Product Environmental Profile

ComPact NS 630b-1600



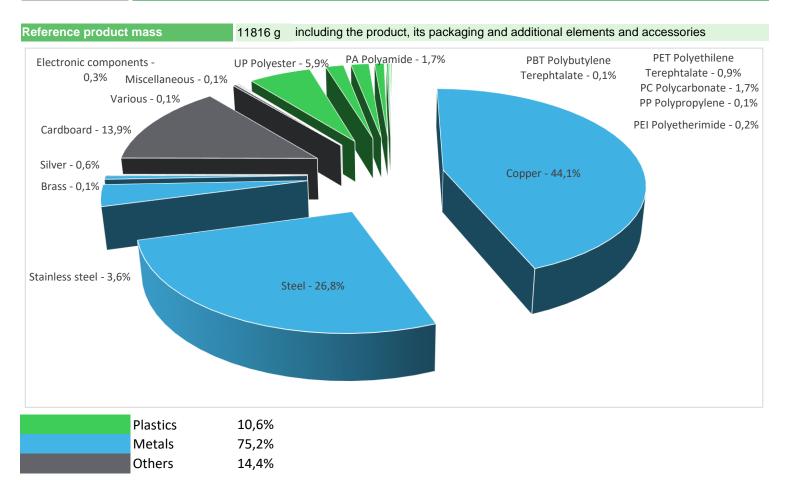




General information

Representative product	ComPact NS 630b-1600 -
Description of the product	The main purpose of the Compact NS 630b-1600 is to protect and control low-voltage distribution systems, it follows IEC60947-1/IEC60947-2 and lifetime is 20 years. The data used to make this PEP are the most representative of the product studied. No missing data is to be declared.
Functional unit	Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 690V AC and rated current 1250A at 50°C. This protection is ensured in accordance with the following parameters: - Number of poles 3 - Rated breaking capacity 50kA - Tripping curve, long time, short time and instantanous protections

Constituent materials



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

(1) Additional environmental information

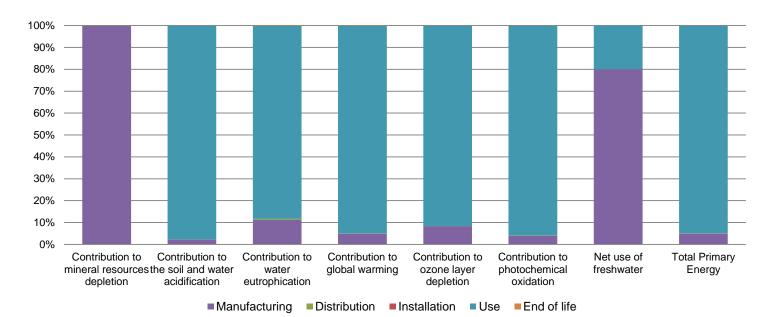
	The ComPact NS 630b-1600 presents the following relevent environmental aspects					
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified					
	Weight and volume of the packaging optimized, based on the European Union's packaging directive					
Distribution	Packaging weight is 1728 g, consisting of Carboard (78%), foam support (22%)					
	Packaging recycled materials is 85% of total packaging mass.					
	Product distribution optimised by setting up local distribution centres					
Installation	Ref 33250 does not require any installation operations					
Use	The product does not require special maintenance operations.					
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials					
End of life	This product contains two PCBAs 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:76%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).					

\mathcal{O} Environmental impacts

Reference life time	20 years						
Product category	Circuit-breakers						
Installation elements	Disposal of packaging, and transport to disposal of packaging are accounted for in the installation phase.						
llse scenario	Load rate: 50% of 1250A Use time rate: 30% for 20 years						
Geographical representativeness	Europe						
rechnological	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.						
	Manufacturing	Installation	Use	End of life			
Energy model used	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			

		630b-1600 -				
Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
ion kg Sb eq	8,36E-02	8,35E-02	0*	0*	4,67E-05	0*
cation kg SO ₂ eq	7,92E+00	1,66E-01	6,96E-03	0*	7,74E+00	2,77E-03
kg PO ₄ ³⁻ eq	3,30E-01	3,68E-02	1,60E-03	9,47E-05	2,90E-01	6,98E-04
kg CO ₂ eq	1,08E+03	5,29E+01	1,52E+00	0*	1,02E+03	1,12E+00
kg CFC11 eq	2,71E-04	2,26E-05	0*	0*	2,49E-04	6,11E-08
kg C_2H_4 eq	3,82E-01	1,50E-02	4,97E-04	0*	3,66E-01	2,95E-04
Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
m3	1,34E+01	1,07E+01	0*	0*	2,67E+00	0*
MJ	2,19E+04	1,07E+03	2,16E+01	0*	2,07E+04	1,53E+01
C	tion kg Sb eq cation kg SO ₂ eq kg PO ₄ ³⁻ eq kg CO ₂ eq kg CFC11 eq kg C ₂ H ₄ eq <u>Unit</u> m3	kg Sb eq 8,36E-02 cation kg SO2 eq 7,92E+00 kg PO4 ³⁻ eq 3,30E-01 kg CO2 eq 1,08E+03 kg CFC11 2,71E-04 kg C2H4 eq 3,82E-01 Unit Total m3 1,34E+01	kg Sb eq 8,36E-02 8,35E-02 cation kg SO ₂ eq 7,92E+00 1,66E-01 kg PO ₄ ³⁻ eq 3,30E-01 3,68E-02 kg CO ₂ eq 1,08E+03 5,29E+01 kg CFC11 eq 2,71E-04 2,26E-05 kg C ₂ H ₄ eq 3,82E-01 1,50E-02 Unit Total Manufacturing m3 1,34E+01 1,07E+01	kg Sb eq 8,36E-02 8,35E-02 0* cation kg SO ₂ eq 7,92E+00 1,66E-01 6,96E-03 kg PO ₄ ³⁻ eq 3,30E-01 3,68E-02 1,60E-03 kg CO ₂ eq 1,08E+03 5,29E+01 1,52E+00 kg CC ₂ eq 1,08E+03 5,29E+01 1,52E+00 kg CFC11 2,71E-04 2,26E-05 0* kg C ₂ H ₄ eq 3,82E-01 1,50E-02 4,97E-04 Manufacturing Distribution m3 1,34E+01 1,07E+01 0*	kg Sb eq 8,36E-02 8,35E-02 0* 0* cation kg SO ₂ eq 7,92E+00 1,66E-01 6,96E-03 0* kg PO ₄ ³⁻ eq 3,30E-01 3,68E-02 1,60E-03 9,47E-05 kg CO ₂ eq 1,08E+03 5,29E+01 1,52E+00 0* kg CO ₂ eq 1,08E+03 5,29E+01 1,52E+00 0* kg CFC11 2,71E-04 2,26E-05 0* 0* kg C ₂ H ₄ eq 3,82E-01 1,50E-02 4,97E-04 0* kg C ₂ H ₄ eq 3,82E-01 1,50E-02 4,97E-04 0* m3 1,34E+01 1,07E+01 0* 0*	kg Sb eq $8,36E-02$ $8,35E-02$ 0^* 0^* $4,67E-05$ cationkg SO_2 eq $7,92E+00$ $1,66E-01$ $6,96E-03$ 0^* $7,74E+00$ kg PO_4^3 eq $3,30E-01$ $3,68E-02$ $1,60E-03$ $9,47E-05$ $2,90E-01$ kg CO_2 eq $1,08E+03$ $5,29E+01$ $1,52E+00$ 0^* $1,02E+03$ kg CFC11 $2,71E-04$ $2,26E-05$ 0^* 0^* $2,49E-04$ kg C_2H_4 eq $3,82E-01$ $1,50E-02$ $4,97E-04$ 0^* $3,66E-01$ UnitTotalManufacturingDistributionInstallationUsem3 $1,34E+01$ $1,07E+01$ 0^* 0^* $2,67E+00$

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Optional indicators		ComPact NS	630b-1600 -				
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1,12E+04	6,44E+02	2,14E+01	1,22E+00	1,05E+04	1,26E+01
Contribution to air pollution	m³	7,69E+04	3,29E+04	6,49E+01	0*	4,39E+04	9,80E+01
Contribution to water pollution	m³	4,94E+04	6,03E+03	2,51E+02	1,42E+01	4,30E+04	1,10E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1,91E+00	1,91E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1,54E+03	5,80E+01	0*	0*	1,48E+03	0*
Total use of non-renewable primary energy resources	MJ	2,03E+04	1,02E+03	2,15E+01	0*	1,93E+04	1,53E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1,51E+03	3,01E+01	0*	0*	1,48E+03	0*
Use of renewable primary energy resources used as raw material	MJ	2,79E+01	2,79E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2,03E+04	9,80E+02	2,15E+01	0*	1,93E+04	1,53E+01
Use of non renewable primary energy resources used as raw material	MJ	3,54E+01	3,54E+01	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	1,00E+03	9,91E+02	0*	0*	0*	1,18E+01
Non hazardous waste disposed	kg	3,89E+03	6,09E+01	0*	0*	3,83E+03	0*
Radioactive waste disposed	kg	3,14E+00	2,06E-02	0*	0*	3,12E+00	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	9,93E+00	1,09E+00	0*	1,72E+00	0*	7,12E+00
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	7,61E-02	0*	0*	0*	0*	7,61E-02
Exported Energy	MJ	5,44E-03	5,12E-04	0*	4,93E-03	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 2018-11 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).

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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	06/2020	Information and reference documents	www.pep-ecopassport.org		
		Validity period	5 years		
Independent verification of	the declaration and data, in complian	nce with ISO 14025 : 2010			
Internal	External X				
The PCR review was cond	ucted by a panel of experts chaired b	y 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 w declarations »	ith ISO 14025 : 2010 « Environmenta	al labels and declarations. Type III en	vironmental		

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