Product Environmental Profile





Maintenance slot DXL

Ready to use spare power brick



Socomec is member of : COSYSTEM Member of WEEE Europe Environment and sustainable development commissions

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.

PEP ecopassport® Registration number: SOCO-00107-V01.01-EN

Contact: http://www.socomec.com/contact-us_en.html





Product information :

Reference product

References covered by this PEP:

The representative product is the Maintenance slot DXL with sales reference 3DX-SS-240-00-0 + 3DX-PI-240-00-0 with the following description: Ready to use spare power brick

3DX-SS-240-00-0 + 3DX-PI-240-00-0

Functional unit

Make ready a power brick of DXL Product during preventive maintenance activities or brick replacement during RSL of 15 years.

Materials and substances

Declaration of the constitutives materials

Total mass of the reference product (including packaging): 814,9 kg among which packaging: 110 kg For the reference product:

| Plastics as % of w | eight | Metals as % of we | Metals as % of weight Other as % of weight | | eight |
|--------------------------|-------|--------------------------|--|-------------------------|--------|
| Epoxy resin | 0,95% | Stainless steel | 29,90% | Electronic components | 38,82% |
| Polyamide | 0,63% | Aluminium and its alloys | 6,92% | Wood | 13,54% |
| PP | 0,61% | Copper and its alloys | 3,51% | Miscellanous | 0,23% |
| PC | 0,41% | Steel | 2,47% | Other inorganics | 0,21% |
| PUR | 0,27% | Other ferrous alloys | 0,30% | Paper | 0,20% |
| PVC | 0,22% | Nickel and its alloys | <0,1% | Cardboard | <0,1% |
| PE | 0,16% | Zinc and its alloys | <0,1% | Other organics | <0,1% |
| Phenolic resin | <0,1% | Tin and its alloys | <0,1% | | |
| ABS | <0,1% | Precious metals | <0,1% | | |
| PBT | <0,1% | Other metals | <0,1% | | |
| Polyester | <0,1% | Lead and its alloys | <0,1% | | |
| Other plastics | 0,10% | | | | |
| | | | | | |
| Total Plastics: 29,42 kg | 3,61% | Total Metals: 353,1 kg | 43,33% | Total Others: 432,38 kg | 53,06% |

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).



REACH 1907/2006 regulation: To the best of our knowledge, based on the supplier declarations, at the publication date of this document, the product do not contain any 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

| Mode | Power of the reference product [W] | Load rate [%] | Time distribution [%] |
|--------|------------------------------------|---------------|-----------------------|
| Active | 250000 W | 0,67% | 100% |

Product power consumption during its total lifespan (15 years): 220095 kWh

Care and maintenance

The product does not require any maintenance under normal conditions of use.

Consumables

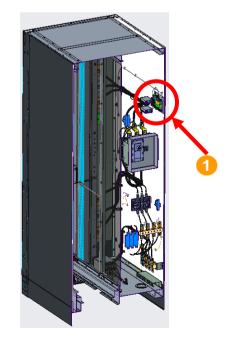
The product does not require consumables.

• 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 | |
|------------------------------------|-----------------------|-----------|----------|--|
| Necessity of a selective treatment | Printed circuit board | 0,943 kg | 1 | |





Recyclability potential of the product according to IEC TR 62635

The recyclability potential of the product is 76,13%.

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

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

EIME version: EIME v6.2.1-17

Database version: CODDE-2024-04 - updated on 2024-06-04 For biogenic carbon storage the 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. | | |
| 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 | 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 Maintenance slot DXL, per FU

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) |
|---|--------------------|--------------|-----------|----------|----------|-----------|-------------|
| Climate change | kg CO2 eq. | 2,74E+04 | 5,29E+03 | 1,44E+02 | 3,84E+02 | 2,16E+04 | 6,02E+01 |
| Climate change-Biogenic | kg CO2 eq. | 1,22E+02 | 0* | 0* | 1,74E+02 | 3,97E+01 | 0* |
| Climate change-Fossil | kg CO2 eq. | 2,73E+04 | 5,38E+03 | 1,44E+02 | 2,10E+02 | 2,15E+04 | 6,02E+01 |
| Climate change-Land use and land use change | kg CO2 eq. | 1,34E-02 | 1,34E-02 | 0* | 0* | 0* | 0* |
| Ozone depletion | kg CFC-11 eq. | 4,54E-04 | 3,48E-04 | 2,20E-07 | 2,58E-07 | 1,04E-04 | 6,87E-07 |
| Acidification | mol H+ eq. | 1,64E+02 | 5,18E+01 | 9,10E-01 | 1,01E-01 | 1,10E+02 | 3,21E-01 |
| Eutrophication, freshwater | kg P eq. | 8,52E-02 | 1,98E-02 | 5,39E-05 | 8,90E-04 | 5,67E-02 | 7,74E-03 |
| Eutrophication, marine | kg N eq. | 2,02E+01 | 6,17E+00 | 4,27E-01 | 4,45E-02 | 1,35E+01 | 1,40E-01 |
| Eutrophication, terrestrial | mol N eq. | 2,93E+02 | 7,06E+01 | 4,68E+00 | 4,32E-01 | 2,16E+02 | 1,43E+00 |
| Photochemical ozone formation - human health | kg NMVOC eq. | 6,59E+01 | 2,19E+01 | 1,18E+00 | 1,69E-01 | 4,23E+01 | 3,70E-01 |
| Resource use, minerals and metals | kg SB eq. | 3,31E-01 | 3,23E-01 | 0* | 0* | 7,62E-03 | 0* |
| Resource use, fossils | MJ | 8,13E+05 | 2,66E+05 | 2,00E+03 | 2,00E+02 | 5,44E+05 | 8,25E+02 |
| Water use | m3 eq. | 5,15E+03 | 3,50E+03 | 5,46E-01 | 1,87E+00 | 1,65E+03 | 1,37E+00 |
| Particulate matter | Disease occurrence | 1,22E-03 | 3,19E-04 | 7,40E-06 | 5,74E-07 | 8,89E-04 | 2,37E-06 |
| lonising radiation, human health | kBq U235 eq. | 2,00E+05 | 1,69E+05 | 0* | 0* | 3,10E+04 | 0* |
| Ecotoxicity, freshwater | CTUe | 3,98E+05 | 3,57E+05 | 9,41E+01 | 0* | 4,07E+04 | 3,69E+02 |
| Human toxicity, cancer | CTUh | 9,13E-03 | 9,12E-03 | 0* | 0* | 2,71E-06 | 0* |
| Human toxicity, non-cancer | CTUh | 3,39E-04 | 2,74E-04 | 4,89E-08 | 3,69E-08 | 6,47E-05 | 7,50E-08 |
| Land use | No dimension | 6,54E+02 | 5,77E+01 | 0* | 0* | 5,96E+02 | 0* |
| Renewable primary energy used as energy | MJ | 1,47E+05 | 2,96E+03 | 0* | 0* | 1,44E+05 | 0* |
| Renewable primary energy used as raw material | MJ | 3,03E+03 | 3,03E+03 | 0* | 0* | 0* | 0* |
| Total renewable primary energy | MJ | 1,50E+05 | 5,99E+03 | 0* | 0* | 1,44E+05 | 0* |
| Non renewable primary energy used as energy | MJ | 8,12E+05 | 2,65E+05 | 2,00E+03 | 2,00E+02 | 5,44E+05 | 8,25E+02 |
| Non renewable primary energy used as raw material | MJ | 1,95E+03 | 1,95E+03 | 0* | 0* | 0* | 0* |
| Total non renewable primary energy | MJ | 8,13E+05 | 2,66E+05 | 2,00E+03 | 2,00E+02 | 5,44E+05 | 8,25E+02 |
| Total primary energy | MJ | 9,63E+05 | 2,72E+05 | 2,01E+03 | 2,04E+02 | 6,88E+05 | 8,35E+02 |
| Use of secondary material | kg | 8,84E-03 | 8,84E-03 | 0* | 0* | 0* | 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* |
| Net use of fresh water | m3 | 1,20E+02 | 8,14E+01 | 1,27E-02 | 4,35E-02 | 3,88E+01 | 3,20E-02 |
| Hazardous waste disposed | kg | 1,46E+04 | 1,37E+04 | 0* | 0* | 9,45E+02 | 0* |
| Non hazardous waste disposed | kg | 7,42E+03 | 2,91E+03 | 5,04E+00 | 1,23E+02 | 3,64E+03 | 7,39E+02 |
| Radioactive waste disposed | kg | 3,58E+00 | 2,72E+00 | 3,59E-03 | 4,21E-03 | 8,35E-01 | 1,12E-02 |
| Components for reuse | kg | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for recycling | kg | 5,95E-02 | 5,95E-02 | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Exported Energy | MJ | 1,37E+02 | 4,10E+01 | 0* | 9,58E+01 | 0* | 0* |
| Biogenic carbon content - Product | kg of C | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Biogenic carbon content - Packaging | kg of C | 4,43E+01 | 4,43E+01 | 0* | 0* | 0* | 0* |

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 use stage (U), the product does not require maintenance therefore the impacts values are representatives of the B6 phase from the use stage: - Energy requirements during the use stage



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|--|---|---|--|--|--|
| Verifier accreditation number : VH12 | Information and reference documents : www | Information and reference documents : www.pep-ecopassport.org | | | |
| Date of issue: 07-2024 | Validity period : 5 years | Validity period : 5 years | | | |
| Independant verification of the declaration and data in compliance with ISO 14025 : 2006 | | | | | |
| Internal : ☑ 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 50693:20 | PEP | | | | |
| 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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