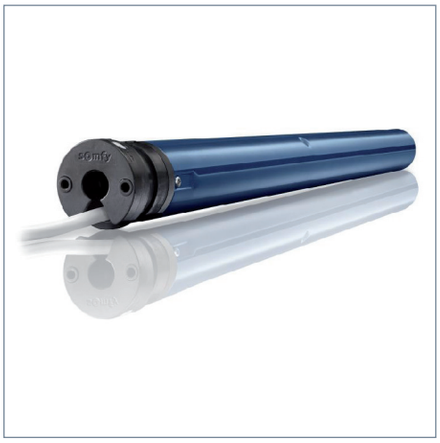
50, avenue du Nouveau Monde
74300 Cluses
Tel. 04 50 96 83 79

Product Environmental Profile
Wired motor for blinds or projection screens
Sonesse 40 WT Range

Reference product



> Reference product

SONESSE 40 9/12 VVF2.5M UNIT

Ref **1001551**

> 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."

The functional unit is defined by the PSR and meets specific standards.
The lifetime reference has no link with the guarantee of the product.

> Products covered

SONESSE 40 1,3/55
SONESSE 40 3/30
SONESSE 40 6/20
SONESSE 40 6/30
SONESSE 40 9/12
SONESSE 40 T 9/12
SONESSE 40 TM 9/12
SONESSE 40 T 6/20
SONESSE 40 TM 6/20
SONESSE 40 TML 6/20
409R2 SONESSE 9/14
406A2 SONESSE 6/24
407R3 SONESSE 7/12
409R6 SONESSE 9/14
406A6 SONESSE 6/24
404S3 SONESSE 4/36
404S2 SONESSE 4/36
403S3 SONESSE 3/30
403S6 SONESSE 3/36
405A3 SONESSE 5/20
403S6 SONESSE 3/36

Some references include motorization system and control.
The PEP only covers product references on the motor part.

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		
	g	%		g	%		g	%
PA66	144,0	7,46	**Steel**	773,1	40,07	**Lubricant**	25,0	1,3
PVC	120,0	6,22	**Copper**	212,6	11,02	**Others**	4,1	0,21
Glass fiber	89,6	4,64	**Zamak**	46,7	2,42	**Packaging**		
POM	39,5	2,05	**Aluminium**	28,3	1,47	**Paper**	92,1	4,77
Thermoset	15,6	0,81	**Bronze**	27,9	1,45	**Cardboard**	243,0	12,6
PA6	12,9	0,67	**Alloy**	15,9	0,82			
Others	36,0	1,87	**Others**	3,1	0,16			
Total mass of reference product: 1929,33 g								
Estimated recyclable content: 31,3 %								

> CHEMICAL SUBSTANCES

The products covered by this PEP comply with REACH regulation and RoHS directive

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Manufacturing

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

> Energy model
Polish mix

Distribution

The packaging is 100% recyclable. Paper is 100% recycled fibers and cardboard is minimum 50% recycled fibers. Packaging is continuously improved by reducing the amount and using a maximum of recycled material. Different sorts of packaging exist for this range : unit, by 5 or by 100. For the modelisation, unit pack is the reference.

Installation

> Installation elements
There is no installation element required for that range of products.

> Installation processes
There is no installation process.

> Energy model
No

Use

> For the considered scenario, the product has a power of 120 W in active mode during 0.34% of the time.
This corresponds to an energy consumption of 53.1 kWh for the lifetime of 15 years.

> Energy model of the usage phase: Europe mix

> Consumables and maintenance: None

End of life

> Typical transport conditions
Considering the complexity and the lack of knowledge of the electric and electronic recycling channel and processes all around the world, we considered a 1000 km transport of the product at the end of life and a landfill treatment.

> Energy model
European mix

Environmental impacts

Evaluation of the environmental impact covers the following life cycle stages: manufacturing, distribution, installation, usage and end of life.
All calculations are done with EIME software version EIME© v5.7.0.3

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Product Environmental Profile

Wired motor for blinds or projection screens
Sonesse 40 WT Range

Indicators	Global	Unit	Manufacturing	Distribution	Installation	Usage	End of Life
Acidification potential of soil and water	1.62E-1	kg SO_2 eq	3,57E-02	1,63E-02	1,15E-04	1,10E-01	5.31E-4
Abiotic depletion (elements, ultimate reserves)	3.50E-4	kg antimony eq	3,48E-04	2,08E-08	1,25E-09	2,28E-06	6.98E-9
Abiotic depletion (fossil fuels)	3.93E+2	MJ	8,49E+01	7,31E+00	3,49E-01	2,98E+02	1.81E+0
Air pollution	3.07E+3	m^3	1,84E+03	7,88E+01	3,25E+00	1,13E+03	1.15E+1
Eutrophication	1.44E-2	kg$(PO_4)^{3-}$eq	5,08E-03	1,61E-03	2,80E-04	6,62E-03	7.60E-4
Global Warming	3.59E+1	kg CO_2 eq	8,67E+00	5,75E-01	1,98E-01	2,63E+01	1.32E-1
Ozone layer depletion	2.58E-6	CFC-11 eq	8,63E-07	9,85E-10	5,75E-10	1,71E-06	2.08E-9
Photochemical oxidation	9.97E-3	kg C_2H_4 eq	3,05E-03	8,08E-04	4,74E-05	6,02E-03	4.06E-5
Water pollution	2.59E+3	m^3	1,39E+03	8,56E+01	8,67E+00	1,08E+03	1.69E+1
Total Primary Energy	7.14E+2	MJ	1,80E+02	7,35E+00	3,14E-01	5,25E+02	1.55E+0
Total use of renewable primary energy resources	7.30E+1	MJ	6,23E+00	9,39E-03	3,42E-03	6,67E+01	2.22E-2
Total use of non-renewable primary energy resources	6.41E+2	MJ	1,74E+02	7,34E+00	3,10E-01	4,58E+02	1.53E+0
Use of renewable primary energy excluding renewable primary energy used as raw material	7.22E+1	MJ	5,49E+00	9,39E-03	3,42E-03	6,67E+01	2.22E-2
Use of renewable primary energy resources used as raw material	7.48E-1	MJ	7,48E-01	0,00E+00	0,00E+00	0,00E+00	0.00E+0
Use of non renewable primary energy excluding non renewable primary energy used as raw material	6.30E+2	MJ	1,63E+02	7,34E+00	3,10E-01	4,58E+02	1.53E+0
Use of non renewable primary energy resources used as raw material	1.11E+1	MJ	1,11E+01	0,00E+00	0,00E+00	0,00E+00	0.00E+0
Use of non renewable secondary fuels	0.00E+0	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0.00E+0
Use of renewable secondary fuels	0.00E+0	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0.00E+0
Use of secondary material	6.50E-1	kg	6,50E-01	0,00E+00	0,00E+00	0,00E+00	0.00E+0
Net use of fresh water	9.59E+1	m^3	7,11E-01	4,44E-05	3,12E-05	9,52E+01	7.40E-5
Hazardous waste disposed	2.38E+1	kg	2,38E+01	0,00E+00	1,29E-04	1,37E-02	3.43E-4
Non hazardous waste disposed	1.08E+2	kg	8,14E+00	1,77E-02	1,83E-01	9,79E+01	1.67E+0
Radioactive waste disposed	6.79E-2	kg	2,48E-03	1,23E-05	4,14E-06	6,54E-02	2.60E-5
Components for reuse	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	6,27E-02	MJ	2,14E-02	0,00E+00	5,22E-02	0,00E+00	0,00E+00

> These environmental impacts are only applicable to the reference product mentioned on page 1. To cover all the «covered references» mentioned on page 1, a calculation by an extrapolation coefficient is required.

> Extrapolation rule

An extrapolation rule is made for the use, depending on the couple.

	Manufacturing	Distribution	Installation	Use	End of life	Application example: Global sum for Global Warming indicator (kg CO_2 eq)
Sonesse 40 WT (9 Nm)	1,00	1,00	1,00	1,00	1,00	3,59E+01
Sonesse 40 WT (7 Nm)	1,00	1,00	1,00	0,71	1,00	2,82E+01
Sonesse 40 WT (6 Nm)	1,00	1,00	1,00	0,59	1,00	2,50E+01
Sonesse 40 WT (5 Nm)	1,00	1,00	1,00	0,42	1,00	2,05E+01
Sonesse 40 WT (4 Nm)	1,00	1,00	1,00	0,31	1,00	1,77E+01
Sonesse 40 WT (1,3 Nm)	1,00	1,00	1,00	0,18	1,00	1,43E+01

Registration number : SOMF-00027-V01.03-EN	Applicable PCR: PCR-ed3-EN-2015 04 02 Supplemented by PSR-0006-ed1.1-EN-2015 10 16
Accreditation number: VH18	Programme information: **www.pep-ecopassport.org**
Edition date: 07-2018	Period of validity: 5 years
Independent verification of the declaration and data, according to ISO 14025 : 2010 Internal ❒ External ☒ Bureau Veritas LCIE	
Document in compliance with ISO 14025:2010: Environmental labels and declarations. Type III environmental declarations.	
PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
The elements of the present PEP cannot be compared with elements from another programme.	
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