Product Environmental Profile

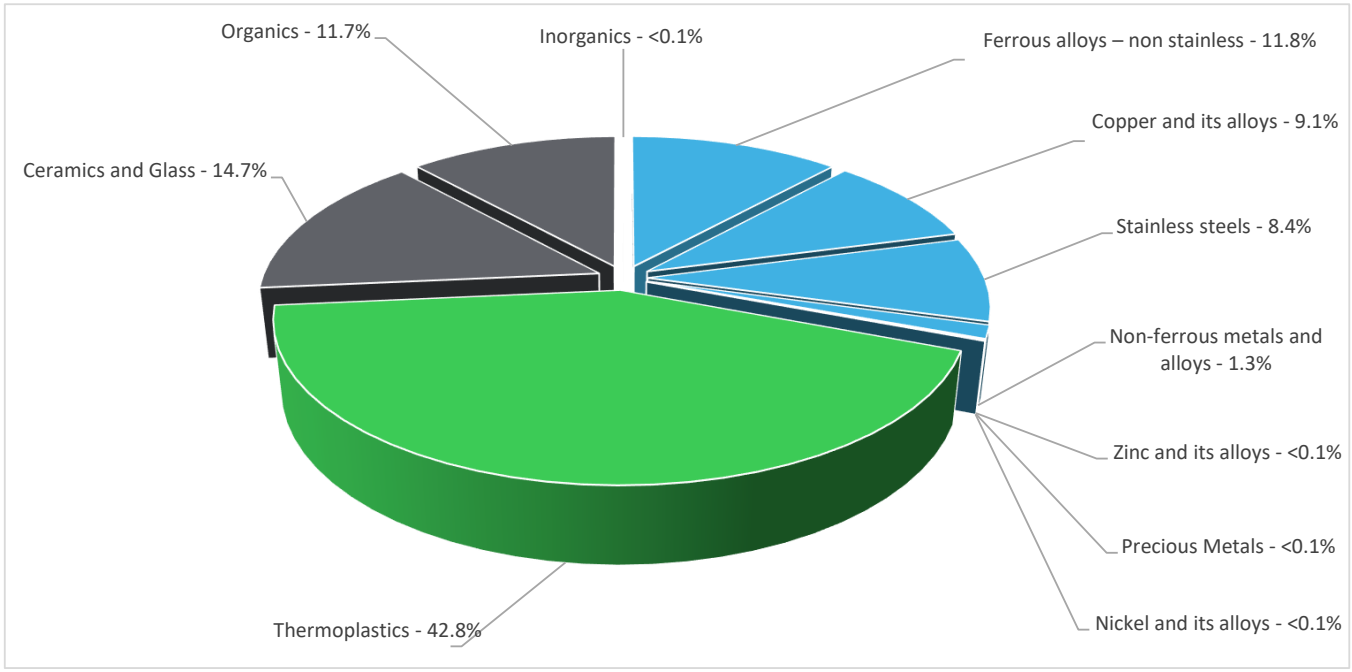
TeSys GS 32A 3P

General information

Representative product	TeSys GS 32A 3P - GS1DD3
Description of the product	TeSys GS is manually operated, modular version multipolar fuse combination switch which can be used with 14x51 fuse size and in 3P + switched neutral. This product can be associated with high breaking capacity fuses, and make and break on load and provide safety isolation and protection against overcurrent and short-circuit for any low voltage electrical circuit.
Functional unit	Establish, support and interrupt for 20 years rated currents in normal conditions of circuit characterized by the current of 32A, including any conditions specified for overload in operation characterized by the current of 32A, for the operating voltage of 690VAC for the category of use AC-23 A.

Constituent materials

Reference product mass	560 g	including the product, its packaging and additional elements and accessories



Plastics	42.8%
Metals	30.8%
Others	26.5%

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

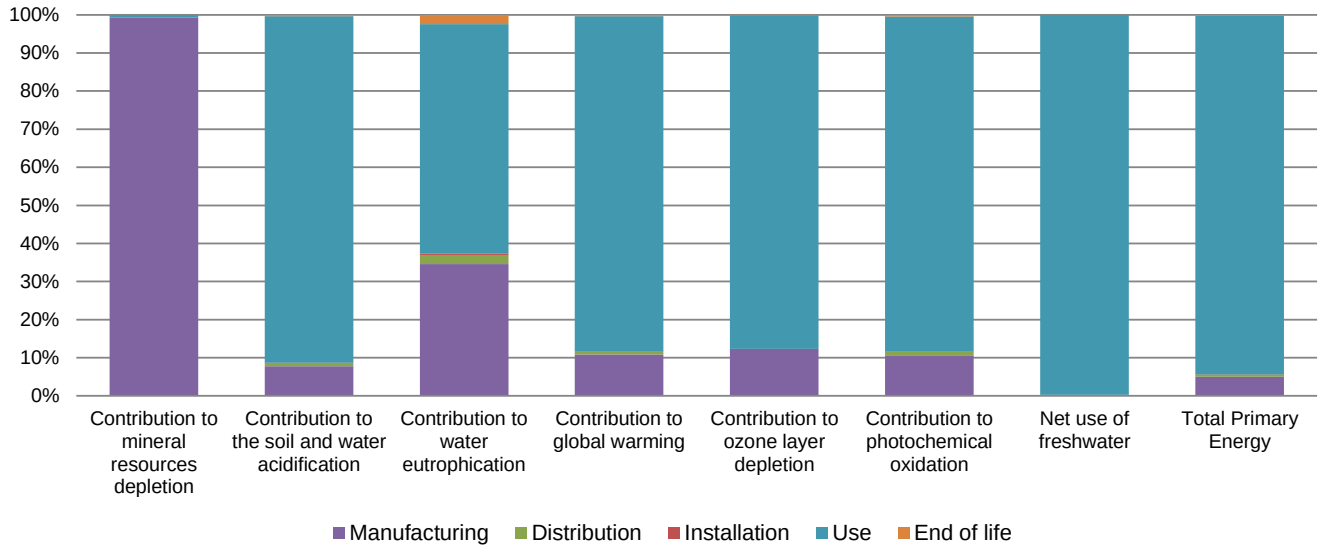
Additional environmental information

The TeSys GS 32A 3P presents the following relevent environmental aspects	
Manufacturing	Manufactured at a ISO14001 certified production site
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 64 g, consisting of Cardboard/Paper (50 g), Plastic (14 g) Product distribution optimised by setting up local distribution centres
Installation	The installation stage consists in connecting the product to the existing electrical installation. The installation does not generate any significant impacts on the environment, except impacts from packaging waste.
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 Springs 1% of product Mass which is Potential security hazard for operators 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: **9.1%** 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	Switches			
Installation elements	No special components needed			
Use scenario	The total dissipated power at Ith for 3 pole is 3.6 at 100% load rate and Load rate: 50% of In Use time rate: 30% of RLT			
Geographical representativeness	Europe			
Technological representativeness	TeSys GS is manually operated, modular version multipolar fuse combination switch which can be used with 14x51 fuse size and in 3P + switched neutral. This product can be associated with high breaking capacity fuses, and make and break on load and provide safety isolation and protection against overcurrent and short-circuit for any low voltage electrical circuit.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Manufacturing Plant Location: France or Tunisia	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators	**TeSys GS 32A 3P - GS1DD3**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4.01E-04	3.98E-04	0*	0*	2.69E-06	0*
Contribution to the soil and water acidification	kg SO_2 eq	1.42E-01	1.10E-02	1.31E-03	5.76E-05	1.29E-01	4.48E-04
Contribution to water eutrophication	kg PO_4^{3-} eq	1.29E-02	4.46E-03	3.02E-04	3.97E-05	7.78E-03	3.08E-04
Contribution to global warming	kg CO_2 eq	3.51E+01	3.81E+00	2.93E-01	1.40E-02	3.09E+01	1.09E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.30E-06	2.83E-07	5.93E-10	0*	2.01E-06	1.61E-09
Contribution to photochemical oxidation	kg C_2H_4 eq	8.05E-03	8.41E-04	9.34E-05	4.30E-06	7.08E-03	3.34E-05
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.12E+02	3.41E-01	0*	0*	1.12E+02	0*
Total Primary Energy	MJ	1.31E+03	6.49E+01	8.26E+00	3.42E-01	1.24E+03	2.69E+00



Optional indicators		TeSys GS 32A 3P - GS1DD3					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	3.73E+02	1.71E+01	4.11E+00	1.63E-01	3.51E+02	1.27E+00
Contribution to air pollution	m³	1.76E+03	4.10E+02	1.20E+01	1.17E+00	1.33E+03	9.05E+00
Contribution to water pollution	m³	3.11E+03	1.77E+03	4.81E+01	1.91E+00	1.28E+03	1.48E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	5.77E-02	5.77E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	7.97E+01	1.22E+00	0*	0*	7.85E+01	1.72E-02
Total use of non-renewable primary energy resources	MJ	5.75E+02	3.12E+01	4.13E+00	1.71E-01	5.39E+02	1.33E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7.85E+01	0*	0*	0*	7.85E+01	1.72E-02
Use of renewable primary energy resources used as raw material	MJ	1.25E+00	1.25E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.67E+02	2.30E+01	4.13E+00	1.71E-01	5.39E+02	1.33E+00
Use of non renewable primary energy resources used as raw material	MJ	8.20E+00	8.20E+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	7.86E+00	7.85E+00	0*	0*	1.61E-02	0*
Non hazardous waste disposed	kg	1.18E+02	2.51E+00	0*	7.14E-02	1.15E+02	5.53E-01
Radioactive waste disposed	kg	7.76E-02	6.38E-04	0*	0*	7.69E-02	2.01E-05
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.49E-06	3.49E-06	0*	0*	0*	0*
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*
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 v5.8.1, database version 2016-11 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).

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	ENVPEP2003008_V1	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	04/2020	*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

ENVPEP2003008_V1 04/2020