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Product Environmental Profil

Radio motor for rolling shutters S&SO-RS100 io, S&SO-RS100 io Hybrid

A leading player in the housing industry for over 50 years, SOMFY is working to reduce its carbon emissions by 50% by 2030 and like so helps its customers and partners in their environmental approach.

Our actions to reduce our carbon footprint:

OFFER ECO-DESIGNED* PRODUCTS WITH A REDUCED ENVIRONMENTAL IMPACT THROUGHOUT THEIR LIFE CYCLE

OFFER SOLUTIONS THAT IMPROVE THE ENERGY EFFICIENCY OF BUILDINGS AND THUS LIMIT CO2 EMISSIONS.

[1]. Somfy's eco-design approach, identified by the ACT FOR GREEN label, aims to reduce the environmental impact of products throughout their life cycle, from the extraction of raw materials to the end of their life, by placing requirements above current regulations.

— Reference product

> Reference product

S&SO-RS100 io Hybrid 15

Réf.	5141718

> Functional unit

Ensure the closing and opening action by performing 14 000 operating cycles, and a reference service life of 15 years, with a torque of 15 Nm, on a length of 2 meters, corresponding to 13 winding turns per half-cycle, with a tube diameter of 50 mm.

> References covered

5142200	S&SO-RS100 io 10	5142210	S&SO-RS100 io 15 RH	5142205	S&SO-RS100 io HYBRID 6 TH
5142203	S&SO-RS100 io 10 TH	5141718	S&SO-RS100 io HYBRID 15	5143514	S&SO-RS100 io HYBRID 6 RH
5142209	S&SO-RS100 io 10 RH	5142207	S&SO-RS100 io HYBRID 15 TH	5105052	S&SO-RS100 io 20
5142198	S&SO-RS100 io HYBRID 10	5143516	S&SO-RS100 io HYBRID 15 RH	5115781	S&SO-RS100 io 20 TH
5142206	S&SO-RS100 io HYBRID 10 TH	5142199	S&SO-RS100 io 6	5142407	S&SO-RS100 io 20 RH
5143515	S&SO-RS100 io HYBRID 10 RH	5142202	S&SO-RS100 io 6 TH	5105044	S&SO-RS100 io HYBRID 20
5142201	S&SO-RS100 io 15	5142208	S&SO-RS100 io 6 RH	5115785	S&SO-RS100 io HYBRID 20 TH
5142204	S&SO-RS100 io 15 TH	5142197	S&SO-RS100 io HYBRID 6	5142410	S&SO-RS100 io HYBRID 20 RH

Materials and substances

All useful measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing.

Plastics		Metals		Other	
	%		%		%
PVC	7.0	**Steel**	47.0	**Glass fiber**	5.8
PA66	5.9	**Copper**	6.8	**Paint**	0.6
PBT	4.1	**Magnet**	2.3	**Lubricant**	0.3
POM	4.1	**Zamak**	2.1	**Other**	0.5
PA6	0.7	**Aluminium**	0.3	**Sum**	7.1
Other	0.9	**Other**	0.8	Packaging	
Sum	22.7	**Sum**	59.2	**Cardboard**	8.1
				Paper	2.9
				Sum	11.0
Total mass of the reference product : 1720g					
Estimated recyclable content : 54.4%					

> CHEMICAL SUBSTANCES

The product covered by this PEP comply with REACH regulation and RoHS directive 2011/65/EU, 2015/863 et 201/2102.

— Manufacturing

The devices covered in this PEP are manufactured in a production that has adopted an environmental management approach.

> Energy model
French mix

— Distribution

> Packaging is continuously improved by reducing the amount and using a maximum of recycled materials

> The unit pack has been modeled here. It is made up of:
- 100% recycled fiber paper instructions
- cardboard with a minimum of 50% recycled fibers

— Installation

> Installation elements
There is no element included in this phase.

> Installation processes
There is no installation process

> Energy model
Not applicable

— Use

For the considered scenario, the product has a power of 22 W in active mode during 0.276% of the life cycle, and 0.47W during 99.724% of his life cycle.

> Energy model of the use phase: European mix

> Consumables and maintenance : None

— End of life

> Typical transport conditions
Considering the complexity of the electric and electronic recycling channel and our lack of knowledge about the end-of-life processes implemented all around the world, we considered:

- 200 km of transport.
- A waste pretreatment of electrical and electronic equipment, including dismantling and material separation
- A waste incineration of electrical and electronic equipment.

Environmental impacts

Evaluation of the environmental impact covers the following life cycle stages: manufacturing, distribution, installation, use and end of life. All calculations are done with EIME software version EIME© v5.9.3 and CODDE 2022-01.

Indicators	Units	Global	Manufacturing	Distribution	Installation	Use	End of life
Acidification potential of soil and water	Kg eq. SO_2	9.61e-2	3.25e-2	1.51e-2	6.91e-5	4.81e-2	3.42e-4
Abiotic depletion (elements. ultimate reserves)	Kg eq. Antimoine	1.68e-3	1.68e-3	2.05e-8	6.82e-10	2.83e-6	4.43e-9
Abiotic depletion (fossil fuels)	MJ	5.60e+2	1.23e+2	7.20e+0	1.75e-1	4.28e+2	7.86e-1
Air pollution	m^3	3.62e+3	1.63e+3	7.36e+1	2.18e+0	1.90e+3	9.64e+0
Eutrophication	kg eq. PO4	1.70e-2	5.53e-3	1.51e-3	4.17e-4	8.86e-3	6.88e-4
Global Warming	kg eq. CO2	4.06e+1	1.19e+1	5.63e-1	2.43e-1	2.75e+1	3.81e-1
Ozone layer depletion	kg eq. CFC-11	1.09e-6	9.72e-7	9.75e-10	6.38e-10	1.09e-7	2.23e-9
Photochemical oxidation	kg eq. ethylene	7.78e-3	3.16e-3	7.51e-4	5.84e-5	3.78e-3	2.58e-5
Water pollution	m^3	2.50e+3	1.41e+3	8.42e+1	1.21e+1	9.72e+2	1.66e+1
Total Primary Energy	MJ	1.13e+3	2.51e+2	7.24e+0	1.92e-1	8.66e+2	8.91e-1
Total use of renewable primary energy resources	MJ	1.48e+2	8.11e+0	9.27e-3	1.68e-3	1.39e+2	1.60e-2
Total use of non-renewable primary energy resources	MJ	9.78e+2	2.43e+2	7.23e+0	1.90e-1	7.26e+2	8.75e-1
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.47e+2	7.69e+0	9.27e-3	1.68e-3	1.39e+2	1.60e-2
Use of renewable primary energy resources used as raw material	MJ	4.19e-1	4.19e-1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of nonrenewable primary energy excluding nonrenewable primary energy used as raw material	MJ	9.67e+2	2.32e+2	7.23e+0	1.90e-1	7.26e+2	8.75e-1
Use of nonrenewable primary energy resources used as raw material	MJ	1.09e+1	1.09e+1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of nonrenewable secondary fuels	MJ	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of renewable secondary fuels	MJ	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of secondary material	kg	4.87e-1	4.87e-1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Net use of fresh water	m3	2.77e+0	1.53e+0	4.39e-5	1.92e-5	1.24e+0	1.67e-4
Hazardous waste disposed	kg	3.30e+1	3.23e+1	0.00e+0	1.71e-4	5.33e-1	2.01e-1
Non hazardous waste disposed	kg	1.13e+1	5.59e+0	1.75e-2	1.93e-1	4.10e+0	1.43e+0
Non hazardous waste disposed	kg	3.06e-3	2.17e-3	1.22e-5	2.21e-6	8.59e-4	1.92e-5
Components for reuse	kg	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Materials for recycling	kg	2.82e-2	2.82e-2	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Materials for energy recovery	kg	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Exported Energy	MJ	1.21e-1	9.42e-2	0.00e+0	2.69e-2	0.00e+0	0.00e+0

> Here are the impacts of the B module.

Indicators	Units	Use phase	B1	B2	B3	B4	B5	B6	B7
Acidification potential of soil and water	kg SO2 eq	4.81e-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81e-2	0.00E+00
Abiotic depletion (elements. ultimate reserves)	Kg eq. Antimoine	2.83e-6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83e-6	0.00E+00
Abiotic depletion (fossil fuels)	MJ	4.28e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28e+2	0.00E+00
Air pollution	m^3	1.90e+3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90e+3	0.00E+00
Eutrophication	kg PO4--- eq	8.86e-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86e-3	0.00E+00
Global Warming	kg CO2 eq.	2.75e+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75e+1	0.00E+00
Ozone layer depletion	kg CFC-11 eq.	1.09e-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09e-7	0.00E+00
Photochemical oxidation	kg ethylene eq.	3.78e-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78e-3	0.00E+00
Water pollution	m^3	9.72e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72e+2	0.00E+00
Total Primary Energy	MJ	8.66e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.66e+2	0.00E+00
Total use of renewable primary energy resources	MJ	1.39e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39e+2	0.00E+00
Total use of non-renewable primary energy resources	MJ	7.26e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26e+2	0.00E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.39e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39e+2	0.00E+00
Use of renewable primary energy resources used as raw material	MJ	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Use of nonrenewable primary energy excluding nonrenewable primary energy used as raw material	MJ	7.26e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26e+2	0.00E+00
Use of nonrenewable primary energy resources used as raw material	MJ	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Use of nonrenewable secondary fuels	MJ	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Use of renewable secondary fuels	MJ	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Use of secondary material	kg	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Net use of fresh water	m3	1.24e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24e+0	0.00E+00
Hazardous waste disposed	kg	5.33e-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33e-1	0.00E+00
Non hazardous waste disposed	kg	4.10e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10e+0	0.00E+00
Non hazardous waste disposed	kg	8.59e-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59e-4	0.00E+00
Components for reuse	kg	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Materials for recycling	kg	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Materials for energy recovery	kg	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Exported Energy	MJ	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00

> Those impacts are only applicable to the reference product on page 1.

> Extrapolation rule

For each phase of the life cycle. there is an extrapolation factor. To obtain the impacts of the other product. you need to multiply by the specific extrapolation factor.

	Manufacturing	Distribution	Installation	Use	End of life	Example for Use Phase Global warming (kg eq. CO2)
6/17	0.95	0.88	1.00	0.96	0.82	2.65E+01
10/17	0.95	0.88	1.00	1.00	0.82	2.75E+01
15/17	1.00	1.00	1.00	1.00	1.00	2.75E+01
20/17	1.00	1.00	1.00	1.10	1.00	3.03E+01

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Accreditation number: VH18	Programme information: www.pep-ecopassport.org
Date of issue: 08-2022	Validity period: 5 years
Independent verification of the declaration and data. in compliance with ISO 14025 : 2006 Internal ☐ External ☑ Bureau Veritas LCIE	
The PCR review was conducted by a panel of experts chaired by 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 with ISO 14025: 2006 “Environmental labels and declarations. Type III environmental déclarations	
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