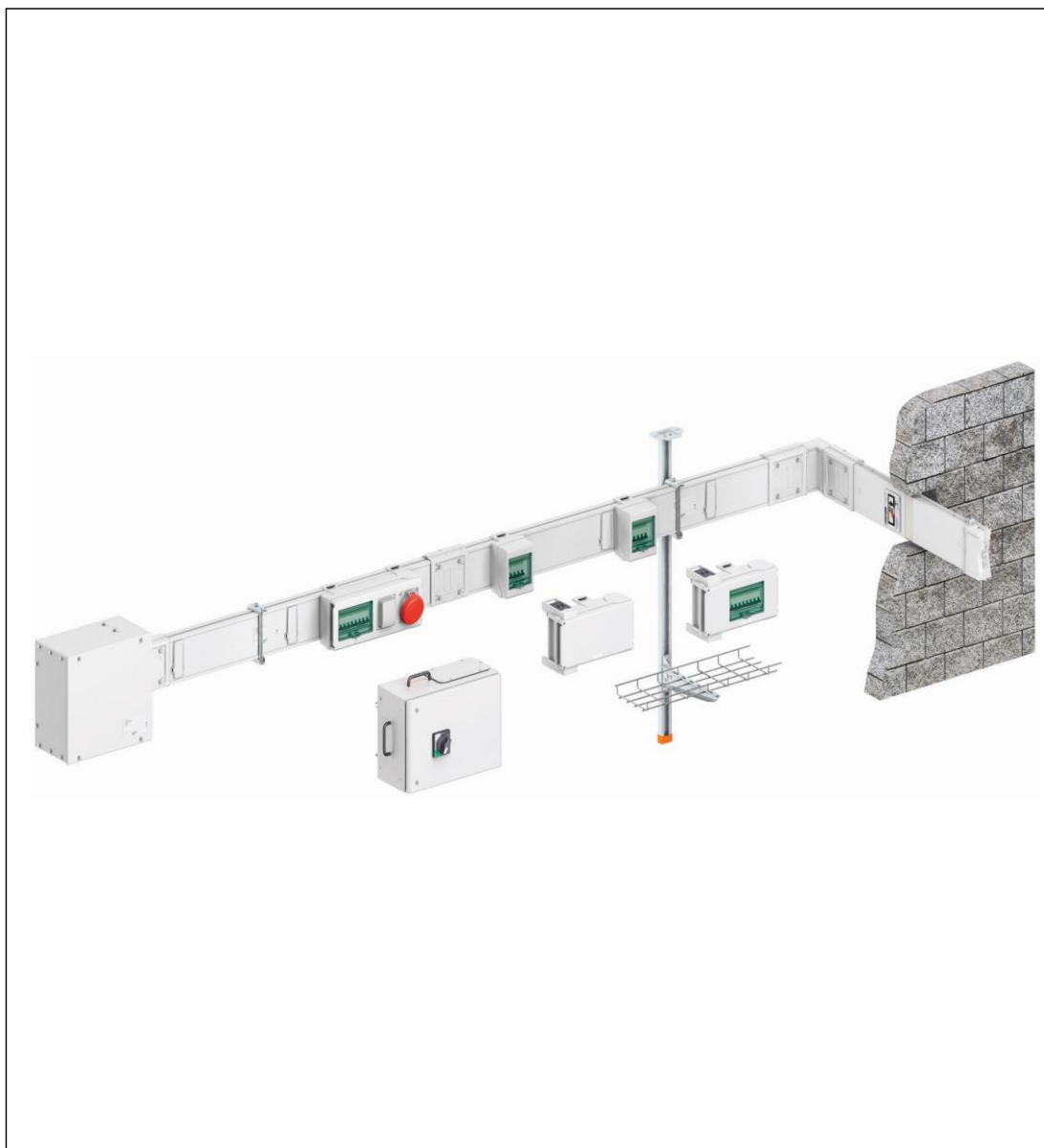


Product Environmental Profile

Canalis KSC 160 to 800A





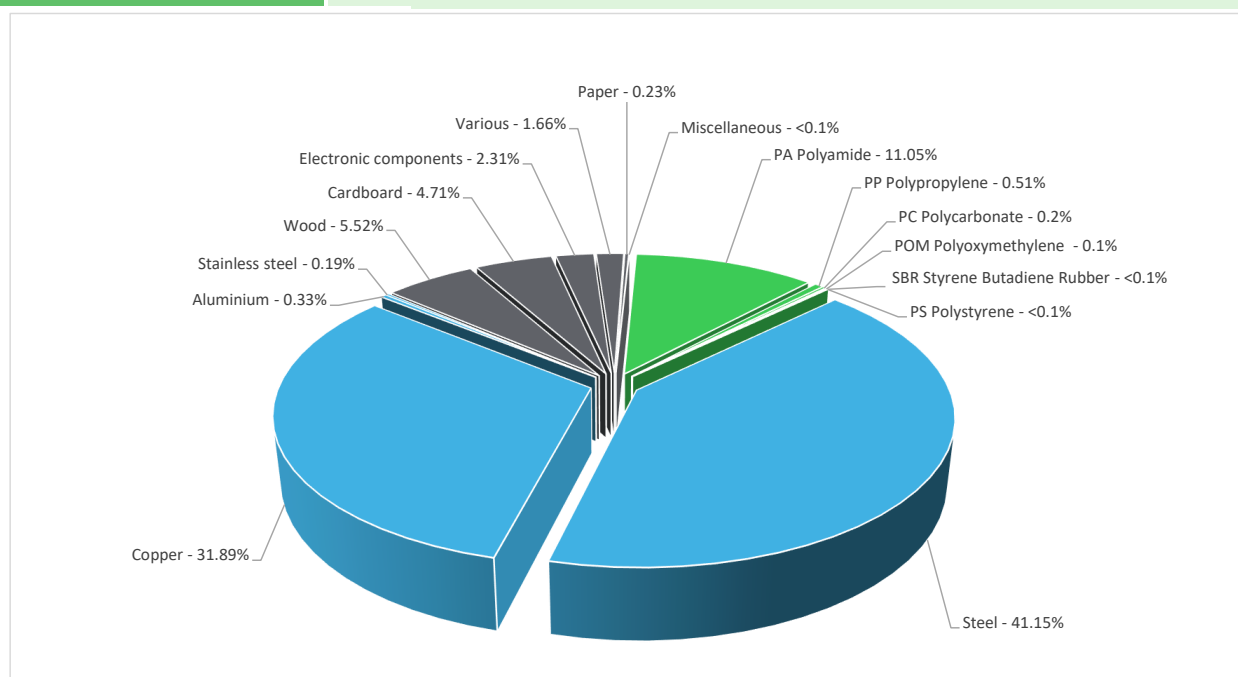
General information

Reference product	Canalis KSC 160 to 800A - KSC250AB4, KSC250ED4306, KSC250ED43012, KSB32CM55, KSB400ZF1, KSB63SM48
Description of the product	<p>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.</p> <p>The result is an optimised electrical installation with even higher performance through full electrical, mechanical and communication compatibility.</p> <p>With the Canalis, we get a complete type tested distribution solution that complies with IEC61439-6.</p> <p>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.</p>
Representative product	<p>The product used for the analysis is the typical product, KSC 250A, which consists of:</p> <ul style="list-style-type: none"> • 1 x 250 A power feed box (cat. no. KSC250AB4) • 3 x 250 A straight lengths, four-pole, 6 tap-off units / 3 m (cat. no. KSC250ED4306) • 2 x 250 A straight lengths, four-pole, 12 tap-off units / 3 m (cat. no. KSC250ED43012) • 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	<p>Canalis KSC 160 to 800A configuration is to transport and distribute electrical energy for high power applications for 20 years with following technical characteristics</p> <ul style="list-style-type: none"> • Busbar trunking rated current: 160 to 800A • 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: 3m. Customized lengths available • Regulations: compliant with IEC 61439-1 & 6



Constituent materials

Reference product mass	138.45 Kg including the product, its packaging and additional elements and accessories
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Plastics	12.0%
Metals	73.6%
Others	14.5%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<https://www.se.com/ww/en/work/support/green-premium/>

Additional environmental information

End Of Life	Recyclability potential:	80%	Recyclability rate has been calculated based on REEECYLAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).
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Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - continuous operation			
Installation elements	No special components needed during installation phase. The disposal of the packaging material is accounted for during this phase (Including transport to disposal).			
Use scenario	load rate / rated current (In): 30 % of In percentage of utilization time: 100%			
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 in production.			
Geographical representativeness	Europe			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

Mandatory Indicators			Canalis KSC 160 to 800A - Canalis KSC 160 to 800A					
Impact indicators	Unit	Total	Manufacturing [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Loads and Benefits [D]
Contribution to climate change	kg CO2 eq	2.07E+03	7.13E+02	1.81E+01	1.83E+01	1.02E+03	2.99E+02	-3.38E+02
Contribution to climate change-fossil	kg CO2 eq	2.04E+03	6.89E+02	1.81E+01	2.21E+01	1.02E+03	2.89E+02	-3.28E+02
Contribution to climate change-biogenic	kg CO2 eq	3.07E+01	2.38E+01	0*	0*	1.36E+00	9.35E+00	-9.57E+00
Contribution to climate change-land use and land use change	kg CO2 eq	1.51E-04	0*	0*	0*	0*	1.51E-04	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	6.80E-05	5.68E-05	2.77E-08	8.05E-07	4.35E-06	6.00E-06	-6.32E-05
Contribution to acidification	mol H+ eq	1.87E+01	1.09E+01	1.16E-01	5.34E-02	5.81E+00	1.91E+00	-8.73E+00
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	3.29E-01	4.61E-03	0*	1.31E-04	2.79E-03	3.22E-01	-4.44E-04
Contribution to eutrophication marine	kg N eq	1.90E+00	7.74E-01	5.47E-02	1.52E-02	6.60E-01	3.92E-01	-2.52E-01
Contribution to eutrophication, terrestrial	mol N eq	2.25E+01	8.49E+00	6.00E-01	1.21E-01	9.92E+00	3.42E+00	-2.91E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	6.23E+00	2.98E+00	1.52E-01	3.46E-02	2.12E+00	9.48E-01	-1.38E+00
Contribution to resource use, minerals and metals	kg Sb eq	9.36E-02	8.45E-02	0*	0*	7.37E-05	9.05E-03	-1.27E-01
Contribution to resource use, fossils	MJ	6.14E+04	2.21E+04	2.52E+02	1.34E+02	2.59E+04	1.30E+04	-6.78E+03
Contribution to water use	m3 eq	2.74E+03	4.09E+02	0*	5.20E+00	3.60E+01	2.29E+03	-4.45E+02

Additional indicators for the French regulation are available as well

Inventory flows Indicators			Canalis KSC 160 to 800A - Canalis KSC 160 to 800A					
Inventory flows	Unit	Total	Manufact.	Distribution	Installation	Use	End of Life	Loads and Benefits
			[A1 - A3]	[A4]	[A5]	[B1 - B7]	[C1 - C4]	[D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5.64E+03	3.90E+02	0*	4.10E+01	4.98E+03	2.26E+02	-1.67E+02
Contribution to use of renewable primary energy resources used as raw material	MJ	1.36E+02	1.36E+02	0*	0*	0*	0*	-1.43E+02
Contribution to total use of renewable primary energy resources	MJ	5.77E+03	5.26E+02	0*	4.10E+01	4.98E+03	2.26E+02	-3.09E+02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6.06E+04	2.13E+04	2.52E+02	1.34E+02	2.59E+04	1.30E+04	-6.80E+03
Contribution to use of non renewable primary energy resources used as raw material	MJ	8.47E+02	8.47E+02	0*	0*	0*	0*	1.97E+01
Contribution to total use of non-renewable primary energy resources	MJ	6.14E+04	2.21E+04	2.52E+02	1.34E+02	2.59E+04	1.30E+04	-6.78E+03
Contribution to use of secondary material	kg	9.41E-01	9.41E-01	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m³	6.97E+01	9.53E+00	0*	1.21E-01	8.39E-01	5.92E+01	-1.04E+01
Contribution to hazardous waste disposed	kg	7.02E+03	6.87E+03	0*	0*	1.90E+01	1.30E+02	-1.08E+04
Contribution to non hazardous waste disposed	kg	5.14E+02	3.03E+02	6.35E-01	4.50E+01	1.46E+02	1.84E+01	-3.42E+02
Contribution to radioactive waste disposed	kg	1.18E-01	8.00E-02	4.52E-04	5.44E-03	3.07E-02	1.43E-03	-1.04E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.09E+02	0*	0*	8.79E+00	0*	1.01E+02	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	5.27E+00	4.95E-01	0*	4.77E+00	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

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

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

For all the impact indicators, the manufacturing phase has the greatest impacts contribution on the environmental indicators for Climate change-Biogenic (GWPb), Ozone depletion (ODP), Acidification (AP) and Resource use, minerals and metals (ADPe).

the Usag stage is the greatest contributor on the environmental indicators for Climate change (GWP); Climate change-Fossil (GWPf); Eutrophication, terrestrial (Ept); Resource use, fossils (ADPf), due to the energy losses occurring throughout the product reference service lifetime.

The EoLI phase has the greatest impacts contribution on the environmental indicators for Climate change-Land use and land use change (GWPlu), Eutrophication, freshwater (EpF) and Water use (WU).

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.

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Date of issue	12/2023	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 Julie ORGELET (DDemain)			
PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019			
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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