63E-06	0*	7.45E-03	6.06E-06
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	2.30E-01	6.84E-02	0*	5.38E-02	0*	1.07E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	8.98E-02	0*	0*	0*	0*	8.98E-02
Exported Energy	MJ	1.71E-04	1.60E-05	0*	1.55E-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 v5.9.3, database version 2022-01 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).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

For our products, the first proposition for significant parameter is energy consumption values.
Depending on the impact analysis, the environmental indicators (without RMD) of other products in this family may be proportional extrapolated by energy consumption values. For RMD, impact may be proportional extrapolated by mass of the product.

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	ENVPEP1308014_V3-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	08/2022	*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) »

Schneider Electric Industries SAS

Country Customer Care Center
http://www.schneider-electric.com/contact

35, rue Joseph Monier

CS 30323

F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439
Capital social 896 313 776 €

www.schneider-electric.com

Published by Schneider Electric