

Product Environmental Profile

Radio motor for indoor, outdoor blinds and rolling shutters RTS Range : Altus 50, Orea 50, Oximo 50, Maestria 50



— Reference product



> Reference product

Oximo RTS 40/17

Ref **980720C**

> Functional unit

"To ensure the closing and opening action by performing 14 000 operating cycles, on a reference service life of 15 years, with a torque of 40 N.m, on a length of 2 meters, corresponding to 13 winding turns per half cycle with a tube diameter of 50 mm."

The lifetime reference has no link with the guarantee of the product.

> References covered

Altus 50 RH RTS 15/17
Altus 50 RH RTS 15/32
Altus 50 RH RTS 25/17
Altus 50 RH RTS 6/17
Altus 50 RH RTS 6/32
Altus 50 RTS 10/12
Altus 50 RTS 10/17
Altus 50 RTS 10/32
Altus 50 RTS 15/17
Altus 50 RTS 20/12
Altus 50 RTS 20/17
Altus 50 RTS 25/17
Altus 50 RTS 30/12
Altus 50 RTS 30/17
Altus 50 RTS 35/17
Altus 50 RTS 40/12
Altus 50 RTS 40/17
Altus 50 RTS 50/12

Altus 50 RTS 6/12
Altus 50 RTS 6/17
Altus 50 RTS 6/32
Altus 50 RTS 6/54
Altus 50 TH RTS 6/12
Altus 50 TH RTS 10/12
Altus 50 TH RTS 20/12
510R2 Altus RTS
506S2 Altus RTS
510S2 Altus RTS
525A2 Altus RTS
530R2 Altus RTS
535 A2 Altus RTS
540 R2 Altus RTS
550R2 Altus RTS
506S2 RH Altus RTS
510S2 RH Altus RTS
515R2 Altus RTS

Altus 515 R3 RTS 426
Altus 520 R3 RTS 426
Altus 530 R3 RTS 426
Altus 540 R3 RTS 426
Altus 505 S3 RTS 426
538R6 Altus RTS447
518A6 Altus RTS447
506A6 Altus RTS447
538R6 Altus RTS 38/14
506R6 Altus RTS 6/14
510S6 Altus RTS 10/32
510R6 Altus RTS 10/14
520R6 Altus RTS 20/14
508A6 Altus RTS 8/20
518A6 Altus RTS 18/20
506S6 Altus RTS 6/32
528R6 Altus RTS 28/14

Orea 50 RH RTS 15/17
Orea 50 RH RTS 15/32
Orea 50 RH RTS 20/17
Orea 50 RH RTS 25/17
Orea 50 RH RTS 30/17
Orea 50 RH RTS 35/17
Orea 50 RH RTS 6/17
Orea 50 RTS 10/17
Orea 50 RTS 15/17
Orea 50 RTS 20/17
Orea 50 RTS 25/17
Orea 50 RTS 30/17
Orea 50 RTS 35/17
Orea 50 RTS 40/17
Orea 50 RTS 50/12
Orea 50 RTS 6/17
535A2 Orea RTS
550R2 Orea RTS

Oximo RTS 10/17
Oximo RTS 15/17
Oximo RTS 20/17
Oximo RTS 30/17
Oximo RTS 40/17
Oximo RTS 50/12
Oximo RTS 6/17
Oximo TH RTS 10/17
Oximo TH RTS 20/17
Oximo TH RTS 30/17
Oximo TH RTS 6/17
510R2 Oximo RTS
525A2 Oximo RTS
Oximo 508A3 RTS 426
Oximo 515A3 RTS 426
Oximo 520A3 RTS 426
Oximo 525A3 RTS 426
Oximo 530A3 RTS 426

Oximo 508A3 RTS 426
Oximo 515A3 RTS 426
Oximo 520A3 RTS 426
Oximo 525A3 RTS 426

510A2 Maestria+ RTS
525A2 Maestria+ RTS
535A2 Maestria+ RTS
550R2 Maestria+ RTS

— 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	%
Polyamide66 (PA6,6)	165,0	5,8	Steel	1914,5	67,1	Glass fiber	80,1	2,8
Silicon rubber	150,0	5,3	Copper	76,6	2,7	Lubricant	25,0	0,9
Polyvinyl chloride (PVC)	41,6	1,5	Alloy	23,2	0,8	Others	24,62	0,9
Polyoxymethylene (POM)	36,5	1,3	Others	33,7	1,2	Packaging		
Thermoset	22,7	0,8				Paper	13,78	0,5
Others	81,7	2,9				Cardboard	163,0	5,7
Total mass of reference product: 2851.99 g								
Estimated recyclable content: 29.3 %								

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> CHEMICAL SUBSTANCES

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



— 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, by 5 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 270W in active mode during 0.27% of the time and 0.38W in standby mode during 99.73% of the time. **This corresponds to an energy consumption of 145.55 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© v5.8.0.

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Indicators	Global	Unit	Manufacturing	Distribution	Installation	Usage	End of Life
Acidification potential of soil and water	3.72e-1	kg SO ₂ eq	4.92e-2	2.41e-2	5.24e-5	2.98e-1	8.58e-4
Abiotic depletion (elements, ultimate reserves)	6.01e-4	kg antimony eq	5.95e-4	3.07e-8	4.80e-10	6.20e-6	1.08e-8
Abiotic depletion (fossil fuels)	9.58e+2	MJ	1.35e+2	1.08e+1	1.68e-1	8.10e+2	2.87e+0
Air pollution	4.87e+3	m ³	1.66e+3	1.16e+2	1.42e+0	3.07e+3	1.72e+1
Eutrophication	2.95e-2	kg(PO ₄) ³⁻ eq	7.44e-3	2.37e-3	4.55e-4	1.80e-2	1.26e-3
Global Warming	8.55e+1	kg CO ₂ eq	1.28e+1	8.49e-1	2.44e-1	7.13e+1	2.11e-1
Ozone layer depletion	6.75e-6	CFC-11 eq	2.10e-6	1.46e-9	6.23e-10	4.65e-6	2.98e-9
Photochemical oxidation	2.21e-2	kg C ₂ H ₄ eq	4.40e-3	1.19e-3	5.88e-5	1.63e-2	6.53e-5
Water pollution	4.95e+3	m ³	1.84e+3	1.26e+2	1.35e+1	2.94e+3	2.76e+1
Total Primary Energy	1.78e+3	MJ	3.41e+2	1.09e+1	1.68e-1	1.42e+3	2.51e+0
Total use of renewable primary energy resources	1.84e+2	MJ	3.12e+0	1.39e-2	6.79e-4	1.81e+2	3.18e-2
Total use of non-renewable primary energy resources	1.59e+3	MJ	3.38e+2	1.08e+1	1.67e-1	1.24e+3	2.48e+0
Use of renewable primary energy excluding renewable primary energy used as raw material	1.84e+2	MJ	2.61e+0	1.39e-2	6.79e-4	1.81e+2	3.18e-2
Use of renewable primary energy resources used as raw material	5.07e-1	MJ	5.07e-1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of non renewable primary energy excluding non renewable primary energy used as raw material	1.58e+3	MJ	3.23e+2	1.08e+1	1.67e-1	1.24e+3	2.48e+0
Use of non renewable primary energy resources used as raw material	1.49e+1	MJ	1.49e+1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of non renewable secondary fuels	0.00e+0	MJ	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of renewable secondary fuels	0.00e+0	MJ	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Use of secondary material	8.91e-1	kg	8.91e-1	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Net use of fresh water	2.59e+2	m ³	8.27e-1	6.56e-5	1.00e-5	2.59e+2	1.07e-4
Hazardous waste disposed	9.14e+0	kg	9.10e+0	0.00e+0	1.79e-4	3.72e-2	4.85e-4
Non hazardous waste disposed	2.77e+2	kg	8.20e+0	2.62e-2	1.81e-1	2.66e+2	2.78e+0
Radioactive waste disposed	1.80e-1	kg	2.13e-3	1.82e-5	1.08e-6	1.78e-1	3.73e-5
Components for reuse	0.00e+0	kg	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Materials for recycling	0.00e+0	kg	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Materials for energy recovery	0.00e+0	kg	0.00e+0	0.00e+0	0.00e+0	0.00e+0	0.00e+0
Exported energy	6.87e-3	MJ	0.00e+0	0.00e+0	6.87e-3	0.00e+0	0.00e+0

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> 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.

Altus, Orea, Oximo, Maestria	Manufacturing	Distribution	Installation	Use	End of life	Application example: Global sum for Global Warming indicator (kg CO ₂ eq)
5 Nm	1	1	1	0,47	1	4,75E+01
6 Nm	1	1	1	0,65	1	6,05E+01
10 Nm	1	1	1	0,69	1	6,29E+01
15 Nm	1	1	1	0,69	1	6,28E+01
20 Nm	1	1	1	0,82	1	7,27E+01
30 Nm	1	1	1	0,93	1	8,02E+01
35 Nm	1	1	1	0,93	1	8,02E+01
40 Nm	1	1	1	1	1	8,54E+01
50 Nm	1	1	1	1,17	1	9,72E+01

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Independent verification of the declaration and data, according to ISO 14025 : 2010 Internal <input type="checkbox"/> External <input checked="" type="checkbox"/> 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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