# Product Environmental Profile

## iDPN N VigiARC

# General information

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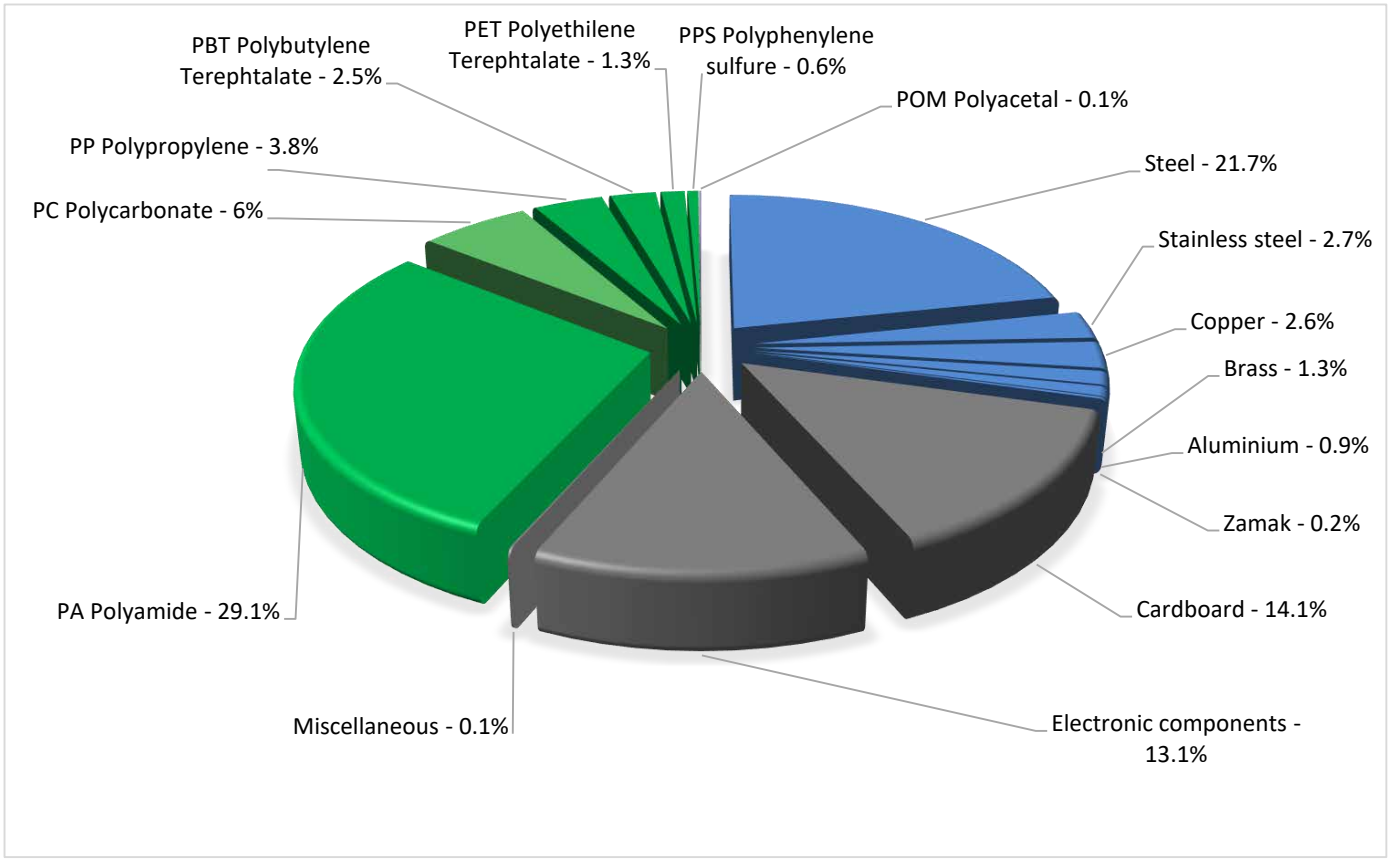
|---|---|
| **Representative product** | iDPN N VigiARC - A9T26620 |
| **Description of the product** | Protection against fire hazards by detection of abnormal electric arcs;<br>Protection against load fire hazards due to slow overvoltages;<br>Fire hazard tripping indication via the front panel indicator;<br>Device self-diagnostics via the test button. |
| **Functional unit** | Protect during 10 years the installation against overloads and short-circuits and people and premises at risk of fire or explosion against insulation defects in circuit with assigned voltage 240V and rated current 6A, 10A, 16A, 20A and 25A. This protection is ensured in accordance with the following parameters:<br>- Number of poles 1P+N<br>- Rated breaking capacity 6000A and 10000A<br>- Tripping curve C<br>- Sensitivity 30mA |

# Constituent materials

| | | |
|---|---|---|
| **Reference product mass** | 240 g | including the product, its packaging and additional elements and accessories |

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|---|---|
| Plastics | 43.3% |
| Metals | 29.4% |
| Others | 27.3% |

# Substance assessment

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 iDPN N VigiARC 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<br>Packaging weight is 35 g, consisting of cardboard (99.9%),Paper(0.01%) |
| **Installation** | This product range 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<br><br>This product contains electronic card (31.5g) that should be separated from the stream of waste so as to optimize end-of-life treatment.<br><br>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<br><br>http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page<br><br>Recyclability potential: **39%** 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

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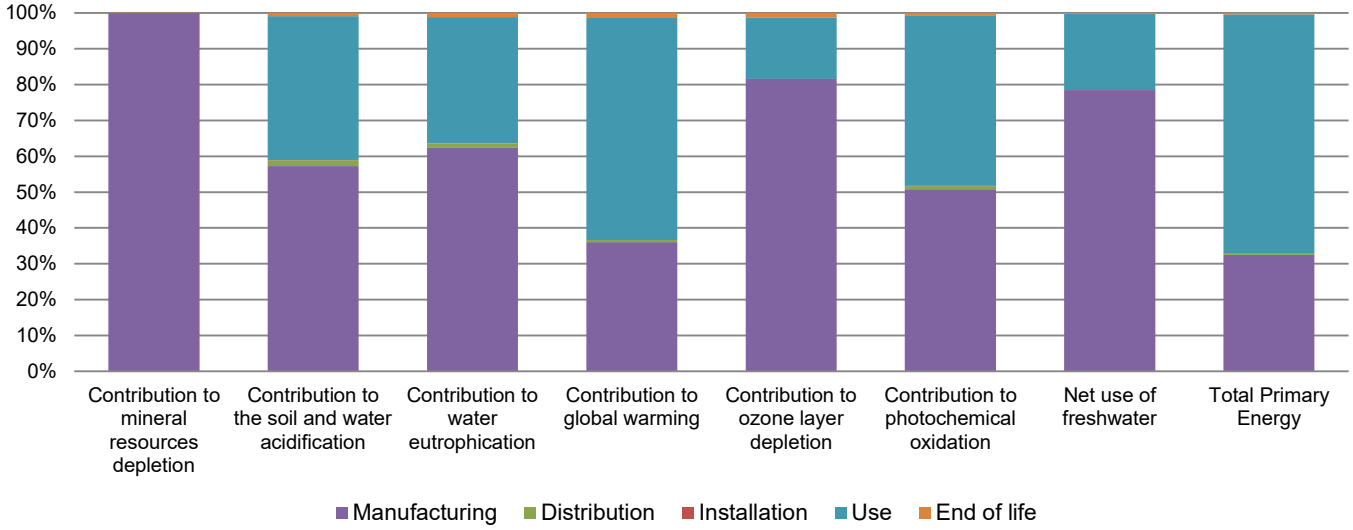
|---|---|
| **Reference life time** | 10 years |
| **Product category** | Differential circuit breaker |
| **Installation elements** | No special components needed |
| **Use scenario** | Load rate: 50% of In<br>Use time rate: 30% of RLT |
| **Geographical representativeness** | Australia,New Zealand |
| **Technological representativeness** | Protection against fire hazards by detection of abnormal electric arcs;<br>Protection against load fire hazards due to slow overvoltages;<br>Fire hazard tripping indication via the front panel indicator;<br>Device self-diagnostics via the test button. |

| | Manufacturing | Installation | Use | End of life |
|---|---|---|---|---|
| **Energy model used** | Energy model used: shanghai | Electricity mix; AC; consumption mix, at consumer; 240V; AU | Electricity mix; AC; consumption mix, at consumer; 240V; AU | Electricity mix; AC; consumption mix, at consumer; 240V; AU |

| Compulsory indicators | iDPN N VigiARC - A9T26620 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Impact indicators** | **Unit** | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 2.08E-04 | 2.08E-04 | 0* | 0* | 4.57E-08 | 0* |
| Contribution to the soil and water acidification | kg $SO_2$ eq | 8.61E-03 | 4.93E-03 | 1.41E-04 | 7.89E-06 | 3.46E-03 | 7.88E-05 |
| Contribution to water eutrophication | kg $PO_4^{3-}$ eq | 2.59E-03 | 1.61E-03 | 3.26E-05 | 1.92E-06 | 9.12E-04 | 3.02E-05 |
| Contribution to global warming | kg $CO_2$ eq | 5.75E+00 | 2.07E+00 | 3.10E-02 | 1.89E-03 | 3.56E+00 | 8.04E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 2.36E-07 | 1.92E-07 | 6.27E-11 | 0* | 4.03E-08 | 2.91E-09 |
| Contribution to photochemical oxidation | kg $C_2H_4$ eq | 1.11E-03 | 5.64E-04 | 1.01E-05 | 5.90E-07 | 5.29E-04 | 7.41E-06 |
| **Resources use** | **Unit** | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 1.61E-02 | 1.26E-02 | 2.77E-06 | 0* | 3.41E-03 | 4.83E-05 |
| Total Primary Energy | MJ | 8.38E+01 | 2.72E+01 | 4.38E-01 | 2.47E-02 | 5.58E+01 | 3.60E-01 |




| Optional indicators | iDPN N VigiARC - A9T26620 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Impact indicators** | **Unit** | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 6.31E+01 | 1.76E+01 | 4.35E-01 | 2.46E-02 | 4.48E+01 | 2.92E-01 |
| Contribution to air pollution | m³ | 6.24E+02 | 3.04E+02 | 1.32E+00 | 7.55E-02 | 3.16E+02 | 2.61E+00 |
| Contribution to water pollution | m³ | 7.60E+02 | 6.02E+02 | 5.09E+00 | 2.87E-01 | 1.48E+02 | 4.26E+00 |
| **Resources use** | **Unit** | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 2.47E-03 | 2.47E-03 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 1.04E+01 | 1.04E+00 | 0* | 0* | 9.36E+00 | 0* |
| Total use of non-renewable primary energy resources | MJ | 7.34E+01 | 2.62E+01 | 4.37E-01 | 2.47E-02 | 4.64E+01 | 3.59E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 9.71E+00 | 3.44E-01 | 0* | 0* | 9.36E+00 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 6.95E-01 | 6.95E-01 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 7.00E+01 | 2.28E+01 | 4.37E-01 | 2.47E-02 | 4.64E+01 | 3.59E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 3.42E+00 | 3.42E+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 | 7.97E+00 | 7.49E+00 | 0* | 0* | 1.00E-01 | 3.75E-01 |
| Non hazardous waste disposed | kg | 1.32E+00 | 7.81E-01 | 1.10E-03 | 2.57E-04 | 5.39E-01 | 1.04E-03 |
| Radioactive waste disposed | kg | 5.81E-04 | 5.53E-04 | 7.84E-07 | 0* | 2.54E-05 | 2.02E-06 |

| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
|---|---|---|---|---|---|---|---|
| Materials for recycling | kg | 1.39E-01 | 2.13E-02 | 0* | 3.48E-02 | 0* | 8.28E-02 |
| Components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 1.89E-02 | 0* | 0* | 0* | 0* | 1.89E-02 |
| Exported Energy | MJ | 1.11E-04 | 1.04E-05 | 0* | 1.00E-04 | 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 2016-11 in compliance with ISO14044.*

The manufacturing 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.*

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|---|---|---|---|
| *Registration number* | ENVPEP1906001_V1-EN | *Drafting rules* | PCR-ed3-EN-2015 04 02 |
| *Date of issue* | 08/2019 | *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) »*

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