

Product Environmental Profile

Vigi iDPN ELE Residual Current Device





General information

Representative product

Vigi iDPN ELE Residual Current Device -A9Y53625

Description of the product

Assembled with iDPN circuit breaker, it provides protection of persons against electric shock by direct contact and indirect contact, protection of persons against fire ignition by leakage currents, and protection of loads against supply voltage increase (OV offer)

Functional unit

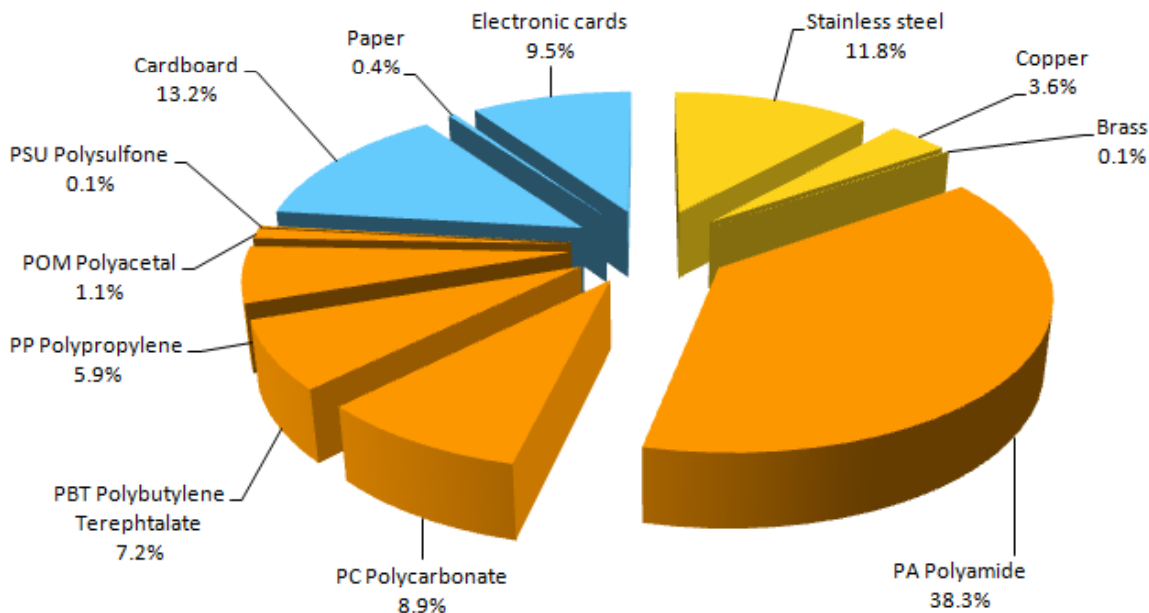
Protect people who direct or indirect touch the equipment when integrating with iDPN circuit breaker during 20 years. iDPN will cut the circuit when product tests the residue current no more than 25mA with assigned voltage 230V . This protection is ensured in accordance with the following parameters:
- Number of poles 1P+N



Constituent materials

Reference product mass

80 g including the product, its packaging and additional elements and accessories



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 Vigi iDPN ELE Residual Current Device presents the following relevant environmental aspects

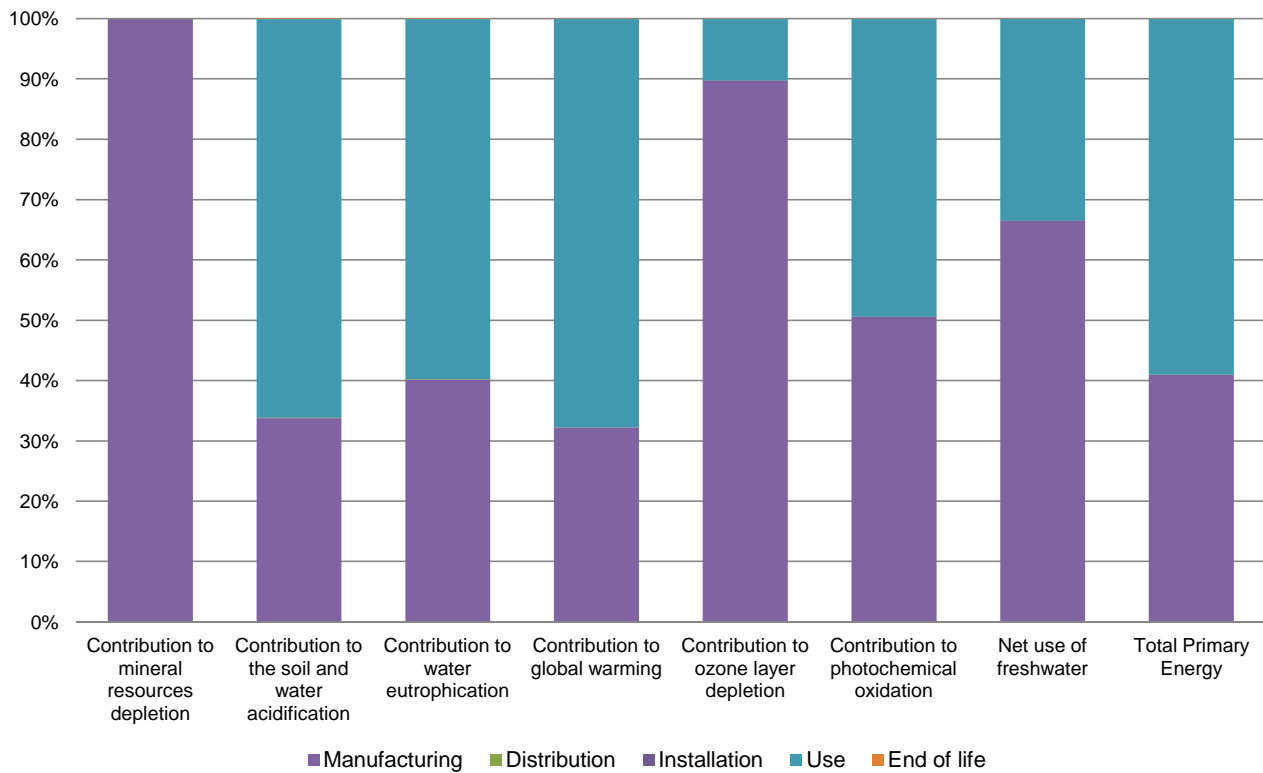
| | |
|----------------------|--|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified |
| Distribution | Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 10.8 g, consisting of Cardboard (94%), paper (6%) |
| Installation | Ref A9Y53625 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 Plastic with brominate FR (0.09g);PCBA bigger than 10cm ² (3.29g) 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: 17% 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 | Passive products - continuous operation | | | |
| Installation elements | No special components needed | | | |
| Use scenario | Product dissipation is 0.126 W full load, loading rate is 30% and service uptime percentage is 100% The product is in active mode 100% of the time with power use of 1.4W for 20 years | | | |
| Geographical representativeness | China | | | |
| Technological representativeness | Assembled with iDPN circuit breaker, it provides protection of persons against electric shock by direct contact and indirect contact, protection of persons against fire ignition by leakage currents, and protection of loads against supply voltage increase (OV offer) | | | |
| Energy model used | Manufacturing | Installation | Use | End of life |
| | Energy model used: China | Electricity mix; AC; consumption mix, at consumer; 220V; CN | Electricity mix; AC; consumption mix, at consumer; 220V; CN | Electricity mix; AC; consumption mix, at consumer; 220V; CN |

| Compulsory indicators | | Vigi iDPN ELE Residual Current Device - A9Y53625 | | | | | |
|--|-------------------------------------|--|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to mineral resources depletion | kg Sb eq | 9.53E-05 | 9.52E-05 | 0* | 0* | 9.86E-08 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 3.69E-02 | 1.24E-02 | 4.71E-05 | 0* | 2.43E-02 | 2.28E-05 |
| Contribution to water eutrophication | kg PO ₄ ³⁻ eq | 1.09E-02 | 4.36E-03 | 1.09E-05 | 0* | 6.49E-03 | 7.71E-06 |
| Contribution to global warming | kg CO ₂ eq | 3.32E+01 | 1.07E+01 | 1.03E-02 | 0* | 2.25E+01 | 1.82E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 1.74E-06 | 1.56E-06 | 0* | 0* | 1.79E-07 | 6.58E-10 |
| Contribution to photochemical oxidation | kg C ₂ H ₄ eq | 5.82E-03 | 2.94E-03 | 3.36E-06 | 0* | 2.88E-03 | 2.25E-06 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Net use of freshwater | m3 | 7.49E-02 | 4.98E-02 | 0* | 0* | 2.51E-02 | 1.23E-05 |
| Total Primary Energy | MJ | 6.43E+02 | 2.63E+02 | 1.46E-01 | 0* | 3.79E+02 | 1.18E-01 |




| Optional indicators | | Vigi iDPN ELE Residual Current Device - A9Y53625 | | | | | |
|---|----------------|--|---------------|--------------|--------------|----------|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Contribution to fossil resources depletion | MJ | 5.10E+02 | 1.59E+02 | 1.45E-01 | 0* | 3.51E+02 | 9.78E-02 |
| Contribution to air pollution | m ³ | 4.48E+03 | 2.15E+03 | 0* | 0* | 2.33E+03 | 7.83E-01 |
| Contribution to water pollution | m ³ | 1.71E+03 | 5.93E+02 | 1.70E+00 | 0* | 1.12E+03 | 1.11E+00 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 1.04E-03 | 1.04E-03 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 1.96E+01 | 7.13E-01 | 0* | 0* | 1.88E+01 | 0* |
| Total use of non-renewable primary energy resources | MJ | 6.23E+02 | 2.63E+02 | 1.46E-01 | 0* | 3.60E+02 | 1.18E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 1.94E+01 | 5.23E-01 | 0* | 0* | 1.88E+01 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 1.90E-01 | 1.90E-01 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 6.22E+02 | 2.61E+02 | 1.46E-01 | 0* | 3.60E+02 | 1.18E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 1.51E+00 | 1.51E+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 | 3.53E+00 | 2.67E+00 | 0* | 1.09E-02 | 7.24E-01 | 1.29E-01 |
| Non hazardous waste disposed | kg | 5.25E+00 | 1.18E+00 | 0* | 0* | 4.07E+00 | 0* |
| Radioactive waste disposed | kg | 1.17E-03 | 1.03E-03 | 2.61E-07 | 0* | 1.34E-04 | 5.51E-07 |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 2.60E-02 | 3.24E-03 | 0* | 1.08E-02 | 0* | 1.20E-02 |
| Components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 4.11E-03 | 3.42E-04 | 0* | 0* | 0* | 3.77E-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 end of life 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° | SCHN-00058-V01.01-EN | Drafting rules | PCR-ed3-EN-2015 04 02 |
| Verifier accreditation N° | VH08 | Supplemented by | PSR-0005-ed2-2016 03 29 |
| Date of issue | 07/2016 | Information and reference documents | www.pep-ecopassport.org |
| | | Validity period | 5 years |
| Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 | | | |
| Internal | External | X | |
| The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN) | | |  |
| The elements of the present PEP cannot be compared with elements from another program. | | | |
| Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations » | | | |

Schneider Electric Industries SAS

Country Customer Care Center: 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

SCHN-00058-V01.01-EN

© 2016 - Schneider Electric – All rights reserved

07/2016