

Product Environmental Profile
SIMON 360 LOLA SWITCHES



Registration number	SIMO-00025-V01.01-EN	Drafting rules	PCR-ed4-EN-2021 09 06
		Supplemented by	PSR-0005-ed3-EN-2023 06 06
Verifier accreditation number	VH45	Information and reference documents	www.pep-ecopassport.org
Date of issue	June 2026	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)			
PEP are complaint with XP CO08-100-1:2016 or EN 50693:2019			
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14025:2006 “Environmental labels and declarations. Type III environmental declarations”			

General information

Company information	SIMON S.A.U. Sancho de Ávila, 66 08018, Barcelona Website: www.simonelectric.com
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Product description and homogeneous environmental family	Family of Simon 360 Lola switches. All products in the family are electronic wall-mounted switches with a rated current of 10AX and a rated voltage of 250V. Lola is Simon's digital ecosystem for the comprehensive management of homes, buildings and cities, allowing total control of spaces. The PEP would include a group of similar products, which all belong to the same product family.
Product standards	Dir. 2014/30/UE RED; Dir. 2011/65/UE RoHS + post. Mod. EN 50428:2005 + A1:2007 + A2:2009; EN IEC 63000:2018; ETSI EN 300328 V2.2.2.
Reference product	Combination of three parts to form the final product: • Mechanism 7510201-039 • Rocker 36110034-190 • Outer plastic frame 36000610-190 Extrapolation coefficients will be calculated and applied for each stage of the life cycle in order to calculate the impacts of the other products of the family.
Functional unit	Connect/disconnect a load of up to 16 A at 250 V through a Wi-Fi communication protocol, requiring connection to the HUB MINI, while protecting the user from direct contact with live parts in household and commercial applications, according to the use scenario defined by the PSR and for a reference service life of 10 years.
Reference flow	• Product with packaging: 192.79 g • Product without packaging: 142.83 g
Product category	Other equipment
Reference lifetime	10 years
LCA software & Database	The environmental impact assessment developed with Simapro 10.2.0.0 and the background dataset retrieved from Ecoinvent 3.11 libraries.

Constituent materials

Material		Weight (g)	Percentage (%)
Plastics 35.76 %	Urea	52.60	27.28%
	Polyamide	8.80	4.56%
	Other plastics	7.53	3.91%
Electronic component 18.67 %	Electronic component	36.00	18.67%
Metals 18.52 %	Steel	35.70	18.52%
Others 1.14 %	Glass fibre	2.20	1.14%
Packaging 25.91%	Cardboard	44.21	22.93%
	Paper	5.56	2.88%
	Plastic	0.20	0.10%
Reference product		142.83	74.09%
Packaging		49.96	25.91%
TOTAL		192.76	100.00

Description of life cycle stages

Manufacturing stage	Manufactured at a Simon's plants in Martorelles and Olot (Spain) certified with ISO 14001. 
Distribution stage	The products are distributed directly from Simon's logistics platform to the distributors, where the installers (final customers) can purchase them.
Installation stage	The installation process is done manually and it does not require any additional component or process apart from the product itself.
Use stage	The use scenario is defined by the corresponding PSR of PEP Ecopassport for this type of products: Reference lifetime (RLT): 10 years The functioning mode for these products includes the on and stand-by modes, for which the power and duration have been considered. This product has no maintenance. The product quality is very high and it can very easily last 10 years on the client's house. No additional electricity consumption is required for maintenance during the 10 years of use.
End-of-life stage	The reference product and the rest of the products of the family comply with Directive 2012/19/EU on the disposal of Waste Electrical and Electronic Equipment. The end-of-life scenario provided by standard EN 50693 has been used to simulate this stage.

Environmental impacts

Results of mandatory indicators per Functional Unit of the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
Climate change - Total	kg CO ₂ eq	1.82E+01	1.47E+00	2.25E-02	8.67E-02	1.65E+01	1.65E+01	1.78E-01	-8.85E-02
Climate change – Fossil	kg CO ₂ eq	1.80E+01	1.54E+00	2.24E-02	3.35E-03	1.62E+01	1.62E+01	1.78E-01	-8.77E-02
Climate change – Biogenic	kg CO ₂ eq	5.69E-02	-7.07E-02	4.73E-06	8.33E-02	4.43E-02	4.43E-02	2.49E-05	-4.38E-04
Climate change - Luluc	kg CO ₂ eq	2.15E-01	3.20E-03	7.43E-06	8.49E-07	2.12E-01	2.12E-01	2.40E-05	-3.61E-04
Ozone depletion (OD)	kg CFC-11 eq	3.95E-07	3.78E-08	4.90E-10	5.52E-11	3.56E-07	3.56E-07	6.97E-10	-1.32E-09
Acidification of soil and water (A)	mol H ⁺ eq	1.01E-01	1.23E-02	7.21E-05	1.52E-05	8.85E-02	8.85E-02	1.62E-04	-3.73E-04
Freshwater eutrophication	kg P eq	6.51E-04	2.64E-04	1.64E-07	3.01E-08	3.86E-04	3.86E-04	6.11E-07	-5.86E-06
Marine aquatic eutrophication	kg N eq	1.65E-02	1.73E-03	2.40E-05	1.04E-05	1.47E-02	1.47E-02	5.74E-05	-1.16E-04
Terrestrial eutrophication	mol N eq	1.90E-01	2.11E-02	2.64E-04	6.36E-05	1.68E-01	1.68E-01	5.79E-04	-1.08E-03
Photochemical ozone creation (POCP)	kg NMVOC eq	6.66E-02	6.09E-03	1.09E-04	2.63E-05	6.02E-02	6.02E-02	2.02E-04	-3.21E-04
Depletion of abiotic resources – elements	kg Sb eq	5.58E-04	1.90E-04	7.57E-08	3.77E-09	3.68E-04	3.68E-04	1.65E-07	-6.15E-07
Depletion of abiotic resources – Fossil fuels	MJ	5.24E+02	2.11E+01	3.18E-01	4.28E-02	5.02E+02	5.02E+02	5.12E-01	-1.06E+00
Water use	m ³ eq. depriv.	1.68E+01	5.02E-01	1.23E-03	1.30E-04	1.63E+01	1.63E+01	1.21E-03	-3.08E-02

Results of inventory flows indicators & indicators describing the use of secondary materials for the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
PERE	MJ	2.04E+02	5.00E+00	5.02E-03	6.48E-01	1.98E+02	1.98E+02	2.05E-02	-3.43E-01
PERM	MJ	0.00E+00	6.47E-01	0.00E+00	-6.47E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.04E+02	5.64E+00	5.02E-03	1.17E-03	1.98E+02	1.98E+02	2.05E-02	-3.43E-01
PENRE	MJ	5.24E+02	1.99E+01	3.18E-01	4.71E-02	5.02E+02	5.02E+02	1.70E+00	-1.06E+00
PENRM	MJ	0.00E+00	1.19E+00	0.00E+00	-4.30E-03	0.00E+00	0.00E+00	-1.19E+00	0.00E+00
PENRT	MJ	5.24E+02	2.11E+01	3.18E-01	4.28E-02	5.02E+02	5.02E+02	5.12E-01	-1.06E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	2.72E-01	1.75E-02	3.97E-05	-9.67E-06	2.55E-01	2.55E-01	1.64E-05	-9.61E-04

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW: Freshwater use

Results of waste category indicators and output flow indicators for the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
Hazardous waste disposed	kg	2.01E-03	2.87E-04	2.17E-06	2.92E-07	1.72E-03	1.72E-03	3.48E-06	-7.12E-06
Non-hazardous waste disposed	kg	2.27E+00	1.10E-01	1.53E-02	5.30E-03	2.06E+00	2.06E+00	8.15E-02	-1.13E-02
Radioactive waste disposed	kg	4.14E-03	3.96E-05	9.36E-08	3.09E-08	4.10E-03	4.10E-03	3.64E-07	-1.47E-06
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	1.06E-01	3.74E-02	0.00E+00	2.47E-02	0.00E+00	0.00E+00	4.35E-02	0.00E+00
Materials for energy recovery	kg	7.06E-02	8.36E-03	0.00E+00	2.75E-03	0.00E+00	0.00E+00	5.95E-02	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Results of biogenic carbon for the reference product:

Indicator	Unit	Quantity
Biogenic carbon content of the product	Kg of C	0.00E+00
Biogenic carbon content of the packaging	kg of C	2.10E-02

Extrapolation rules

Extrapolation factors have been calculated to apply the results of the reference product to the other products in the Simon 360 Lola switches. These factors are based on the main environmental aspects of each life cycle stage, as all products in the family use the same materials and manufacturing process.

Simon 360 Lola Switches are composed of three parts: the mechanism, the rocker and the outer frame. All mechanisms and rockers are single element of different colour, while the outer frame can vary in the number of elements included. Based on this, the extrapolation factors are defined as follows for the stages of the life cycle:

$$\text{Total impact of the socket} =$$

$$(N * \text{Impact of the mechanism}) + (N * \text{Impact of the rocker}) + \text{Impact of the outer frame}$$

In which N is the number of elements of the final product, which has to match the number of elements in the frames.

Extrapolation coefficients:

Reference code	N: Number of mechanisms	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
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MECHANISM OF THE SOCKET

7510201-039	1	8.76E-01	8.76E-01	8.76E-01	1.00E+00	8.76E-01	8.76E-01
7510314-039	1	5.01E-01	5.01E-01	1.33E-01	1.00E+00	6.59E-01	5.01E-01
7510316-039	1	5.01E-01	5.01E-01	1.33E-01	1.00E+00	6.59E-01	5.01E-01
7510321-039	1	5.01E-01	5.01E-01	1.33E-01	1.00E+00	6.59E-01	5.01E-01
7510333-039	1	5.01E-01	5.01E-01	1.33E-01	1.00E+00	6.59E-01	5.01E-01

ROCKER

36110034-190	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110034-098	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110034-099	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110020-190	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110020-098	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110020-099	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110080-190	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110080-098	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02
36110080-099	1	2.65E-02	2.65E-02	2.65E-02	0.00E+00	2.65E-02	2.65E-02

OUTER FRAME

36000610-190	1	9.79E-02	9.79E-02	9.79E-02	0.00E+00	9.79E-02	9.79E-02
36000610-098	1	9.79E-02	9.79E-02	9.79E-02	0.00E+00	9.79E-02	9.79E-02
36000610-099	1	9.79E-02	9.79E-02	9.79E-02	0.00E+00	9.79E-02	9.79E-02

Reference code	N: Number of mechanisms	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
36000620-190	2	1.15E-01	1.15E-01	4.21E-02	0.00E+00	1.32E-01	1.15E-01
36000620-098	2	1.15E-01	1.15E-01	4.21E-02	0.00E+00	1.32E-01	1.15E-01
36000620-099	2	1.15E-01	1.15E-01	4.21E-02	0.00E+00	1.32E-01	1.15E-01
36000630-190	3	1.53E-01	1.53E-01	4.21E-02	0.00E+00	1.78E-01	1.53E-01
36000630-098	3	1.53E-01	1.53E-01	4.21E-02	0.00E+00	1.78E-01	1.53E-01
36000630-099	3	1.53E-01	1.53E-01	4.21E-02	0.00E+00	1.78E-01	1.53E-01
36000640-190	4	1.77E-01	1.77E-01	8.08E-02	0.00E+00	1.99E-01	1.77E-01
36000640-098	4	1.77E-01	1.77E-01	8.08E-02	0.00E+00	1.99E-01	1.77E-01
36000640-099	4	1.77E-01	1.77E-01	8.08E-02	0.00E+00	1.99E-01	1.77E-01

* The reference product is highlighted.