



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

Sonesse 40 RTS

Réf. **5134001**

> Functional unit

"To ensure the closing and opening action by performing 10 000 operations cycles, with a torque of 9 N.m and on a length of 2 meters, for a lifetime of 15 years corresponding to a 16 winding turns per half cycle with a tube diameter of 40 mm."

> References covered

Gamme	Version N.m/RPM	Reference	Gamme	Version N.m/RPM	Reference	Gamme	Version N.m/RPM	Reference
G1	3/30	5133992	G1	9/12	5134001	G2	4/36	5133996
		5133993			5156748			5147404
		5154232		1,3/50	5133989			5147407
		5154233	G6	3/36	5133994			5147408
		5154586			5133995			5134002
		5154588		9/14	5134003			5147406
	6/20	5133997			5134004			5147409
		5154587		6/24	5133999		6/24	5133998
		5154589			5134000			5147405
		5156744					1,3/60	5133990

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	
	%		%		%
PA66	5,6	Steel	50,7	Glass fiber	4,10
POM	2,1	Copper	5,5	Product unspecified	0,30
PC	1,3	Zamak	1,3	Lubricant	0,20
PET	1,0	Bronze	0,9	Other	<0,1
Silicone	0,4	Ferrite	0,4	Sum	4,60
Other	0,1	Other	0,0	Packaging	
Sum	10,5	Sum	58,8	Cardboard	18,6
				Paper	7,6
				Sum	26,1
Total mass of the reference product: 1.75 kg					
Estimated recyclable content : 13.9%					

> CHEMICAL SUBSTANCES

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

Representativeness

> Data has been collected between January and April 2023 by our design team, then treated and analyzed in July and August 2023.

> Data are related to the location of the production and assembly.

> Data matches with previous technology and commercial references only.



— Manufacturing —

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

> Energy model

French mix 2018



— 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

> Packaging's end of life

89% recycling / 9.5% incineration without energy recovery / 1.5% landfill for cardboard and paper



— Use —

For the considered scenario, the product has a power of 120 W in active mode during 0.385 % of the life cycle, and 0.236W during 99.615 % of his life cycle.

> **Energy model of the use phase:** European mix 2018

> **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
Resource use, minerals and metals (Abiotic resource depletion – Elements)	kg SB eq.	2.48e-3	2.47e-3	2.03e-8	5.64e-9	2.76e-6	3.27e-9
Resource use, fossils (Abiotic resource depletion – Fossil fuels)	MJ	1.26e+3	2.78e+2	7.17e+0	6.86e-1	9.70e+2	8.57e-1
Acidification	mol H+ eq.	3.73e-1	1.36e-1	1.85e-2	5.58e-4	2.17e-1	5.57e-4
Ecotoxicity, freshwater	CTUe	1.41e+3	8.81e+2	3.47e-1	2.65e+0	4.10e+2	1.18e+2
Human toxicity, cancer	CTUh	3.07e-6	3.07e-6	8.47e-12	1.65e-11	4.44e-9	1.29e-9
Human toxicity, non-cancer	CTUh	9.75e-7	7.68e-7	1.66e-9	1.97e-9	1.76e-7	2.75e-8
Eutrophication, freshwater	kg P eq.	1.95e-4	5.81e-5	1.95e-7	2.00e-5	1.04e-4	1.27e-5
Eutrophication, marine	kg N eq.	4.46e-2	1.46e-2	4.43e-3	6.16e-4	2.47e-2	2.73e-4
Eutrophication, terrestrial	mol N eq.	5.80e-1	1.56e-1	4.85e-2	1.98e-3	3.71e-1	2.41e-3
Climate change - total	kg CO2 eq.	5.64e+1	1.54e+1	5.66e-1	1.44e+0	3.81e+1	8.64e-1
Climate change - biogenic	kg CO2 eq.	1.27e-1	7.61e-2	0.00e+0	-3.10e-10	5.08e-2	-5.85e-6
Climate change - fossil	kg CO2 eq.	5.62e+1	1.53e+1	5.66e-1	1.44e+0	3.80e+1	8.64e-1
Climate change - land use and land transformation	kg CO2 eq.	7.99e-9	7.99e-9	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Ionising radiation, human health	kg U235 eq.	1.62e+2	1.05e+2	1.18e-3	3.70e-3	5.66e+1	5.73e-3
Land use	No dimension	7.90e-1	3.23e-2	0.00e+0	0.00e+0	7.58e-1	0.00e+0
Ozone depletion	kg CFC-11 eq.	2.09e-6	1.92e-6	7.41e-10	2.94e-9	1.63e-7	3.18e-9
Particulate matter	Disease occurrence	2.58e-6	7.88e-7	9.83e-8	2.83e-9	1.69e-6	3.01e-9
Photochemical ozone formation, human health	kg NMVOC eq.	1.46e-1	5.26e-2	1.25e-2	8.80e-4	7.93e-2	6.08e-4
Water use	m3 eq.	1.43e+1	1.29e+1	1.87e-3	1.26e-2	1.35e+0	1.43e-2
Total Primary Energy	MJ	1.45e+3	2.85e+2	7.18e+0	7.17e-1	1.16e+3	8.68e-1
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.92e+2	5.88e+0	9.20e-3	3.15e-2	1.86e+2	1.04e-2
Use of renewable primary energy resources used as raw material	MJ	1.60e+0	1.60e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Total use of renewable primary energy resources	MJ	1.94e+2	7.49e+0	9.20e-3	3.15e-2	1.86e+2	1.04e-2
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.25e+3	2.69e+2	7.17e+0	6.86e-1	9.70e+2	8.57e-1
Use of non renewable primary energy resources used as raw material	MJ	8.69e+0	8.69e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Total use of non-renewable primary energy resources	MJ	1.26e+3	2.78e+2	7.17e+0	6.86e-1	9.70e+2	8.57e-1
Use of secondary material	kg	3.89e-1	3.89e-1	0.00e+0	0.00e+0	0.00e+0	0.00e+0

Product Environmental Profil

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> Here are the impacts of the B module.

Indicators	Units	Use phase	B1	B2	B3	B4	B5	B6	B7
Resource use, minerals and metals (Abiotic resource depletion – Elements)	kg SB eq.	2.76e-6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76e-6	0.00E+00
Resource use, fossils (Abiotic resource depletion – Fossil fuels)	MJ	9.70e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70e+2	0.00E+00
Acidification	mol H+ eq.	2.17e-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17e-1	0.00E+00
Ecotoxicity, freshwater	CTUe	4.10e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10e+2	0.00E+00
Human toxicity, cancer	CTUh	4.44e-9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44e-9	0.00E+00
Human toxicity, non-cancer	CTUh	1.76e-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76e-7	0.00E+00
Eutrophication, freshwater	kg P eq.	1.04e-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04e-4	0.00E+00
Eutrophication, marine	kg N eq.	2.47e-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47e-2	0.00E+00
Eutrophication, terrestrial	mol N eq.	3.71e-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71e-1	0.00E+00
Climate change - total	kg CO2 eq.	3.81e+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81e+1	0.00E+00
Climate change - biogenic	kg CO2 eq.	5.08e-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08e-2	0.00E+00
Climate change - fossil	kg CO2 eq.	3.80e+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80e+1	0.00E+00
Climate change - land use and land transformation	kg CO2 eq.	0.00e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00e+0	0.00E+00
Ionising radiation, human health	kg U235 eq.	5.66e+1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66e+1	0.00E+00
Land use	No dimension	7.58e-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58e-1	0.00E+00
Ozone depletion	kg CFC-11 eq.	1.63e-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63e-7	0.00E+00
Particulate matter	Disease occurrence	1.69e-6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69e-6	0.00E+00
Photochemical ozone formation, human health	kg NMVOC eq.	7.93e-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.93e-2	0.00E+00
Water use	m3 eq.	1.35e+0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35e+0	0.00E+00
Total Primary Energy	MJ	1.16e+3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16e+3	0.00E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.86e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86e+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
Total use of renewable primary energy resources	MJ	1.86e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86e+2	0.00E+00
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.70e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70e+2	0.00E+00
Use of non 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
Total use of non-renewable primary energy resources	MJ	9.70e+2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70e+2	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

> Biogenic carbon content : 0 kg C. biogenic for the product, 0.258kg C. biogenic for the packaging.

Product Environmental Profil

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> 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.

REFERENCE	N.m	Manufacturing	Distribution	Installation	Use	End of life	Example for total Global warming (kg éq. CO2)
5134001	9	1	1	1	1,00	1	5,64E+01
5133992	3	1	1	1	0,56	1	3,16E+01
5133993	3	1	1	1	0,56	1	3,16E+01
5154232	3	1	1	1	0,56	1	1,31E+01
5154233	3	1	1	1	0,56	1	3,16E+01
5154586	3	1	1	1	0,56	1	3,16E+01
5154588	3	1	1	1	0,56	1	3,16E+01
5133997	6	1	1	1	0,74	1	4,19E+01
5154587	6	1	1	1	0,74	1	4,19E+01
5154589	6	1	1	1	0,74	1	4,19E+01
5156744	6	1	1	1	0,74	1	4,19E+01
5156746	6	1	1	1	0,74	1	4,19E+01
5156748	9	1	1	1	1,00	1	5,64E+01
5133989	1,3	1	1	1	0,49	1	2,78E+01
5133996	4	1	1	1	0,50	1	2,81E+01
5147404	4	1	1	1	0,55	1	3,12E+01
5147407	4	1	1	1	0,55	1	3,12E+01
5147408	4	1	1	1	0,57	1	3,23E+01
5134002	9	1	1	1	0,91	1	5,12E+01
5147406	9	1	1	1	0,91	1	5,12E+01
5147409	9	1	1	1	0,91	1	5,12E+01
5133998	6	1	1	1	0,68	1	3,83E+01
5147405	6	1	1	1	0,68	1	3,83E+01
5133990	1,3	1	1	1	0,47	1	2,66E+01
5133994	3	1	1	1	0,53	1	2,97E+01
5133995	3	1	1	1	0,53	1	2,97E+01
5134003	9	1	1	1	0,91	1	5,12E+01
5134004	9	1	1	1	0,91	1	5,12E+01
5133999	6	1	1	1	0,68	1	3,83E+01
5134000	6	1	1	1	0,68	1	3,83E+01

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Accreditation number: VH48	Programme information: www.pep-ecopassport.org
Date of issue: 09-2023	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 Internal ☐ External ☒	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDEMAIN)	
PEP are compliant with ISO 14025 environmental declaration type III	
The elements of the present PEP cannot be compared with elements from another program.	
Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations. »	
Somfy contact: Justine Tavernier, Ecodesign Engineer. justine.tavernier@somfy.com	

