

# Product Environmental Profile



## STATYS OEM IEC

System transfer switch from 200 A to 1800 A



### The commitments of Socomec to respect the environment

As part of its environmental policy, Socomec is committed to:

- Incorporate the principles of the circular economy into the design of new products and services
- Promote longer product lifetimes
- Promote the use of environmentally responsible materials
- Design and develop solutions to further improve the energy efficiency of our products and services
- Inform our customers in a transparent manner about the environmental impact of our products throughout their life cycle.

To this end, Socomec is committed to constantly monitoring, anticipating and complying with environmental regulations as well as customer expectations relating to its products, and to ensuring that all those involved adhere to and take responsibility for its commitments.

Socomec is member of :

**ecosystem**

Member of de WEEE Europe



**Gimélec**

Environment and sustainable development commissions



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Innovative Power Solutions

## • Product information:

### Reference product:

The representative product is the STATYS OEM IEC 600/630 with sales reference 3230600018 with the following description: System transfer switch from 200 A to 1800 A

### Functional unit:

To ensure power supply continuity by seamless on-load transfer between two independent three-phase supplies with load from 200 A and up to 1800 A and for a service life of 15 years.

### Characteristics of the covered references:

Model	Power [kW]	Weighted STS efficiency [%]	Product mass [kg]	Packaging mass [kg]	Dimensions W*H*D [mm]	Number of phases available
Functional unit: STATYS OEM IEC 600/630	436,5	99,0%	130,0	98,5	800*765*586	Three-phase
Extrapolated unit: STATYS OEM IEC 200	138,6	99,0%	70,0	50,1	400*765*586	Three-phase
Extrapolated unit: STATYS OEM IEC 300/400	277,1	99,0%	105,0	50,1	600*765*586	Three-phase
Extrapolated unit: STATYS OEM IEC 800/1000	692,8	99,0%	495,0	180,0	1000*1930*995	Three-phase
Extrapolated unit: STATYS OEM IEC 1250/1800	1247,0	99,0%	563,1	98,5	910*1955*815	Three-phase

### References covered by this PEP with extrapolation rules:

- STATYS OEM IEC 600/630 with sales references: 3230600018; 3230600016; 3230600017; 3230600013; 3230600014; 3230600015; 3230630018; 3230630016; 3230630017; 3230630013; 3230630014; 3230630015

- STATYS OEM IEC 200 with sales references: 3230200013; 3230200014; 3230200015; 3230200016; 3230200017; 3230200018

- STATYS OEM IEC 300/400 with sales references: 3230300018; 3230300016; 3230300017; 3230300013; 3230300014; 3230300015; 3230400018; 3230400016; 3230400017; 3230400013; 3230400014; 3230400015

- STATYS OEM IEC 800/1000 with sales references: 3230800005; 3230800006; 3230800007; 3231000001; 3231000002; 3231000003

- STATYS OEM IEC 1250/1800 with sales references: 3231250007; 3231250008; 3231250009; 3231400007; 3231400008; 3231400009; 3231600007; 3231600008; 3231600009; 3231800005; 3231800006; 3231800007

## • Materials and substances

### Declaration of the constitutives materials according to IEC 62474

Total mass of the reference product (including packaging): 228,5 kg among which packaging: 98,5 kg

For the STATYS OEM IEC 600/630

Metals		% weight	Plastics		%weight	Others		% weight
Other ferrous alloys - non stainless steels		24,7%	Others thermoplastics		2,8%	Other organics		42,8%
Copper and its alloys		16,2%	Other plastics		1,9%	Ceramics and glass		1,1%
Aluminium and its alloys		9,3%	PVC		0,1%	Other inorganics		0,7%
Nickel and its alloys		0,3%						
Other non-ferrous metals and alloys		0,2%						
Stainless steel		<0,1%						

For the others references covered by this PEP

Model	Metals % weight	Plastics % weight	Others % weight
STATYS OEM IEC 600/630	50,7%	4,8%	44,5%
STATYS OEM IEC 200	52,5%	5,1%	42,4%
STATYS OEM IEC 300/400	60,6%	5,4%	33,9%
STATYS OEM IEC 800/1000	67,7%	4,9%	27,4%
STATYS OEM IEC 1250/1800	78,9%	5,2%	16,0%

## Substances management

Socomec is leading a program to limit the use of hazardous substances in the design of new products and to monitor the presence of substances of concern in its supplies to anticipate future use restrictions.



Directive 2011/65/EU : Product references covered by this PEP meet the requirements of the RoHS Directive on the restriction of substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB), polybrominated diphenyl ethers (PBDEs) and phthalates (DIBP, DEHP, BBP, DBP).



To the best of our knowledge, based on the supplier declarations, at the publication date of this document, the product do not contain any other SVHC in a concentration above 0,1% per weight.

## • Manufacturing



The products covered by this PEP are manufactured on the production site of Huttenheim, France whose environmental management system has been ISO 14001 certified. Impacts on the environment are reduced by optimizing its energy consumption and by practicing a rigorous waste management.

## • Distribution

As part of its distribution policy aiming to respect the environment, Socomec is in favor of groupage transports and ISO 14001 certified logistic partners.

No reconditioning is planned for the product. This phase is consequently neglected.

The sizing of the packaging has been optimized to ensure the best possible protection of the product at the lowest possible volume in order to reduce the impact of the transport stage on the environment.

## • Installation

The installation phase consists in connecting the product to the existing electrical installation.

The installation does not generate any significant impacts on the environment, except impacts from packaging waste.

## • Use phase

### Consumption scenario

Use phase scenario: European energy mix

Load	25%	50%	75%	100%
Proportion of time spent (%)	25%	50%	25%	0%

Total energy consumption during 15 years

Model	Weighted STS efficiency [%]	Total average energy consumption [kWh]
Reference product: STATYS OEM IEC 600/630	99,0%	286757
STATYS OEM IEC 200	99,0%	91034
STATYS OEM IEC 300/400	99,0%	182068
STATYS OEM IEC 800/1000	99,0%	455170
STATYS OEM IEC 1250/1800	99,0%	819305

## Care and maintenance

It is recommended to carry out periodic specialized maintenance in order to keep the equipment at the maximum level of efficiency and to avoid the installation being out of service with possible damage/risks.

Components	Fans	Power supply PCB
Number of replacement	2	1

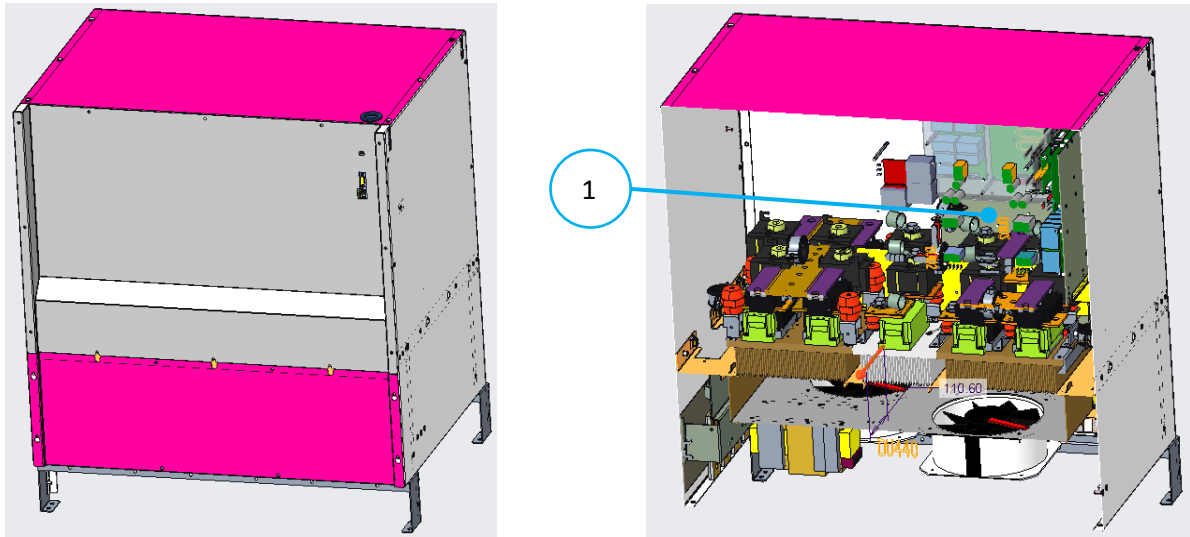
## Consumables

The product does not require consumables.

- End of life

### End of life treatment

The following parts require specific care and selective treatment in accordance with Annex VII of the WEEE Directive 2012/19/EU - Waste of electrical and electronic equipment. Maintenance and disassembly should always be conducted by qualified personnel.



Type of component	Item	Part mass	Location
<b>Electronic cards</b>	*	4377g	1

\* : S07078X01, S07148X01, E962697T, E961307, S07002X02, E961027, E961167, E961127, E961177, E961077T, E964286, E961037

### Recovery potential of the product according to IEC TR 62635

The recovery potential of the product is 86,2%.

This covers material and energy recovery potentials.

## • Environmental impacts

### Calculation methodology: life cycle assessment (LCA)



The calculation of the impacts on the environment was made using a life cycle assessment methodology in accordance with the ISO 14040 requirements and with PEP eco passport product category rules. For more details follow the link:

[www.pep-ecopassport.org](http://www.pep-ecopassport.org)

This study was carried out with the following version of the software EIME and of the database:

EIME version: 5.9.4

Database version: CODDE-2022-01

The whole life cycle has been taken into account:

Step	Geographical representativeness	Scenario
<b>Manufacturing (M) (A1-A3)</b>	Production of electronic components : Asia Production of other components and packaging : Europe Assembly : France	From the raw material extraction to the last Socomec logistic platform, including packaging Waste generated during manufacturing phase are taken into account.
<b>Distribution (D) (A4)</b>	Distribution scenario : Europe	From the last Socomec logistic platform to the final customer. No reconditionning.
<b>Installation (I) (A5)</b>	Transport and treatment of packaging wastes : Local	Local road transport of 1000 km of generated wastes to the treatment site, end of life treatment.
<b>Use phase (U) (B1-B7)</b>	Energy mix : Europe Production of maintenance components: analog to manufacturing phase	Power consumption required during 15 years and maintenance according to consumption scenario above mentioned.
<b>End of life (EOL) (C1-C4)</b>	Transport and treatment : Local	Road transport of 1000 km from the final customer to the treatment sites. End of life treatment.

## Environmental impacts of the STATYS OEM IEC 600/630

The following impacts have been calculated to best represent geographically, temporally and technologically each step of the life cycle.

Indicators	Unit	Total impact	M (A1-A3)	D (A4)	I (A5)	U (B1-B7)	EOL (C1-C4)
Resource use, minerals and metals (Abiotic resource depletion – Elements)	kg Sb eq.	1,83E-01	1,21E-01	0*	0*	6,25E-02	0*
Resource use, fossils (Abiotic resource depletion – Fossil fuels)	MJ	2,50E+06	4,07E+04	1,69E+03	2,53E+02	2,45E+06	3,09E+02
Acidification	mol H+ eq.	7,08E+02	1,94E+01	7,66E-01	1,42E-01	6,87E+02	1,43E-01
Ecotoxicity, freshwater	CTUe	8,68E+05	6,13E+04	0*	3,21E+02	8,06E+05	0*
Human toxicity, cancer	CTUh	1,08E-03	1,03E-03	0*	0*	4,99E-05	0*
Human toxicity, non-cancer	CTUh	8,78E-04	1,43E-04	2,30E-07	2,86E-07	7,35E-04	0*
Eutrophication, freshwater	kg P eq.	1,76E-02	6,31E-03	4,53E-05	5,71E-04	9,11E-03	1,59E-03
Eutrophication, marine	kg N eq.	9,42E+01	1,91E+00	3,59E-01	1,16E-01	9,18E+01	6,47E-02
Eutrophication, terrestrial	mol N eq.	1,02E+03	2,04E+01	3,94E+00	6,55E-01	9,98E+02	6,91E-01
Climate change - total	kg CO2 eq.	1,59E+05	1,49E+03	1,21E+02	2,03E+02	1,57E+05	2,45E+01
Climate change - fossil	kg CO2 eq.	1,26E+04	2,86E+01	0*	0*	1,26E+04	0*
Climate change - biogenic	kg CO2 eq.	1,46E+05	1,46E+03	1,21E+02	2,03E+02	1,44E+05	2,45E+01
Climate change - land use and land transformation	kg CO2 eq.	3,39E-05	1,70E-05	0*	0*	1,69E-05	0*
Ionising radiation, human health	kBq U235 eq.	4,44E+04	1,57E+04	0*	0*	2,87E+04	0*
Land use	No dimension	4,13E+04	1,25E+01	0*	0*	4,13E+04	0*
Ozone depletion	kg CFC-11 eq.	5,17E-03	2,15E-04	0*	0*	4,95E-03	0*
Particulate matter	disease occurrence	7,58E-03	1,24E-04	6,23E-06	9,79E-07	7,45E-03	1,12E-06
Photochemical ozone formation, human health	kg NMVOC eq.	2,91E+02	6,49E+00	9,93E-01	2,16E-01	2,83E+02	1,76E-01
Water use	m <sup>3</sup> eq.	4,24E+04	0*	0*	0*	4,48E+04	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3,57E+05	3,25E+02	0*	0*	3,57E+05	0*
Use of renewable primary energy resources used as raw material	MJ	2,65E+03	2,65E+03	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	3,60E+05	2,97E+03	0*	0*	3,57E+05	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2,50E+06	4,02E+04	1,69E+03	2,53E+02	2,45E+06	3,09E+02
Use of non renewable primary energy resources used as raw material	MJ	4,49E+02	4,08E+02	0*	0*	4,05E+01	0*
Total use of non-renewable primary energy resources	MJ	2,50E+06	4,07E+04	1,69E+03	2,53E+02	2,45E+06	3,09E+02
Use of secondary material	kg	1,05E+00	5,26E-01	0*	0*	5,21E-01	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Total Primary Energy	MJ	2,86E+06	4,36E+04	1,69E+03	0*	2,81E+06	3,11E+02
Net use of freshwater	m <sup>3</sup>	9,88E+02	0*	0*	0*	1,04E+03	0*
Hazardous waste disposed	kg	8,31E+03	7,26E+03	0*	0*	1,05E+03	0*
Non hazardous waste disposed	kg	5,27E+05	2,24E+03	0*	1,07E+02	5,24E+05	1,35E+02
Radioactive waste disposed	kg	3,52E+02	1,68E+00	0*	0*	3,51E+02	0*
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for recycling	kg	1,01E-01	5,14E-02	0*	0*	4,92E-02	0*

Materials for energy recovery	kg	0,00E+00	0*	0*	0*	0*	0*
Exported Energy	MJ by energy vector	8,71E+01	2,61E+01	0*	6,10E+01	0*	0*

**Biogenic carbon content in the reference product:**

Biogenic carbon content of the product	kg of C	0,00E+00	0*	N/A	N/A	N/A	N/A
Biogenic carbon content of the associated packaging	kg of C	3,56E+01	3,56E+01	N/A	N/A	N/A	N/A

NB : 0\* means that this impact either represents less than 0.01% of the total life cycle of the reference flow, or has no impact (in the case where the total impact is zero).

For the products covered by the PEP other than the reference product, the environmental impacts of each phase of the lifecycle are calculated with the following extrapolation factors :

Model	M (A1-A3)	D (A4)	I (A5)	U (B1-B7)	EOL (C1-C4)
STATYS OEM IEC 600/630	1,00	1,00	1,00	1,00	1,00
STATYS OEM IEC 200	0,53	0,53	0,51	0,32	0,54
STATYS OEM IEC 300/400	0,68	0,68	0,51	0,63	0,81
STATYS OEM IEC 800/1000	2,95	2,95	1,83	1,59	3,81
STATYS OEM IEC 1250/1800	2,90	2,90	1,00	2,86	4,33

Extrapolation factors were determined as follows:

- For the Manufacturing and Distribution phases they are proportional to the mass of the product with its packaging;
- For the Installation phase they are proportional to the mass of the packaging;
- For the Use phase they are proportional to the output power.
- For the End of Life phase they are proportional to the mass of the product without its packaging;

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Date of issue: 05-2023	Validity period : 5 years
Independant verification of the declaration and data, in compliance with ISO 14025 : 2006	
Internal : <input checked="" type="checkbox"/>	External : <input type="checkbox"/>
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain) PEPs are compliant with XP C08-100-1 : 2016 or EN 50693:2019 The components of the present PEP may not be compared with components from any other program.	
Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"	

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