Product Environmental Profile

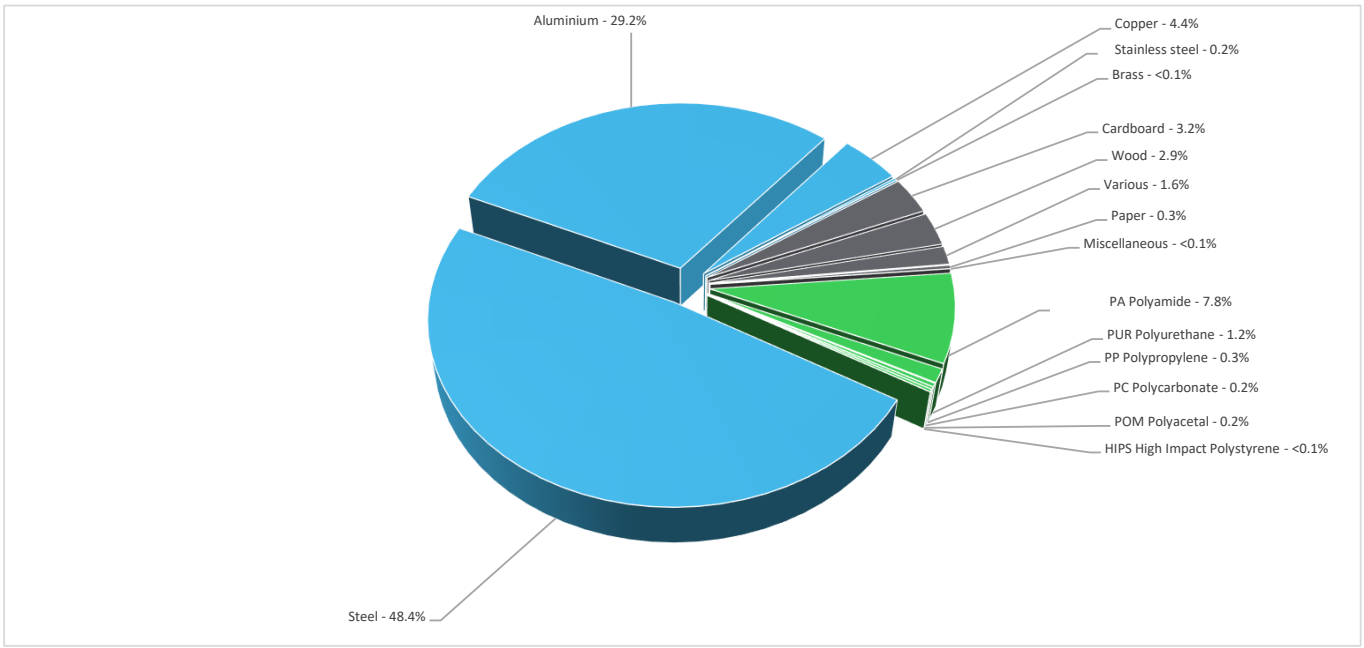
Canalis KSA 100 to 1000A

General information

Representative product	Canalis KSA 100 to 1000A - KSA250AB4, KSA250ED45010, KSA250ED4306, KSB32CM55, KSB400ZF1, KSB63SM48
Description of the product	● Canalis is part of a comprehensive offering of Schneider Electric products designed to operate together. This concept covers all low and medium voltage electrical distribution components. ● The result is an optimised electrical installation with even higher performance through full electrical, mechanical and communication compatibility. ● With the Canalis, we get a complete type tested distribution solution that complies with IEC61439-6. ● It is perfectly suited to traditional applications (factories, warehouses, etc.) and to the distribution of electrical power from transformer to all types of loads in offices, commercial premises, laboratories, etc.
Product definition	• 1 x 250 A power feed box (cat. no. KSA250AB4) • 3 x 250 A straight lengths, four-pole, 10 tap-off units / 5 m (cat. no. KSA250ED45010) • 2 x 250 A straight lengths, four-pole, 6 tap-off units / 3 m (cat. no. KSA250ED4306) • 4 x 25 A connectors, 3L+N+PE, 5 modules (cat. no. KSB32CM55) • 8 fixing devices (cat. no. KSB400ZF1) • 2 x 63 A enclosures, 3L+N+PE, 8 modules (cat. no. KSB63SM48).
Functional unit	The main purpose of the Canalis KSA 100 to 1000A configuration is to transport and distribute electrical energy for high power applications for 20 years with following technical characteristics, •Busbar trunking rated current: 100 to 1000A •Tap-off units with fuses or circuit breakers : 16 to 400A •Number of active conductors: 4+PE •Rated insulating voltage: 690V •High Protection index: IP55 •Length of busbar trunking sections: 5m. Customized lengths available •Regulations: compliant with IEC 61439-1 & 6

Constituent materials

Reference product mass	125812g	including the product, its packaging and additional elements and accessories



Plastics	9.7%
Metals	82.2%
Others	8.0%

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

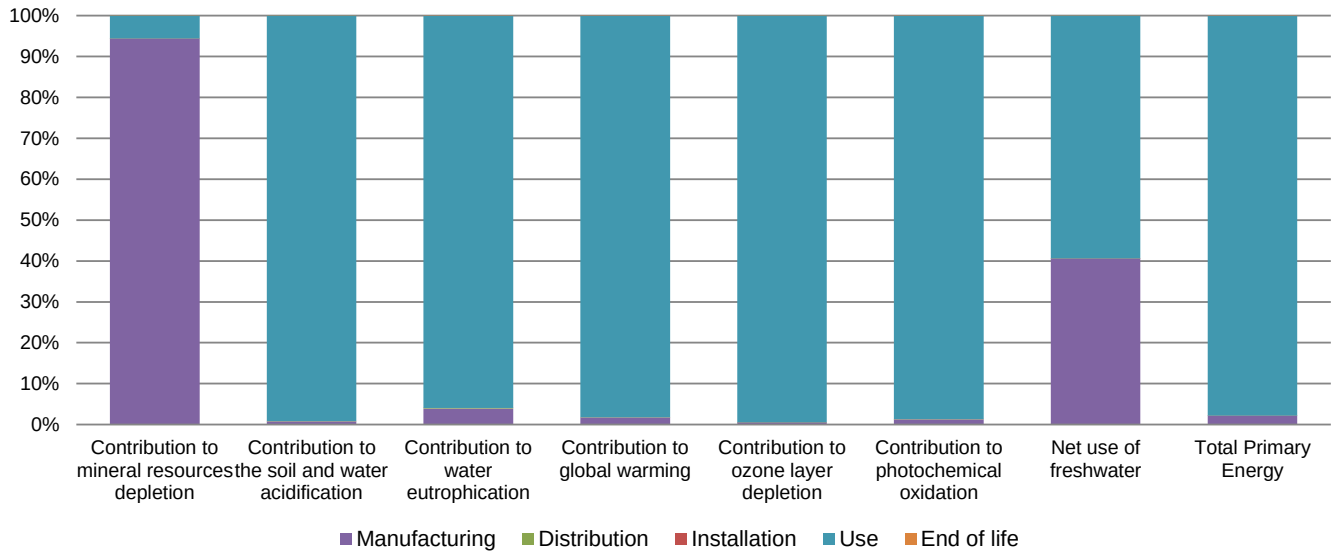
Additional environmental information

The Canalis KSA 100 to 1000A 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 8176.4 g, consisting of paper (5%), wood (45%), carboard (50%) Packaging recycled materials is 82% of total packaging mass. Product distribution optimised by setting up local distribution centres
Installation	No Special components included
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: **81%** 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	Other equipments - Passive product - continuous operation			
Installation elements	The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal).			
Use scenario	load rate / rated current (In): 30 % of 1000 Amps percentage of utilization time: 100% Assumed service lifetime is 20 years and use scenario is : product dissipation is 460.7 W, loading rate is 30% and service uptime percentage is 30%			
Geographical representativeness	Europe			
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: France	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		Canalis KSA 100 to 1000A - KSA250AB4, KSA250ED45010, KSA250ED4306, KSB32CM55, KSB400ZF1, KSB63SM48					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3.88E-02	3.66E-02	0*	0*	2.17E-03	0*
Contribution to the soil and water acidification	kg SO_2 eq	3.63E+02	2.78E+00	7.41E-02	0*	3.60E+02	0*
Contribution to water eutrophication	kg PO_4^{3-} eq	1.41E+01	5.53E-01	1.71E-02	0*	1.35E+01	8.77E-03
Contribution to global warming	kg CO_2 eq	4.85E+04	8.21E+02	1.62E+01	0*	4.77E+04	1.35E+01
Contribution to ozone layer depletion	kg CFC11 eq	1.16E-02	6.29E-05	0*	0*	1.16E-02	0*
Contribution to photochemical oxidation	kg C_2H_4 eq	1.73E+01	2.19E-01	5.29E-03	0*	1.70E+01	3.79E-03
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.09E+02	8.51E+01	0*	0*	1.24E+02	0*
Total Primary Energy	MJ	9.87E+05	2.14E+04	2.30E+02	0*	9.65E+05	1.96E+02



Optional indicators		Canalis KSA 100 to 1000A - KSA250AB4, KSA250ED45010, KSA250ED4306, KSB32CM55, KSB400ZF1, KSB63SM48					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	5.00E+05	9.03E+03	2.28E+02	0*	4.91E+05	1.61E+02
Contribution to air pollution	m^3	2.15E+06	1.04E+05	6.91E+02	0*	2.04E+06	1.26E+03
Contribution to water pollution	m^3	2.18E+06	1.72E+05	2.67E+03	0*	2.00E+06	1.39E+03
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	4.91E+01	4.91E+01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	6.95E+04	4.61E+02	0*	0*	6.91E+04	0*
Total use of non-renewable primary energy resources	MJ	9.18E+05	2.10E+04	2.29E+02	0*	8.96E+05	1.96E+02
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.95E+04	3.71E+02	0*	0*	6.91E+04	0*
Use of renewable primary energy resources used as raw material	MJ	8.99E+01	8.99E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.16E+05	1.96E+04	2.29E+02	0*	8.96E+05	1.96E+02
Use of non renewable primary energy resources used as raw material	MJ	1.32E+03	1.32E+03	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	9.54E+02	8.09E+02	0*	0*	0*	1.45E+02
Non hazardous waste disposed	kg	1.79E+05	7.55E+02	0*	0*	1.78E+05	0*
Radioactive waste disposed	kg	1.46E+02	5.38E-01	0*	0*	1.45E+02	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.17E+02	1.25E+01	0*	5.51E+00	0*	9.88E+01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	7.20E-01	0*	0*	0*	0*	7.20E-01
Exported Energy	MJ	2.55E+00	2.40E-01	0*	2.31E+00	0*	0*

** represents less than 0.01% of the total life cycle of the reference flow*

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-00551-V01.01-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH25	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Date of issue	05/2020	*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 :2016

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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