

Product Environmental Profile

TeSys D Contactors AC 25 to 38A (ref LC1D25P7)





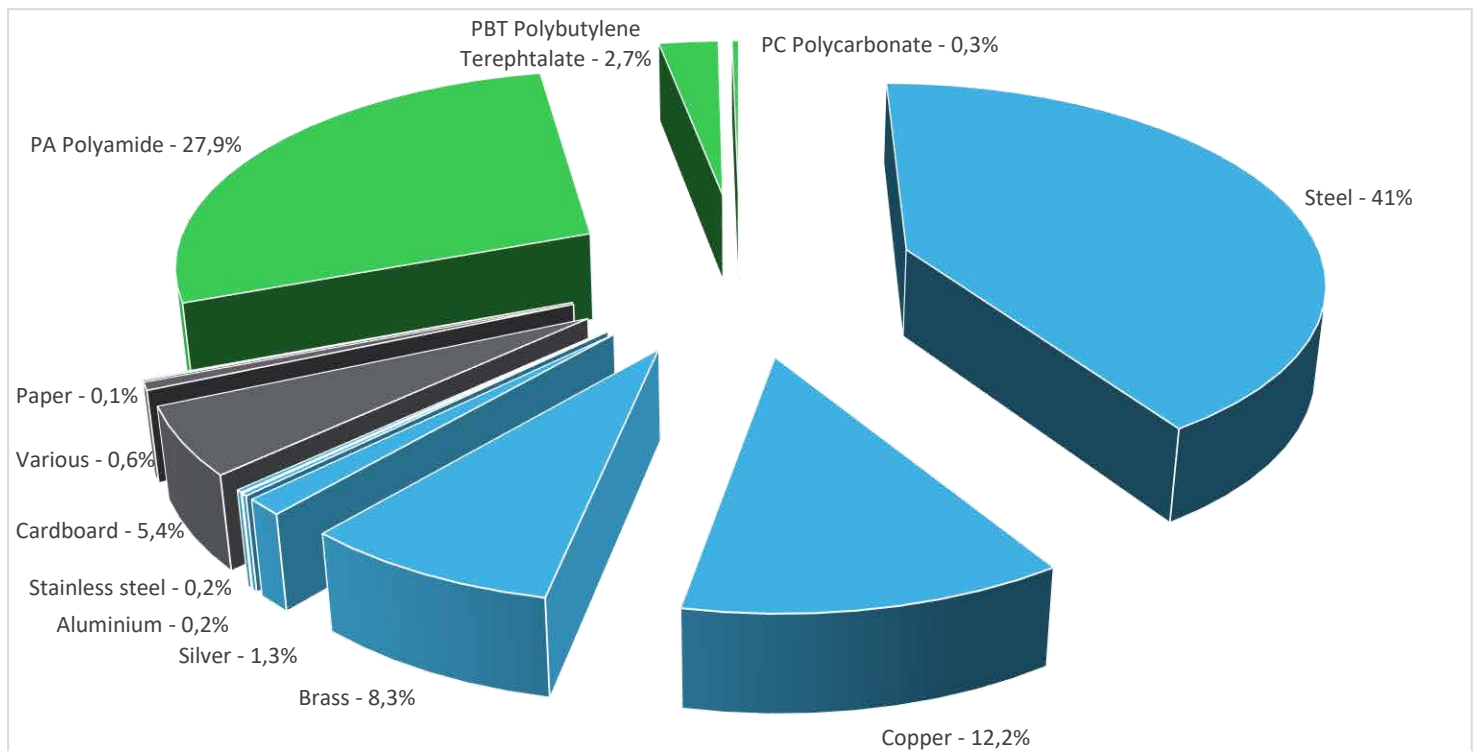
General information

| | |
|-----------------------------------|--|
| Representative product | TeSys D Contactors AC 25 to 38A (ref LC1D25P7) - LC1D25P7 |
| Description of the product | Three-poles contactor supplied with AC and DC currents, intended for make and break current. The data used to make this PEP are the most representative of the product studied. No missing data is to be declared. |
| Functional unit | Switch on and off during 20 years electrical power supply of a downstream installation with an electrical and/or mechanical control. The functional unit is characterized by a type 1F+1O, a control circuit voltage 230 V AC, a power circuit voltage 440 V and a maximum allowed intensity by the power circuit 380 A. |



Constituent materials

Reference product mass 437,3 g including the product, its packaging and additional elements and accessories



| | |
|----------|-------|
| Plastics | 30,9% |
| Metals | 63,2% |
| Others | 6,1% |



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 D Contactors AC 25 to 38A (ref LC1D25P7) presents the following relevant environmental aspects

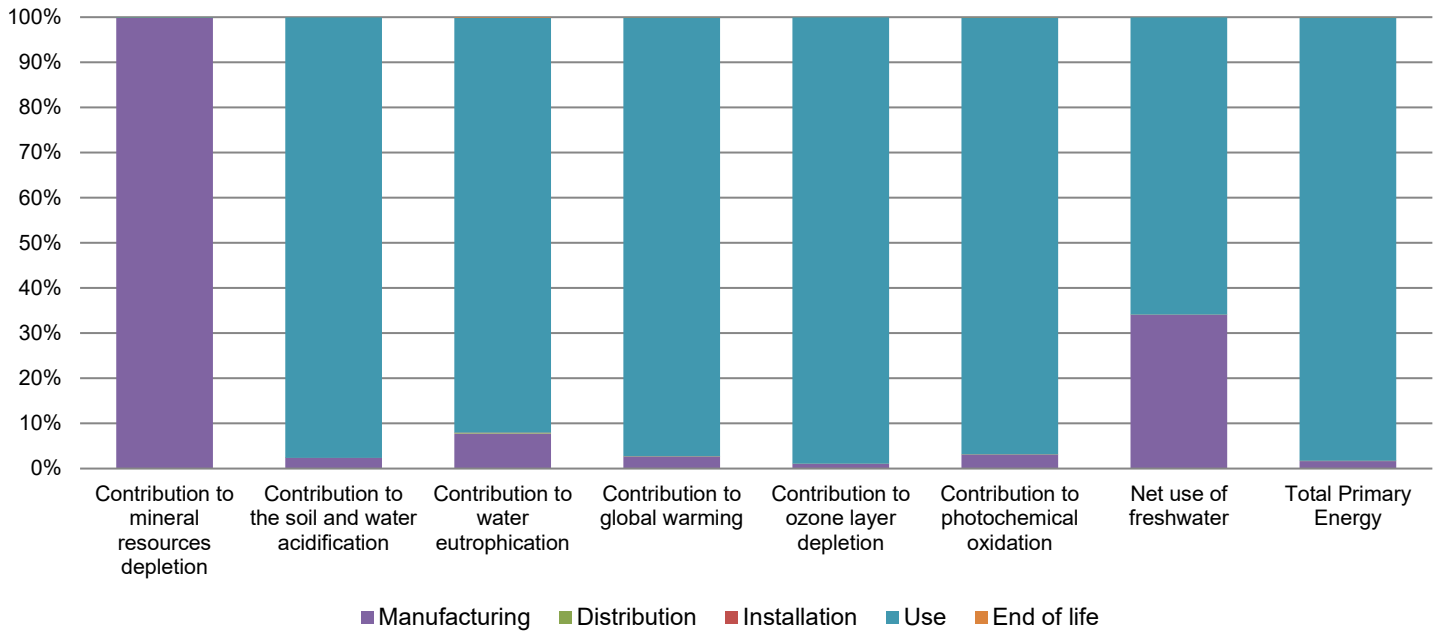
| | |
|----------------------|---|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified |
| Distribution | Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 23,2 g, consisting of Carboard (99%), paper (1%) Packaging recycled materials is 85% of total packaging mass. Product distribution optimised by setting up local distribution centres |
| Installation | Ref LC1D25P7 does not require any installation operations |
| Use | The product does not require special maintenance operations. |
| End of life | End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains 1 plastic part with brominated FR that should be separated from the stream of waste so as to optimize end-of-life treatment. 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 Recyclability potential: 57% Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME). |



Environmental impacts

| | | | | |
|---|--|---|---|---|
| Reference life time | 20 years | | | |
| Product category | Contactor, remote control switch, combinations, starters | | | |
| Installation elements | Disposal of packaging, and transport to disposal of packaging are accounted for in the installation phase. | | | |
| Use scenario | Load factor : 50% of 380 A Use rate: 50% of 20 years | | | |
| Geographical representativeness | Europe | | | |
| Technological representativeness | Three-poles contactor supplied with AC and DC currents, intended for make and break current. The data used to make this PEP are the most representative of the product studied. No missing data is to be declared. | | | |
| Energy model used | Manufacturing | Installation | Use | End of life |
| | Energy model used: China | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 |

| Compulsory indicators | | TeSys D Contactors AC 25 to 38A (ref LC1D25P7) - LC1D25P7 | | | | | |
|--|-------------------------------------|---|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 4,21E-03 | 4,21E-03 | 0* | 0* | 4,32E-06 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 7,35E-01 | 1,72E-02 | 2,58E-04 | 0* | 7,18E-01 | 1,21E-04 |
| Contribution to water eutrophication | kg PO ₄ ³⁻ eq | 2,93E-02 | 2,28E-03 | 5,93E-05 | 0* | 2,69E-02 | 3,24E-05 |
| Contribution to global warming | kg CO ₂ eq | 9,76E+01 | 2,62E+00 | 5,64E-02 | 0* | 9,49E+01 | 5,79E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 2,33E-05 | 2,54E-07 | 0* | 0* | 2,31E-05 | 2,70E-09 |
| Contribution to photochemical oxidation | kg C ₂ H ₄ eq | 3,50E-02 | 1,09E-03 | 1,84E-05 | 0* | 3,39E-02 | 1,27E-05 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 3,76E-01 | 1,28E-01 | 0* | 0* | 2,48E-01 | 5,32E-05 |
| Total Primary Energy | MJ | 1,96E+03 | 3,29E+01 | 7,98E-01 | 0* | 1,92E+03 | 5,91E-01 |




| Optional indicators | | TeSys D Contactors AC 25 to 38A (ref LC1D25P7) - LC1D25P7 | | | | | |
|---|----------------|---|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 9,99E+02 | 2,00E+01 | 7,93E-01 | 0* | 9,78E+02 | 4,75E-01 |
| Contribution to air pollution | m ³ | 5,00E+03 | 9,25E+02 | 2,40E+00 | 0* | 4,07E+03 | 4,25E+00 |
| Contribution to water pollution | m ³ | 4,56E+03 | 5,62E+02 | 9,28E+00 | 0* | 3,98E+03 | 4,98E+00 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 1,45E-02 | 1,45E-02 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 1,39E+02 | 1,56E+00 | 0* | 0* | 1,38E+02 | 0* |
| Total use of non-renewable primary energy resources | MJ | 1,82E+03 | 3,14E+01 | 7,97E-01 | 0* | 1,79E+03 | 5,90E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 1,39E+02 | 1,10E+00 | 0* | 0* | 1,38E+02 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 4,57E-01 | 4,57E-01 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 1,81E+03 | 2,80E+01 | 7,97E-01 | 0* | 1,79E+03 | 5,90E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 3,39E+00 | 3,39E+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 | 3,56E+01 | 3,50E+01 | 0* | 0* | 0* | 5,78E-01 |
| Non hazardous waste disposed | kg | 3,56E+02 | 1,02E+00 | 0* | 0* | 3,55E+02 | 0* |
| Radioactive waste disposed | kg | 2,90E-01 | 5,20E-04 | 0* | 0* | 2,89E-01 | 0* |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 2,94E-01 | 4,07E-02 | 0* | 2,31E-02 | 0* | 2,30E-01 |
| Components for reuse | kg | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 6,60E-03 | 0* | 0* | 0* | 0* | 6,60E-03 |
| Exported Energy | MJ | 7,32E-05 | 6,84E-06 | 0* | 6,64E-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 v5.8.1, database version 2018-11 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.

| | | | |
|--|------------------|--|---|
| <i>Registration number :</i> | SCHN-2015-105-EN | <i>Drafting rules</i> | PCR-ed3-EN-2015 04 02 |
| <i>Verifier accreditation N°</i> | VH25 | <i>Supplemented by</i> | PSR-0005-ed2-EN-2016 03 29 |
| <i>Date of issue</i> | 01/2020 | <i>Information and reference documents</i> | www.pep-ecopassport.org |
| | | <i>Validity period</i> | 5 years |
| <i>Independent verification of the declaration and data, in compliance with ISO 14025 : 2010</i> | | | |
| Internal | External | X | |
| <i>The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)</i> | | | |
| <i>PEP are compliant with XP C08-100-1 :2016</i> | | | |
| <i>The elements of the present PEP cannot be compared with elements from another program.</i> | | | |
| <i>Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »</i> | | | |
| | | |  |

Schneider Electric Industries SAS
ROSELYNE THAI
roselyne.thai@schneider-electric.com

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

SCHN-2015-105-EN

© 2019 - Schneider Electric – All rights reserved

01/2020