Product Environmental Profile

TeSys D contactor-3P-AC3- <= 440V 9A - 1

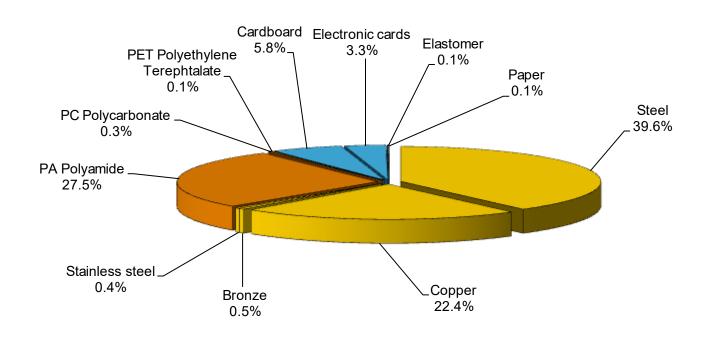






General information

| Representative product | TeSys D contactor-3P-AC3- <= 440V 9A - 1 -LC1D09KUE | | | | |
|----------------------------|--|--|--|--|--|
| Description of the product | To make and break currents up to 90 A for motor loads and up to 9 A for resistive loads at voltages up to 690 V AC for 10 years. | | | | |
| Functional unit | To switch on and off during 10 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 250V, a power circuit voltage 690V and a maximum allowed intensity by the power circuit 90 A. | | | | |



Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) 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) as mentioned in the Directive

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this 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

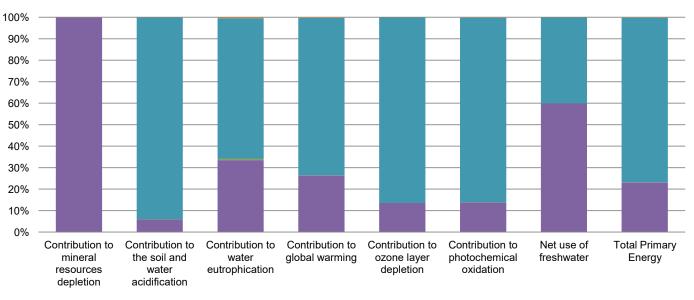
| The TeSys D contactor-3P-AC3- <= 440V 9A - 1 presents the following relevent environmental aspects | | | | | |
|--|---|--|--|--|--|
| Design | | | | | |
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified | | | | |

| Weight and volume of the packaging opt Packaging weight is 23.3 g, consisting of Product distribution optimised by setting | |
|--|---|
| Ref LC1D09KUE does not require any in | stallation operations |
| The product does not require special ma | intenance operations. |
| End of life optimized to decrease the am | ount of waste and allow recovery of the product components and materials |
| This product contains PCBA (5.475g) that life treatment. | at should be separated from the stream of waste so as to optimize end-of- |
| The location of these components and or which is available on the Schneider-Elec | ther recommendations are given in the End of Life Instruction document tric Green Premium website |
| http://www2.schneider-electric.com/sites | /corporate/en/products-services/green-premium/green-premium.page |
| Recyclability potential: 63% | 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). |
| | Packaging weight is 23.3 g, consisting of Product distribution optimised by setting Ref LC1D09KUE does not require any in The product does not require special ma End of life optimized to decrease the am This product contains PCBA (5.475g) tha life treatment. The location of these components and o which is available on the Schneider-Elec http://www2.schneider-electric.com/sites Recyclability potential: 63% |

\mathcal{D} Environmental impacts

| Reference life time | 10 years | | | | | |
|----------------------------------|--|---|---|---|--|--|
| Product category | Passive products - non-continuous operation | | | | | |
| Installation elements | No special components needed | | | | | |
| Use scenario | Product dissipation is 1.154 W full load, loading rate is 30% and service uptime percentage is 30% | | | | | |
| Geographical representativeness | Europe | | | | | |
| Technological representativeness | To make and break currents up to 90 A for motor loads and up to 9 A for resistive loads at voltages up to 690 V AC for 10 years. | | | | | |
| | Manufacturing | Installation | Use | End of life | | |
| Energy model used | Energy model used: France | 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 co | ntactor-3P-AC3- < | <= 440V 9A - 1 | - LC1D09KU | Ξ | |
|--|-------------------------------------|------------|-------------------|----------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 6.78E-04 | 6.77E-04 | 0* | 0* | 8.16E-07 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 1.44E-01 | 8.52E-03 | 2.31E-04 | 0* | 1.35E-01 | 1.13E-04 |
| Contribution to water eutrophication | kg PO ₄ ³⁻ eq | 7.76E-03 | 2.60E-03 | 5.31E-05 | 1.57E-06 | 5.08E-03 | 3.15E-05 |
| Contribution to global warming | kg CO ₂ eq | 2.44E+01 | 6.43E+00 | 5.05E-02 | 0* | 1.79E+01 | 5.93E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 5.04E-06 | 6.85E-07 | 0* | 0* | 4.35E-06 | 2.69E-09 |
| Contribution to photochemical oxidation | kg C_2H_4 eq | 7.45E-03 | 1.02E-03 | 1.65E-05 | 0* | 6.40E-03 | 1.18E-05 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 1.17E-01 | 7.00E-02 | 0* | 0* | 4.67E-02 | 5.16E-05 |
| Total Primary Energy | MJ | 4.73E+02 | 1.09E+02 | 7.14E-01 | 0* | 3.63E+02 | 6.12E-01 |



Manufacturing Distribution Installation Use End of life

| Optional indicators | | TeSys D co | ntactor-3P-AC3- < | <= 440V 9A - 1 | - LC1D09KU | Ξ | |
|---|------|------------|-------------------|----------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 2.61E+02 | 7.53E+01 | 7.09E-01 | 3.06E-02 | 1.84E+02 | 5.04E-01 |
| Contribution to air pollution | m³ | 1.79E+03 | 1.02E+03 | 2.15E+00 | 2.38E-01 | 7.68E+02 | 3.97E+00 |
| Contribution to water pollution | m³ | 1.18E+03 | 4.11E+02 | 8.30E+00 | 2.54E-01 | 7.51E+02 | 4.80E+00 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 6.79E-02 | 6.79E-02 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 2.86E+01 | 2.69E+00 | 0* | 0* | 2.60E+01 | 0* |
| Total use of non-renewable primary energy resources | MJ | 4.44E+02 | 1.06E+02 | 7.13E-01 | 0* | 3.37E+02 | 6.12E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 2.82E+01 | 2.21E+00 | 0* | 0* | 2.60E+01 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 4.75E-01 | 4.75E-01 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 4.41E+02 | 1.03E+02 | 7.13E-01 | 0* | 3.37E+02 | 6.12E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 3.08E+00 | 3.08E+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 | 1.52E+01 | 1.47E+01 | 0* | 2.35E-02 | 0* | 5.16E-01 |
| Non hazardous waste disposed | kg | 6.80E+01 | 1.05E+00 | 0* | 0* | 6.70E+01 | 0* |
| Radioactive waste disposed | kg | 5.51E-02 | 4.90E-04 | 0* | 0* | 5.46E-02 | 0* |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 2.95E-01 | 3.73E-02 | 0* | 2.32E-02 | 0* | 2.35E-01 |
| Components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 8.69E-03 | 8.04E-04 | 0* | 0* | 0* | 7.88E-03 |
| Exported Energy | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |

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

Life cycle assessment performed with EIME version EIME v5.5, database version 2015-04.

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 N° | | ENVPEP1609001_V01.01-EN | Drafting rules | PCR-ed3-EN-2015 04 02 |
|-----------------------------------|-----------|---|------------------------------------|----------------------------|
| Date of issue | | 10/2016 | Supplemented by | PSR-0005-ed2-EN-2016 03 29 |
| Validity period | | 5 years | Information and reference | www.pep-ecopassport.org |
| Independent verifi | cation of | the declaration and data, in compliance | with ISO 14025 : 2010 | |
| Internal | х | External | | |
| The elements of the | he presen | t PEP cannot be compared with eleme | nts from another program. | |
| Document in com declarations » | pliance w | ith ISO 14025 : 2010 « Environmental I | abels and declarations. Type III e | nvironmental |

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