

Product Environmental Profile

ELKO One - Two-way switch - screwless - pure white color

as referent product for:

All ELKO switches





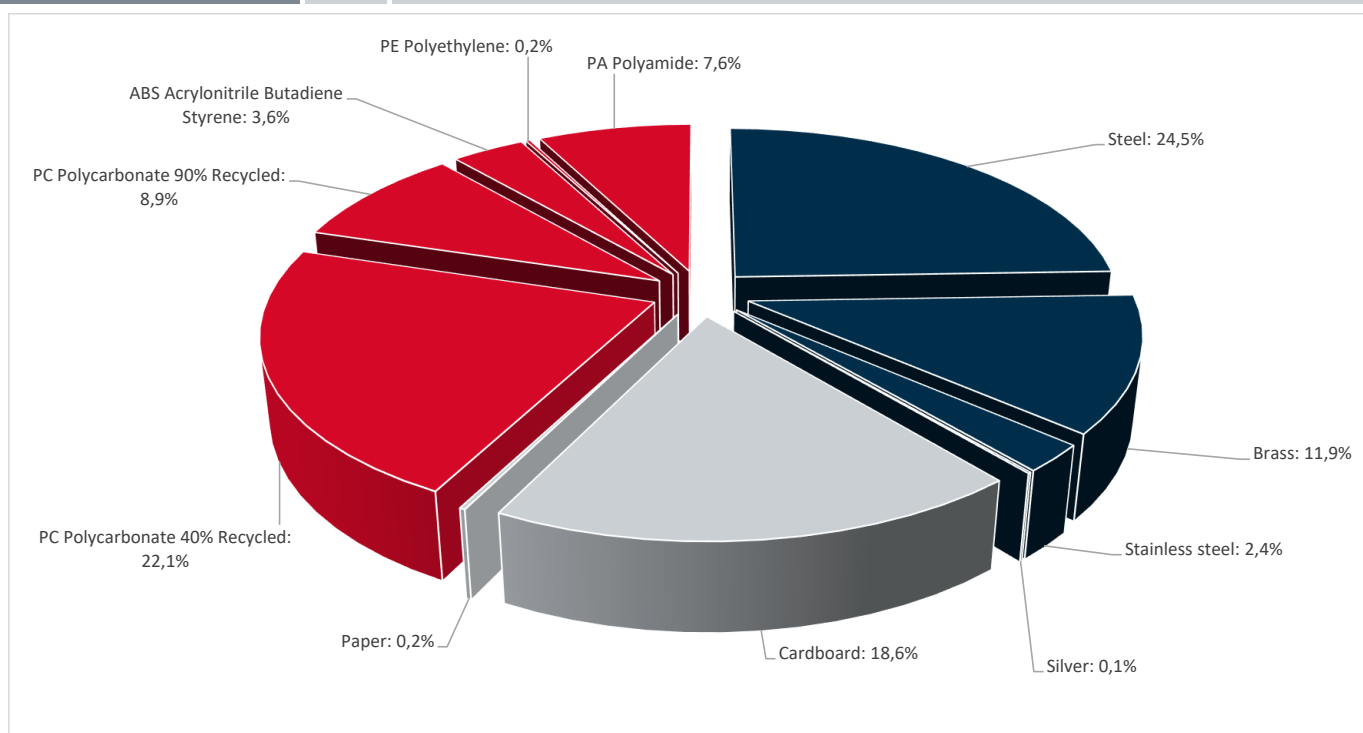
General information

Reference product	ELKO One - Two-way switch - screwless - pure white color - EKO50048+EKO50000
Description of the product	ELKO One 2way 16A with single rocker switch is a product to give the control for a lighting circuit in an electricity network. This product is provided with front aesthetic frame.
Description of the range	Representative of all variants of ELKO switches, with or without accessories, for all type of wirings and terminals, for all type of finishings. The environmental impacts of this reference product are representative of the impacts of the other products of the range which are developed with a similar technology.
Functional unit	Establish, support, interrupt for 20 years, in normal conditions of electrical circuit, a rated current 16A and rated voltage 250V with IP21D protection in accordance with the standard IEC60529, and IK04 in accordance with the standard IEC62262.



Constituent materials

Reference product mass	100 g	including the product, its packaging and additional elements and accessories
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Plastics	42,4%
Metals	38,8%
Others	18,8%



Substance assessment

Details of ROHS and REACH substances information are available on the ELKO website

<https://www.elko.no/om-elko/miljo/>



Additional environmental information

End Of Life	Recyclability potential:	98%	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	Switches			
Installation elements	The disposal of the packaging materials are accounted during the installation phase (including transport to disposal).			
Use scenario	The product is in active mode 30% of the time with a power use of 0.896 W (with 50% of the load rate 16A = 8 A) and in off mode 70% of the time with a power use of 0 W , for 20 years			
Geographical representativeness	Sweden, Norway			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; GE	Electricity Mix; Production mix; Low voltage; SE	Electricity Mix; Production mix; Low voltage; SE	Electricity Mix; Production mix; Low voltage; SE

Mandatory Indicators			ELKO One - Two-way switch - screwless - pure white color - EKO50048+EKO50000					
Impact indicators	Unit	Total	Manufacturing [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to climate change	kg CO2 eq	1,09E+00	4,56E-01	1,31E-02	3,44E-02	3,51E-01	2,37E-01	-1,31E-01
Contribution to climate change-fossil	kg CO2 eq	1,08E+00	4,48E-01	1,31E-02	3,28E-02	3,49E-01	2,37E-01	-1,30E-01
Contribution to climate change-biogenic	kg CO2 eq	1,15E-02	7,81E-03	0*	1,53E-03	2,12E-03	0*	-1,72E-03
Contribution to climate change-land use and land use change	kg CO2 eq	0,00E+00	0*	0*	0*	0*	0*	0,00E+00
Contribution to ozone depletion	kg CFC-11 eq	3,71E-08	2,73E-08	2,01E-11	2,27E-09	6,84E-09	6,89E-10	-3,21E-08
Contribution to acidification	mol H+ eq	9,56E-03	3,24E-03	8,44E-05	1,36E-04	5,69E-03	4,11E-04	-9,68E-04
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	2,46E-05	2,68E-06	4,91E-09	2,48E-07	2,17E-05	2,00E-08	-6,98E-07
Contribution to eutrophication marine	kg N eq	1,02E-03	3,93E-04	3,96E-05	3,62E-05	4,74E-04	7,75E-05	-1,08E-04
Contribution to eutrophication, terrestrial	mol N eq	2,64E-02	4,09E-03	4,35E-04	2,73E-04	2,07E-02	8,82E-04	-1,11E-03
Contribution to photochemical ozone formation - human health	kg COVNM eq	2,90E-03	1,38E-03	1,10E-04	7,29E-05	1,03E-03	2,99E-04	-3,49E-04
Contribution to resource use, minerals and metals	kg Sb eq	1,38E-04	1,38E-04	0*	0*	3,62E-07	0*	-4,04E-05
Contribution to resource use, fossils	MJ	1,07E+02	1,40E+01	1,83E-01	3,58E-01	8,44E+01	8,10E+00	-1,90E+00
Contribution to water use	m3 eq	2,54E-01	1,53E-01	4,97E-05	1,47E-02	3,38E-02	5,26E-02	-9,55E-02

Inventory flows Indicators			ELKO One - Two-way switch - screwless - pure white color - EKO50048+EKO50000					
Inventory flows	Unit	Total	Manufact.	Distribution	Installation	Use	End of Life	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	3,56E+01	0*	0*	2,57E-02	3,56E+01	0*	1,91E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	3,75E-01	3,75E-01	0*	0*	0*	0*	-3,40E-01
Contribution to total use of renewable primary energy resources	MJ	3,60E+01	3,31E-01	0*	2,57E-02	3,56E+01	0*	-1,49E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,06E+02	1,32E+01	1,83E-01	3,58E-01	8,44E+01	8,10E+00	-2,42E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	8,06E-01	8,06E-01	0*	0*	0*	0*	5,24E-01
Contribution to total use of non-renewable primary energy resources	MJ	1,07E+02	1,40E+01	1,83E-01	3,58E-01	8,44E+01	8,10E+00	-1,90E+00
Contribution to use of secondary material	kg	1,87E-02	1,87E-02	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	5,91E-03	3,56E-03	1,16E-06	3,42E-04	7,87E-04	1,23E-03	-2,22E-03
Contribution to hazardous waste disposed	kg	1,54E+00	1,44E+00	0*	4,06E-04	1,14E-02	8,59E-02	-3,14E+00
Contribution to non hazardous waste disposed	kg	1,02E+00	7,78E-01	4,60E-04	1,12E-01	8,68E-02	4,23E-02	-5,24E-01
Contribution to radioactive waste disposed	kg	2,04E-04	1,78E-04	3,28E-07	1,50E-05	9,02E-06	1,90E-06	-3,13E-05
Contribution to components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*	0,00E+00
Contribution to materials for recycling	kg	5,70E-02	0*	0*	1,89E-02	0*	3,81E-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	0,00E+00	0*	0*	0*	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 and the EF 3.0 method of calculation.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available on demand in a digital format - Country Customer Care Center - <https://www.elko.no/kontakt-oss/>

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request

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 :	ELKO-01102-V01.01-EN	Drafting rules	PEP-PCR-ed4-2021 09 06
Verifier accreditation N°	VH48	Supplemented by	PSR-0005-ed2-2016 03 29
Date of issue	11/2023	Information and reference documents	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2006			
Internal	External	X	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEPs are compliant with XP C08-100-1 :2016 or EN 50693:2019			
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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