

Product Environmental Profile

Canalis KSA 250A





General information

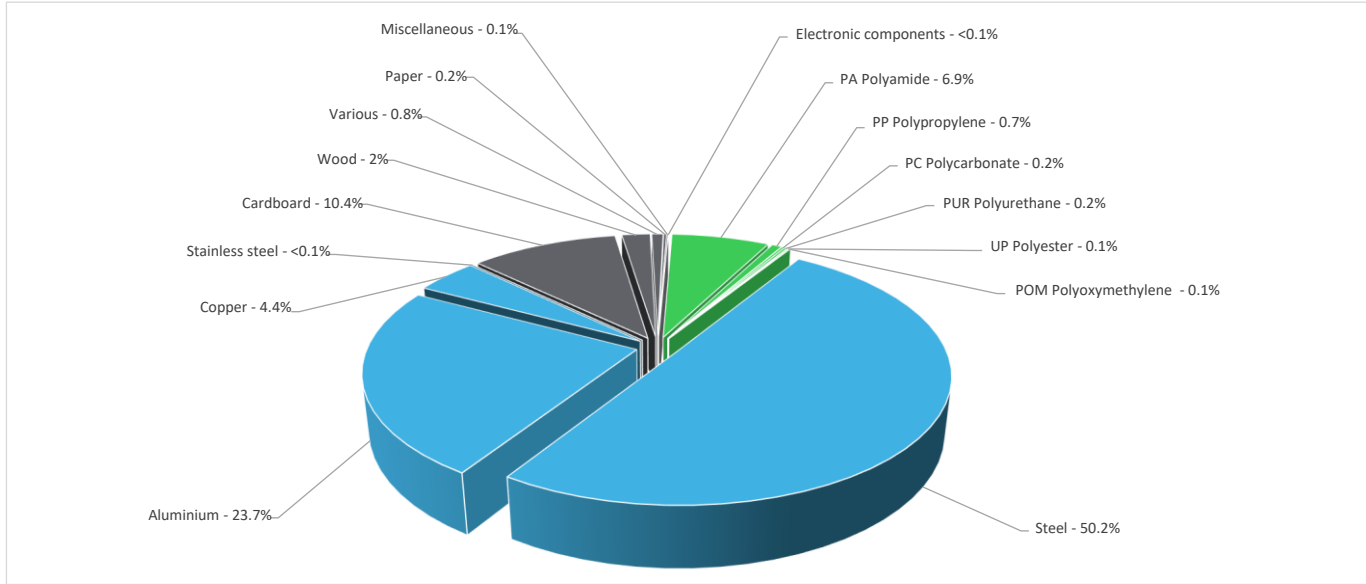
Reference product	Canalis KSA 250A
Product Configuration	<p>The representative product used for the analysis is the typical product KSA 250A, which consists of:</p> <ul style="list-style-type: none"> • 1 x 250 A power feed box (Cat. no. KSA250AB4) • 3 x 250 A straight lengths, four-pole, 10 tap-off units / 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).
Description of the product	<ul style="list-style-type: none"> • The Canalis KSA 250A is part of a comprehensive offering of Schneider Electric products designed to operate together. This concept covers all 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 KSA 250A, 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. • The Canalis KSA 250A for medium-power distribution ranges from 100 to 1000A
Description of the range	Single product
Functional unit	<p>To transport and distribute electrical energy for high power applications according to the appropriate use scenario during the reference service life of the product of 20 years with following technical characteristics,</p> <ul style="list-style-type: none"> • Rated insulating voltage: 690V • IP degree of protection: IP55 conforming in accordance with the standard IEC 60529 • Regulations: compliant with IEC 61439-1 & IEC 61439-6
Specifications are:	<ul style="list-style-type: none"> • Busbar trunking rated current: 250A • Tap-off units with fuses or circuit breakers : 250A • Number of active conductors: 3+PE • Length of busbar trunking sections: 5m. Customized lengths available

Lists of Components Included in the Configuration:

Components	Description & Size (mm)	Qty	Device	Device Description
KSA250AB4	End Feed Box 250 A L x W x H = 501 x 173.5 x 308	1	Feed Unit Aluminium Busbar Trunking, 3L+N+PE Polarity Right or left mounting	Feed Unit used to feed a KS line by cables or directly from the bus bars in a switchboard for 250 to 400 A rating. It can be mounted on the end of a straight length. Supplied with end cover.
KSA250ED45010	Straight Distribution Length 5M 250 A L x W x H = 5000 x 54 x 146	3	Straight Length Aluminium Busbar Trunking, 3L+N+PE Polarity Number of outlets is 10	These components carry the current and supply loads. They constitute the basic structure of the line.
KSA250ED4306	Straight Distribution Length 3M 250 A L x W x H = 3000 x 54 x 146	2	Straight Length Aluminium Busbar Trunking, 3L+N+PE Polarity Number of outlets is 6	These components carry the current and supply loads. They constitute the basic structure of the line.
KSB32CM55	Connector 32A 5 Modules A x B x F = 135 x 158 x 175	4	Tap-OFF Units with wander sockets, 5 Modules 3L+N+PE Polarity, Pre wired connection	This tap-off unit can be equipped with most modular devices of the Acti 9 type: Rated current: 32 A with a window in front for visual and physical access to the devices. A transparent cover seals the window.
KSB400ZF1	Fixing Bracket 400 A L x W x H = 92 x 30 x 183	8	Fixing System Wall or Suspended on threaded rod mounting	The fixing system ensures that Canalis KSA is well secured, whatever the type of building structure. For attachment of the busbar trunking to the structure of the building, either directly or via a threaded rod, brackets, etc.
KSB63SM48	Tap OFF Unit 63A 8 Modules A x B x F = 357 x 158 x 202	2	Tap-OFF Units with Isolator, 8 Modules 3L+N+PE Polarity, Copper cable Lugs connection	These tap-off units accept most modular devices of the Acti 9 type. They have a window in front for visual and physical access to the devices. A transparent cover seals the window. Maximum rated current 63 A for eight modules.

Constituent materials

Reference product mass 159736.27 g Including the product and its packaging.



Plastics	8.2%
Metals	78.3%
Others	13.5%

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:	89%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECYLAB tool developed by Ecosystem, for components or materials not covered by the tool, data from the EIME database and the related PSR 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	The Product does not need any special installation operation.			
Use scenario	As Per PSR @ Load rate 30% and RLT 100%, The power dissipated by the Canalis KSA 250A is 5118.75 W for 20 years.			
Time representativeness	The collected data are representative of the year 2023			
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are similar and representative of the actual type of technologies used to make the product.			
Geographical representativeness	Europe			
Final assembly site	France (Dijon)			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Low voltage; 2018; Europe, EU-27 (A1-A2) Electricity Mix; Low voltage; 2018; France, FR (A3)	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27

Detailed results of the optional indicators mentioned in PCRd4 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 KSA 250A - Canalis KSA 250A							
Impact indicators	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads	
Contribution to climate change	kg CO2 eq	3.46E+04	1.18E+03	3.11E+01	2.15E+01	3.31E+04	3.06E+02	-8.50E+02	
Contribution to climate change-fossil	kg CO2 eq	3.45E+04	1.15E+03	3.11E+01	1.92E+01	3.30E+04	3.04E+02	-8.32E+02	
Contribution to climate change-biogenic	kg CO2 eq	7.11E+01	2.33E+01	0*	2.27E+00	4.41E+01	1.42E+00	-1.76E+01	
Contribution to climate change-land use and land use change	kg CO2 eq	5.08E-04	4.73E-04	0*	0*	0*	3.47E-05	0.00E+00	
Contribution to ozone depletion	kg CFC-11 eq	2.56E-04	1.12E-04	4.77E-08	2.37E-07	1.41E-04	2.02E-06	-1.20E-04	
Contribution to acidification	mol H+ eq	1.98E+02	8.21E+00	1.97E-01	5.38E-02	1.89E+02	1.12E+00	-6.35E+00	
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	1.48E-01	1.26E-02	0*	4.20E-04	9.06E-02	4.46E-02	-2.50E-03	
Contribution to eutrophication marine	kg N eq	2.29E+01	1.06E+00	9.23E-02	2.33E-02	2.14E+01	2.36E-01	-4.81E-01	
Contribution to eutrophication, terrestrial	mol N eq	3.38E+02	1.15E+01	1.01E+00	1.64E-01	3.22E+02	2.63E+00	-5.40E+00	
Contribution to photochemical ozone formation - human health	kg COVNM eq	7.36E+01	3.64E+00	2.55E-01	3.82E-02	6.89E+01	8.38E-01	-1.89E+00	
Contribution to resource use, minerals and metals	kg Sb eq	6.04E-02	5.66E-02	0*	0*	2.40E-03	1.42E-03	-1.05E-01	
Contribution to resource use, fossils	MJ	9.04E+05	4.32E+04	4.34E+02	1.80E+02	8.43E+05	1.72E+04	-1.42E+04	
Contribution to water use	m3 eq	1.63E+03	3.31E+02	0*	1.56E+00	1.17E+03	1.28E+02	-2.78E+02	

Inventory flows Indicators		Canalis KSA 250A - Canalis KSA 250A							
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads	
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.63E+05	6.09E+02	0*	3.61E+01	1.62E+05	3.52E+01	-4.05E+02	
Contribution to use of renewable primary energy resources used as raw material	MJ	1.65E+02	1.65E+02	0*	0*	0*	0*	-5.25E+01	
Contribution to total use of renewable primary energy resources	MJ	1.63E+05	7.74E+02	0*	3.61E+01	1.62E+05	3.52E+01	-4.57E+02	
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.03E+05	4.28E+04	4.34E+02	1.80E+02	8.43E+05	1.72E+04	-1.42E+04	
Contribution to use of non renewable primary energy resources used as raw material	MJ	4.43E+02	4.43E+02	0*	0*	0*	0*	-4.09E-04	
Contribution to total use of non-renewable primary energy resources	MJ	9.04E+05	4.32E+04	4.34E+02	1.80E+02	8.43E+05	1.72E+04	-1.42E+04	
Contribution to use of secondary material	kg	1.36E+01	1.36E+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	m ³	3.80E+01	7.72E+00	0*	3.64E-02	2.73E+01	2.98E+00	-6.47E+00	
Contribution to hazardous waste disposed	kg	2.45E+03	1.83E+03	0*	4.48E-01	6.18E+02	5.74E-01	-8.45E+03	
Contribution to non hazardous waste disposed	kg	6.10E+03	1.31E+03	1.09E+00	9.83E+00	4.76E+03	2.12E+01	-1.12E+03	
Contribution to radioactive waste disposed	kg	2.22E+00	1.22E+00	7.77E-04	1.02E-03	9.96E-01	1.93E-03	-8.07E-01	
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00	
Contribution to materials for recycling	kg	1.43E+02	1.84E+01	0*	8.88E-01	0*	1.24E+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	3.49E+00	6.03E-01	0*	1.68E+00	0*	1.21E+00	0.00E+00	

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

Contribution to biogenic carbon content of the product kg de C 0.00E+00

Contribution to biogenic carbon content of the associated packaging kg de C 5.87E+00

The calculation of the biogenic carbon is based on the APESA/RECORD for paper (28%), EN 16485 for Wood (39.52%) and ADEME for cardboard (37.8%).

Mandatory Indicators		Canalis KSA 250A - Canalis KSA 250A							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	3.31E+04	0*	0*	0*	0*	0*	3.31E+04	0*
Contribution to climate change-fossil	kg CO2 eq	3.30E+04	0*	0*	0*	0*	0*	3.30E+04	0*
Contribution to climate change-biogenic	kg CO2 eq	4.41E+01	0*	0*	0*	0*	0*	4.41E+01	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	1.41E-04	0*	0*	0*	0*	0*	1.41E-04	0*
Contribution to acidification	mol H+ eq	1.89E+02	0*	0*	0*	0*	0*	1.89E+02	0*
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	9.06E-02	0*	0*	0*	0*	0*	9.06E-02	0*
Contribution to eutrophication marine	kg N eq	2.14E+01	0*	0*	0*	0*	0*	2.14E+01	0*
Contribution to eutrophication, terrestrial	mol N eq	3.22E+02	0*	0*	0*	0*	0*	3.22E+02	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	6.89E+01	0*	0*	0*	0*	0*	6.89E+01	0*
Contribution to resource use, minerals and metals	kg Sb eq	2.40E-03	0*	0*	0*	0*	0*	2.40E-03	0*
Contribution to resource use, fossils	MJ	8.43E+05	0*	0*	0*	0*	0*	8.43E+05	0*
Contribution to water use	m3 eq	1.17E+03	0*	0*	0*	0*	0*	1.17E+03	0*

Inventory flows Indicators		Canalis KSA 250A - Canalis KSA 250A							
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.62E+05	0*	0*	0*	0*	0*	1.62E+05	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	1.62E+05	0*	0*	0*	0*	0*	1.62E+05	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	8.43E+05	0*	0*	0*	0*	0*	8.43E+05	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	8.43E+05	0*	0*	0*	0*	0*	8.43E+05	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m ³	2.73E+01	0*	0*	0*	0*	0*	2.73E+01	0*
Contribution to hazardous waste disposed	kg	6.18E+02	0*	0*	0*	0*	0*	6.18E+02	0*
Contribution to non hazardous waste disposed	kg	4.76E+03	0*	0*	0*	0*	0*	4.76E+03	0*
Contribution to radioactive waste disposed	kg	9.96E-01	0*	0*	0*	0*	0*	9.96E-01	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	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 v6.2, database version 2024-04 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

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-01180-V01.01-EN	Drafting rules	PCR-4-ed4-EN-2021 09 06
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Verifier accreditation N°	VH42	Information and reference documents	www.pep-ecopassport.org
Date of issue	06-2024	Validity period	5 years

Independent verification of the declaration and data, in compliance with ISO 14025 : 2006

Internal External

The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)

PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022

The components of the present PEP may not be compared with components from any other program.

Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"



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