Product Environmental Profile

STATYS UL 800A

System transfer switch up to 800A







PEP ecopassport® Registration number: SOCO-00086-V01.01-EN

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The commitments of Socomec to respect the environment

14025

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.





• Product information :

Reference product

The representative product is the STATYS UL 800A with sales reference 3ST-I08U-33B-XBX with the following description: System transfer switch up to 800A

Reference product characteristics

Model	Power [W]	Weighted efficiency [%]	Dimensions W*H*D [mm]	Product mass [kg]	Number of phases available
STATYS UL 800A	554240	99,5%	848*995*650	221	Three phase

Functional unit

To ensure power supply continuity by seamless on-load transfer between two independant three-phase supplies with load up to 800 amps and for a service life of 15 years.

References covered by this PEP with extrapolation rules:

- STATYS UL 800A with sales references: 3ST-I08U-33B-XBX; 3ST-I08U-33A-XBX, 3ST-I08U-33A-XFX, 3ST-I08U-33B-XBX, 3ST-I08U-33C-XBX, 3ST-I08U-33D-XFX, 3ST-I08U-33D-XFX

- STATYS UL 600A with sales references: 3ST-I02U-33A-XFX, 3ST-I02U-33A-XBX, 3ST-I02U-33B-XFX, 3ST-I02U-33C-XFX, 3ST-I02U-33D-XFX, 3ST-I02U-43A-XFX, 3ST-I02U-43B-XFX, 3ST-I02U-43B-XFX, 3ST-I02U-43D-XFX, 3ST-I02U-44A-XFX, 3ST-I02U-44B-XFX, 3ST-I02U-44C-XFX, 3ST-I04U-33B-XFX, 3ST-I04U-33B-XFX, 3ST-I04U-33B-XFX, 3ST-I04U-33B-XFX, 3ST-I04U-33B-XFX, 3ST-I04U-33D-XFX, 3ST-I04U-43B-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43B-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I04U-43D-XFX, 3ST-I06U-33B-XFX, 3ST-I06U-33B-XFX, 3ST-I06U-33B-XFX, 3ST-I06U-33D-XFX, 3ST-I06U-33D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-44D-XFX, 3ST-I06U-43D-XFX, 3ST-I06U-44D-XFX, 3ST-I06U

Characteristics of the covered references:

Model	Power [W]	Weighted STS efficiency [%]	Product mass [kg]	Packaging mass [kg]
Functional unit: STATYS UL 800A	554240	99,5%	221	30
Extrapolated unit: STATYS UL 600A	415680	99,5%	216	30

• Materials and substances

Declaration of the constitutives materials

Total mass of the reference product (including packaging): 250,8 kg among which packaging: 30 kg

Plastics as % of weight		Metals as % of weight		Other as % of weight		
PC 4,48%		Stainless steel	39,11%	Wood	11,99%	
Polyamide	1,61%	Copper and its alloys	18,17%	Electronic components	6,93%	
Polyester	0,72%	Aluminium and its alloys	9,84%	Other organics	1,13%	
PVC	0,57%	Steel	3,42%	Other inorganics	0,49%	
Epoxy resin	0,30%	Other ferrous alloys	0,31%	Paper	0,15%	
ABS	0,29%	Nickel and its alloys	0,30%	Cardboard	0,11%	
PE	<0,1%	Zinc and its alloys	<0,1%			
PTFE	<0,1%	Tin and its alloys	<0,1%			
Phenolic resin	<0,1%	Lead and its alloys	<0,1%			
		Precious metals	<0,1%			
		Other metals	<0,1%			
Other plastics	<0,1%					
			-			
Total Plastics: 20,1 kg	8,03%	Total Metals: 178,12 kg	71,17%	Total Others: 52,04 kg	20,79%	

For the reference product:



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 reconditionning 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 stage 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]		
STATYS UL 800A	99,5%	163406		
STATYS UL 600A	99,5%	126992		

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.

Typical parts which are subjects to maintenance:

Components	Fans	Power supply PCB
Number of replacement	2	1

Consumables

The product does not require consumables.



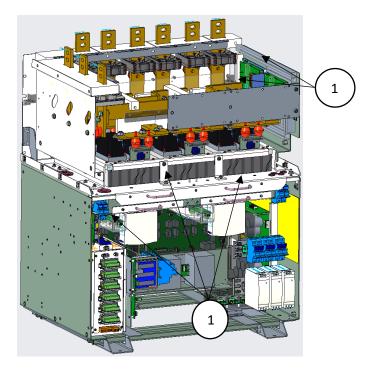
• End of life

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	ltem	Part mass	Location
Electronic cards	*	8,5 kg	1





*: E964286, E226348, E962557, E963417, E961027, E963437, E963467, E962767, S07002X02, E069378, EA060528, S07078X01, E961037, E961197, S07148X01, E963527T, E963477, E963457, E226348, E170658

Recyclability potential of the product according to IEC TR 62635

The recyclability potential of the product is 74,15%.

This covers material and energy recovery potentials.



• Environmental impacts

Calculation methodology: life cycle assessment (LCA)

ISO
4040

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

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

EIME version:	V6.0.5
Database version:	CODDE-2023-02
For biogenic carbon storage t	he following methodology was used : 0/0

The whole life cycle has been taken into account:

Step	Geographical representativeness	Scenario
Manufacturing (M) (A1-A3) 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.
Distribution (D) (A4)	Distribution scenario : Europe	From the last Socomec logistic platform to the final customer. No reconditionning.
Installation (I) (A5)	Transport and treatment of packaging wastes : Local	Local road transport of 1000 km of generated wastes to the treatment site, end of life treatment.
Use phase (U) (B1-B7)	Energy mix : Europe Production of maintenance components: analog to manufacturing phase	Power consumption required during 15 years and maintenance according to consumption scenario above mentionned.
End of life (EOL) (C1-C4)	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 UL 800A, per FU

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

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Indicators	Unit	Total impact	M (A1-A3)	D (A4)	I (A5)	U (B1-B7)	EOL (C1-C4)
Acidification	mol H+ eq.	4,09E+02	2,51E+01	2,80E-01	0*	3,83E+02	1,00E-01
Climate change - Total	kg CO2 eq.	6,92E+04	2,02E+03	4,43E+01	5,75E+01	6,71E+04	1,89E+01
Climate change - Biogenic	kg CO2 eq.	1,28E+02	3,65E+01	0*	0*	9,13E+01	0*
Climate change - Fossil	kg CO2 eq.	6,91E+04	1,98E+03	4,43E+01	5,75E+01	6,70E+04	1,89E+01
Climate change - Land use and land use	kg CO2 eq.	2,17E-02	2,17E-02	0*	0*	1,04E-05	0*
transformation				-	-		
Ecotoxicity, freshwater	CTUe	8,25E+05	1,00E+05	0*	0*	7,24E+05	1,19E+02
Particulate matter	disease occurrence	3,14E-03	1,62E-04	2,28E-06	0*	2,98E-03	7,42E-07
Eutrophication, freshwater	kg P eq.	1,95E-01	8,02E-03	0*	2,43E-04	1,84E-01	2,42E-03
Eutrophication, marine	kg N eq.	4,59E+01	2,17E+00	1,31E-01	1,21E-02	4,35E+01	4,38E-02
Eutrophication, terrestrial	mol N eq.	6,79E+02	2,36E+01	1,44E+00	1,18E-01	6,53E+02	4,47E-01
Human toxicity, cancer	CTUh	1,35E-03	1,31E-03	0*	0*	3,16E-05	0*
Human toxicity, non-cancer	CTUh	5,17E-04	2,02E-04	8,41E-08	6,94E-08	3,15E-04	5,66E-08
Ionising radiation, human health	kBq U235 eq.	1,22E+05	2,18E+04	0*	0*	1,00E+05	0*
Land use	No dimension	1,43E+03	8,79E+01	0*	0*	1,34E+03	0*
Ozone depletion	kg CFC-11 éq.	5,67E-04	2,65E-04	6,78E-08	7,04E-08	3,02E-04	2,15E-07
Photochemical ozone formation, human health		1,48E+02	7,94E+00	3,63E-01	4,46E-02	1,40E+02	1,16E-01
Abiotic resource depletion - fossil fuels or resource depletion - fossils	MJ	1,78E+06	7,14E+04	6,17E+02	0*	1,71E+06	2,58E+02
Abiotic resource depletion - elements or resource depletion - metals and minerals	kg Sb eq.	2,03E-01	1,87E-01	0*	0*	1,62E-02	0*
Water use	m³ eq.	-8,40E+02	-3,34E+03	0*	0*	0*	0*
Net use of freshwater	m ³	-1,93E+01	-7,74E+01	0*	0*	0*	0*
Total Primary Energy	MJ	2,11E+06	7,34E+04	6,18E+02	0*	2,04E+06	2,61E+02
Total use of non-renewable primary energy resources	MJ	1,78E+06	7,14E+04	6,17E+02	0*	1,71E+06	2,58E+02
Total use of renewable primary energy resources	MJ	3,30E+05	1,98E+03	0*	0*	3,28E+05	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,78E+06	7,04E+04	6,17E+02	0*	1,71E+06	2,58E+02
Use of non renewable primary energy resources used as raw material	MJ	1,10E+03	1,06E+03	0*	0*	4,64E+01	0*
Use of non renewable secondary fuels	МJ	0,00E+00	0*	0*	0*	0*	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3,29E+05	1,15E+03	0*	0*	3,28E+05	0*
Use of renewable primary energy resources used as raw material	MJ	8,30E+02	8,30E+02	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of secondary material	kg	2,67E-02	2,67E-02	0*	0*	3,39E-05	0*
Hazardous waste disposed	kg	1,21E+04	1,03E+04	0*	0*	1,80E+03	0*
Non hazardous waste disposed	kg	1,16E+04	1,61E+03	1,55E+00	3,35E+01	9,75E+03	2,31E+02
Radioactive waste disposed	kg	4,51E+00	2,39E+00	1,11E-03	1,15E-03	2,12E+00	3,50E-03
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Exported Energy	MJ	3,73E+01	1,12E+01	0*	2,61E+01	0*	0*
Materials for energy recovery	kg	0,00E+00	0*	0*	0*	0*	0*



Materials for recycling	kg	1,34E-01	1,03E-01	0*	0*	3,08E-02	0*
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Biogenic carbon content in the reference product:

Biogenic carbon content of the product	kg of C	0,00E+00	0,00E+00	N/A	N/A	N/A	N/A
Biogenic carbon content of the associated packaging	kg of C	0,00E+00	0,00E+00	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 UL 800A	1,00	1,00	1,00	1,00	1,00
STATYS UL 600A	0,98	0,98	1,00	0,75	0,98

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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Verifier accreditation number :	VH12		Information and reference documents : www.pep-ecopassport.org		
Date of issue:	11-2023		Validity period : 5 years		
Independant verification of the declaration and data, in compliance with ISO 14025 : 2006					
Internal :	\checkmark	External :			
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 PASS					
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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