

# Product Environmental Profile



## STATYS RACK HC IEC

System transfert switch from 32 A and up to 100 A RACK



### 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 :



Member of de WEEE Europe



Environment and sustainable development commissions



PEP ecopassport® Registration number: SOCO-00066-V01.01-EN

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Innovative Power Solutions

## ● Product information :

### Reference product

The representative product is the STATYS RACK HC IEC 63A/100A with sales reference 3230100012 with the following description:  
System transfert switch from 32 A and up to 100 A RACK

### Functional unit

To ensure power supply continuity by seamless on-load transfer between two independant three-phase supplies with load from 32 A and up to 100 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 RACK HC IEC 63A/100A  | 69,3       | 99,0%                       | 57,9              | 113,0               | 482*400*648           | Three-phase                |
| Extrapolated unit: STATYS RACK HC IEC 32A/63A | 14,5       | 99,0%                       | 26,0              | 5,0                 | 482*86*747            | Single-phase               |

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

- STATYS RACK HC IEC 63A/100A with sales references: 3230063001; 3230063002; 3230063003; 3230063007; 3230063008; 3230063009; 3230100001; 3230100002; 3230100003; 3230100007; 3230100008; 3230100009; 3230063004; 3230063005; 3230063006; 3230063010; 3230063011; 3230063012; 3230100004; 3230100005; 3230100006; 3230100010; 3230100011; 3230100012; 3ST-R63C-43A-XHC; 3ST-R63C-44A-XHC; 3ST-R01C-43A-XHC; 3ST-R01C-44A-XHC
- STATYS RACK HC IEC 32A/63A with sales references: 3210032001; 3210063001; 3210032002; 3210063002; 1ST-R63C-22E-XHC

## ● Materials and substances

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

Total mass of the reference product (including packaging): 170,9 kg among which packaging: 113 kg

For the STATYS RACK HC IEC 63A/100A

| Metals % weight                             |       | Plastics %weight      |      | Others % weight    |       |
|---------------------------------------------|-------|-----------------------|------|--------------------|-------|
| Other ferrous alloys - non stainless steels | 18,6% | Others thermoplastics | 4,9% | Other organics     | 61,6% |
| Copper and its alloys                       | 7,6%  | Other plastics        | 2,2% | Ceramics and glass | 1,1%  |
| Aluminium and its alloys                    | 2,6%  | PVC                   | 0,2% | Other inorganics   | 0,8%  |
| Other non-ferrous metals and alloys         | 0,4%  |                       |      |                    |       |
| Nickel and its alloys                       | 0,1%  |                       |      |                    |       |
| Stainless steel                             | <0,1% |                       |      |                    |       |
| Precious metals                             | <0,1% |                       |      |                    |       |
| Zinc and its alloys                         | <0,1% |                       |      |                    |       |

For the others references covered by this PEP

| Model                       | Metals % weight | Plastics % weight | Others % weight |
|-----------------------------|-----------------|-------------------|-----------------|
| STATYS RACK HC IEC 63A/100A | 29,3%           | 7,3%              | 63,5%           |
| STATYS RACK HC IEC 32A/63A  | 65,4%           | 12,5%             | 22,2%           |

## 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 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 RACK HC IEC 63A/100A | 99,0%                       | 45517                                  |
| STATYS RACK HC IEC 32A/63A                     | 99,0%                       | 9520                                   |

## 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                |

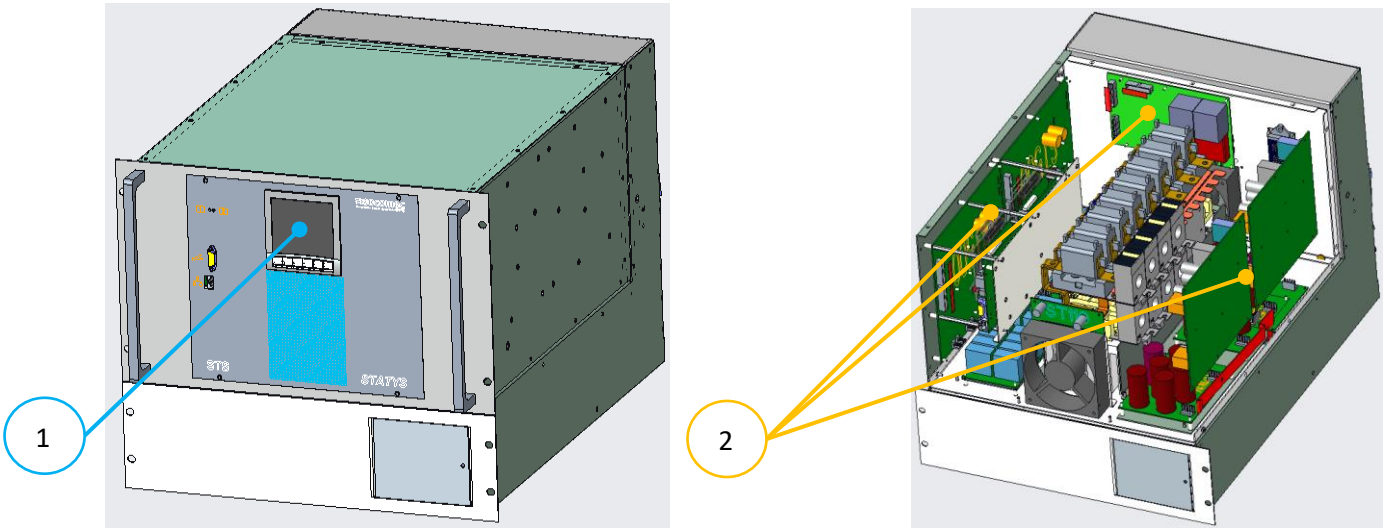
## Consumables

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 |
|-------------------|----------|-----------|----------|
| LCD               | UNIP7-U4 | 205 g     | 1        |
| Electronic cards  | *        | 3599 g    | 2        |

\* : E961307, S07002X02, E961027, E961037, E962697T, E962647, E961167, E961127, E961177, E961077T

Recovery potential of the product according to IEC TR 62635

The recovery potential of the product is 91,1%.  
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<br>Production of other components and packaging : Europe<br>Assembly : France | From the raw material extraction to the last Socomec logistic platform, including packaging<br>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.<br>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<br>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.<br>End of life treatment.                                                               |

## Environmental impacts of the STATYS RACK HC IEC 63A/100A

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.          | 2,38E-01     | 7,10E-02  | 0*       | 0*       | 1,67E-01  | 0*          |
| Resource use, fossils (Abiotic resource depletion – Fossil fuels)                               | MJ                 | 4,39E+05     | 2,29E+04  | 1,26E+03 | 2,61E+02 | 4,15E+05  | 1,39E+02    |
| Acidification                                                                                   | mol H+ eq.         | 1,24E+02     | 8,22E+00  | 5,73E-01 | 1,31E-01 | 1,15E+02  | 6,43E-02    |
| Ecotoxicity, freshwater                                                                         | CTUe               | 2,13E+05     | 6,95E+04  | 6,09E+01 | 1,15E+03 | 1,42E+05  | 3,92E+01    |
| Human toxicity, cancer                                                                          | CTUh               | 3,23E-03     | 3,17E-03  | 0*       | 0*       | 6,17E-05  | 0*          |
| Human toxicity, non-cancer                                                                      | CTUh               | 1,95E-04     | 5,24E-05  | 1,72E-07 | 4,41E-07 | 1,42E-04  | 2,71E-08    |
| Eutrophication, freshwater                                                                      | kg P eq.           | 1,06E-02     | 4,53E-03  | 3,39E-05 | 6,54E-06 | 5,24E-03  | 7,84E-04    |
| Eutrophication, marine                                                                          | kg N eq.           | 1,73E+01     | 1,28E+00  | 2,68E-01 | 2,63E-01 | 1,55E+01  | 2,89E-02    |
| Eutrophication, terrestrial                                                                     | mol N eq.          | 1,84E+02     | 1,28E+01  | 2,94E+00 | 5,98E-01 | 1,68E+02  | 3,10E-01    |
| Climate change - total                                                                          | kg CO2 eq.         | 2,76E+04     | 9,00E+02  | 9,05E+01 | 2,45E+02 | 2,64E+04  | 1,11E+01    |
| Climate change - fossil                                                                         | kg CO2 eq.         | 2,07E+03     | 1,22E+01  | 0*       | 0*       | 2,06E+03  | 0*          |
| Climate change - biogenic                                                                       | kg CO2 eq.         | 2,56E+04     | 8,88E+02  | 9,05E+01 | 2,45E+02 | 2,43E+04  | 1,11E+01    |
| Climate change - land use and land transformation                                               | kg CO2 eq.         | 6,97E-05     | 1,70E-05  | 0*       | 0*       | 5,27E-05  | 0*          |
| Ionising radiation, human health                                                                | kBq U235 eq.       | 5,69E+04     | 4,88E+04  | 0*       | 0*       | 8,13E+03  | 0*          |
| Land use                                                                                        | No dimension       | 6,77E+03     | 1,20E+01  | 0*       | 0*       | 6,75E+03  | 0*          |
| Ozone depletion                                                                                 | kg CFC-11 éq.      | 1,19E-03     | 1,26E-04  | 1,39E-07 | 5,17E-07 | 1,06E-03  | 0*          |
| Particulate matter                                                                              | disease occurrence | 1,30E-03     | 5,06E-05  | 4,66E-06 | 9,92E-07 | 1,24E-03  | 5,02E-07    |
| Photochemical ozone formation, human health                                                     | kg NMVOC eq.       | 5,27E+01     | 3,85E+00  | 7,43E-01 | 2,15E-01 | 4,78E+01  | 7,90E-02    |
| Water use                                                                                       | m³ eq.             | 7,30E+03     | 0*        | 0*       | 0*       | 8,09E+03  | 0*          |
| Use of renewable primary energy excluding renewable primary energy used as raw material         | MJ                 | 5,91E+04     | 3,12E+02  | 0*       | 0*       | 5,88E+04  | 0*          |
| Use of renewable primary energy resources used as raw material                                  | MJ                 | 3,07E+03     | 3,07E+03  | 0*       | 0*       | 0*        | 0*          |
| Total use of renewable primary energy resources                                                 | MJ                 | 6,21E+04     | 3,38E+03  | 0*       | 0*       | 5,88E+04  | 0*          |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ                 | 4,39E+05     | 2,25E+04  | 1,26E+03 | 2,61E+02 | 4,14E+05  | 1,39E+02    |
| Use of non renewable primary energy resources used as raw material                              | MJ                 | 5,66E+02     | 4,52E+02  | 0*       | 0*       | 1,13E+02  | 0*          |
| Total use of non-renewable primary energy resources                                             | MJ                 | 4,39E+05     | 2,29E+04  | 1,26E+03 | 2,61E+02 | 4,15E+05  | 1,39E+02    |
| Use of secondary material                                                                       | kg                 | 9,20E-01     | 2,43E-01  | 0*       | 0*       | 6,77E-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                 | 5,01E+05     | 2,63E+04  | 1,26E+03 | 2,61E+02 | 4,73E+05  | 1,40E+02    |
| Net use of freshwater                                                                           | m³                 | 1,70E+02     | 0*        | 0*       | 0*       | 1,88E+02  | 0*          |
| Hazardous waste disposed                                                                        | kg                 | 5,27E+03     | 2,51E+03  | 0*       | 0*       | 2,76E+03  | 0*          |
| Non hazardous waste disposed                                                                    | kg                 | 8,67E+04     | 5,86E+02  | 0*       | 1,14E+02 | 8,59E+04  | 6,13E+01    |
| Radioactive waste disposed                                                                      | kg                 | 6,11E+01     | 1,11E+00  | 0*       | 0*       | 5,99E+01  | 0*          |
| Components for reuse                                                                            | kg                 | 0,00E+00     | 0*        | 0*       | 0*       | 0*        | 0*          |
| Materials for recycling                                                                         | kg                 | 2,03E-01     | 5,03E-02  | 0*       | 0*       | 1,53E-01  | 0*          |

|                               |    |          |    |    |    |    |    |
|-------------------------------|----|----------|----|----|----|----|----|
| Materials for energy recovery | kg | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Exported Energy               | MJ | 0,00E+00 | 0* | 0* | 0* | 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 | 3,16E+01 | 3,16E+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 RACK HC IEC 63A/100A | 1,00      | 1,00   | 1,00   | 1,00      | 1,00        |
| STATYS RACK HC IEC 32A/63A  | 0,45      | 0,18   | 0,04   | 0,21      | 0,45        |

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;

|                                                                                                                                                                                                                                                        |                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Registration number : SOCO-00066-V01.01-EN                                                                                                                                                                                                             | Drafting Rules : "PEP-PCR-ed4-EN 2021 09 06"                                                               |
| Verifier accreditation number : VH12                                                                                                                                                                                                                   | Information and reference documents : <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a> |
| 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)<br>PEPs are compliant with XP C08-100-1 : 2016 or EN 50693:2019<br>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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