Product Environmental Profile

TeSys Deca overload relay



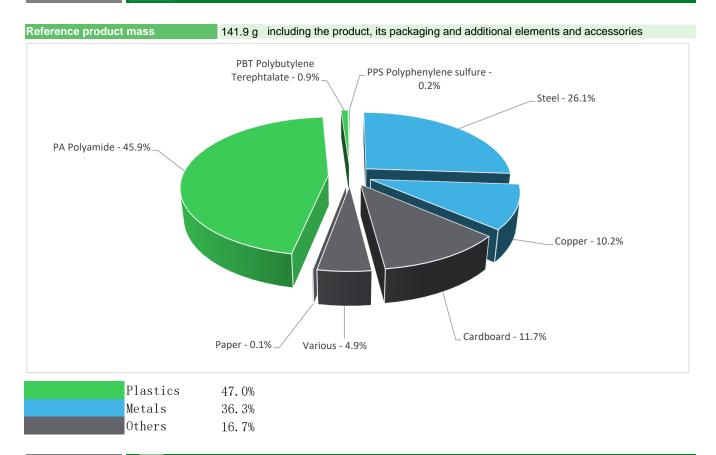






| Representative product | TeSys Deca overload relay - LRD06 | | | | |
|----------------------------|--|--|--|--|--|
| Description of the product | The main purpose of the thermal overload relays is to detect overload currents in order to prethe motor. | | | | |
| Functional unit | The functional unit of the LRD06 is to detect overload currents in order to protect the load for 20 years. Standardized product characteristics to provide: rated insulation voltage: 690V conventional free air thermal current: 5A rated operational voltage: 690V AC rated impulse withstand voltage: 6KV thermal protection adjustment range:1-1.6A tripping class:10A | | | | |

Constituent materials



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate – BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page



Additional environmental information

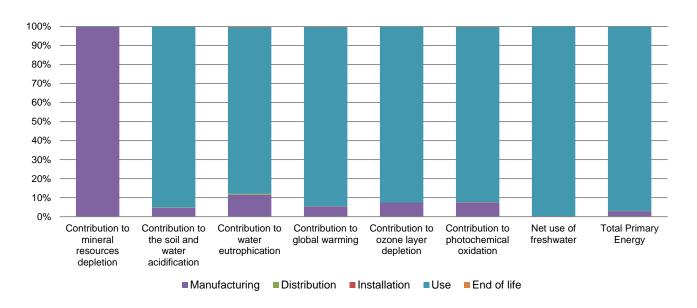
| | The TeSys Deca overload relay presents the following relevent environmental aspects | | | | | | |
|---------------|---|--|--|--|--|--|--|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified | | | | | | |
| Distribution | Weight and volume of the packaging optimized, based on the European Union's packaging directive | | | | | | |
| Distribution | Packaging weight is 17.2 g, consisting of cardboard (100%) | | | | | | |
| Installation | Ref LRD06 does not require any installation operations. | | | | | | |
| Use | The product does not require special maintenance operations. | | | | | | |
| | End of life optimized to decrease the amount of waste and allow recovery of the product components and materials | | | | | | |
| | This product contains Plastic with brominated FR17(1g) that should be separated from the stream of waste so as to optimize end-of-life treatment. | | | | | | |
| End of life | The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website | | | | | | |
| | http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page | | | | | | |
| | Based on "ECO'DEEE recyclability and recoverability calculation method" Recyclability potential: 38% (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME). | | | | | | |



Tenvironmental impacts

| Reference life time | 20 years | | | | | |
|----------------------------------|---|---|---|---|--|--|
| Product category | Other equipments - Passive product - non-continuous operation | | | | | |
| Installation elements | The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal). | | | | | |
| Use scenario | load rate / rated current (In): 30 % of In percentage of utilization time: 30% | | | | | |
| Geographical representativeness | Europe | | | | | |
| Technological representativeness | The main purpose of the thermal overload relays is to detect overload currents in order to protect the motor. | | | | | |
| | Manufacturing | Installation | Use | End of life | | |
| Energy model used | Energy model used: France | Electricity mix; AC; consumption mix, at consumer; 230V; FR | Electricity mix; AC; consumption mix, at consumer; 230V; FR | Electricity mix; AC; consumption mix, at consumer; 230V; FR | | |

| Compulsory indicators | TeSys Deca overload relay - LRD06 | | | | | | |
|--|-----------------------------------|----------|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 4.96E-04 | 4.95E-04 | 0* | 0* | 1.21E-06 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 6.10E-02 | 2.88E-03 | 8.36E-05 | 0* | 5.80E-02 | 3.97E-05 |
| Contribution to water eutrophication | kg PO ₄ 3- eq | 3.99E-03 | 4.60E-04 | 1.93E-05 | 9.43E-07 | 3.50E-03 | 1.15E-05 |
| Contribution to global warming | kg CO ₂ eq | 1.47E+01 | 7.87E-01 | 1.83E-02 | 0* | 1.39E+01 | 2.27E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 9.80E-07 | 7.30E-08 | 0* | 0* | 9.06E-07 | 9.21E-10 |
| Contribution to photochemical oxidation | kg C₂H₄ eq | 3.46E-03 | 2.57E-04 | 5.97E-06 | 0* | 3.19E-03 | 4.10E-06 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 5.04E+01 | 8.36E-03 | 0* | 0* | 5.04E+01 | 0* |
| Total Primary Energy | MJ | 2.87E+02 | 8.35E+00 | 2.59E-01 | 0* | 2.78E+02 | 1.91E-01 |



| Optional indicators | | TeSys Deca | overload relay - I | LRD06 | | | |
|---|------|------------|--------------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 1.63E+02 | 4.73E+00 | 2.57E-01 | 0* | 1.58E+02 | 1.54E-01 |
| Contribution to air pollution | m³ | 7.97E+02 | 1.96E+02 | 7.79E-01 | 0* | 5.99E+02 | 1.39E+00 |
| Contribution to water pollution | m³ | 8.23E+02 | 2.45E+02 | 3.01E+00 | 1.41E-01 | 5.74E+02 | 1.72E+00 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 1.88E-02 | 1.88E-02 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 3.56E+01 | 2.97E-01 | 0* | 0* | 3.53E+01 | 0* |
| Total use of non-renewable primary energy resources | MJ | 2.51E+02 | 8.06E+00 | 2.59E-01 | 0* | 2.42E+02 | 1.91E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 3.56E+01 | 2.42E-01 | 0* | 0* | 3.53E+01 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 5.46E-02 | 5.46E-02 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 2.49E+02 | 6.03E+00 | 2.59E-01 | 0* | 2.42E+02 | 1.91E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 2.02E+00 | 2.02E+00 | 0* | 0* | 0* | 0* |
| Use of non renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Use of renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Waste categories | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Hazardous waste disposed | kg | 6.87E+00 | 6.65E+00 | 0* | 0* | 7.25E-03 | 2.11E-01 |
| Non hazardous waste disposed | kg | 5.24E+01 | 5.96E-01 | 0* | 0* | 5.18E+01 | 0* |
| Radioactive waste disposed | kg | 3.49E-02 | 3.08E-04 | 0* | 0* | 3.46E-02 | 0* |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 7.96E-02 | 1.37E-02 | 0* | 1.71E-02 | 0* | 4.87E-02 |
| Components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 3.45E-03 | 0* | 0* | 0* | 0* | 3.45E-03 |
| Exported Energy | MJ | 5.44E-05 | 5.11E-06 | 0* | 4.93E-05 | 0* | 0* |

^{*} represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.9.3, database version 2020-12 in compliance with ISO14044.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

| Registration number | ENVPEP080206EN_V2 | Drafting rules | PCR-ed3-EN-2015 04 02 |
|---------------------|-------------------|-------------------------------------|----------------------------|
| Date of issue | 02/2022 | Supplemented by | PSR-0005-ed2-EN-2016 03 29 |
| Validity period | 5 years | Information and reference documents | www.pep-ecopassport.org |

Independent verification of the declaration and data

Internal X External

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »

Schneider Electric Industries SAS

Country Customer Care Center http://www.schneider-electric.com/contact

35, rue Joseph Monier

CS 30323

F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439 Capital social 896 313 776 €

www.schneider-electric.com

Published by Schneider Electric

ENVPEP080206EN_V2

© 2019 - Schneider Electric – All rights reserved

02/2022