# **Product Environmental Profile**

## MOTION SENSORS WITH RELAY OR DIMMER ACTUATOR, WITH AND W/O BLE CONNECTIVITY





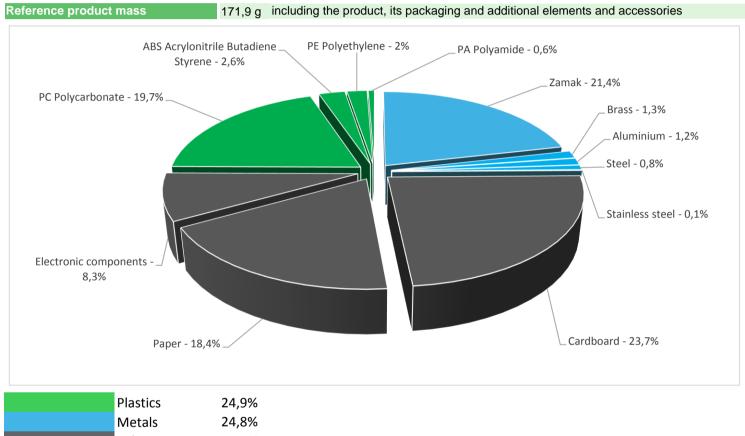




#### General information

| Representative product     | MOTION SENSORS WITH RELAY OR DIMMER ACTUATOR, WITH AND W/O BLE<br>CONNECTIVITY - NU352718   |
|----------------------------|---|
| Description of the product | The main function of this product is automatically switch loads (inductive, capacitive, resistive).   |
| Functional unit            | Establish, support and interrupt for 20 years rated currents in normal conditions of circuit characterized by the current 1A for dimmer and 10A for Relay, including any conditions specified |

### Constituent materials



Others 50,4%

#### 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

## (1) Additional environmental information

| The MOTION S  | ENSORS WITH RELAY OR DIMMER ACTUATOR, WITH AND W/O BLE CONNECTIVITY presents the following relevent environmental aspects  |  |  |  |  |  |  |
|---------------|--|--|--|--|--|--|--|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified  |  |  |  |  |  |  |
|               | Weight and volume of the packaging optimized, based on the European Union's packaging directive  |  |  |  |  |  |  |
| Distribution  | Packaging weight is 72,9 g, consisting of paper (42%), cardboard (55%), PE film (3%)   |  |  |  |  |  |  |
|               | Product distribution optimised by setting up local distribution centres  |  |  |  |  |  |  |
| Installation  | Ref NU352718 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 electronic cards (21,7g) 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   |  |  |  |  |  |  |
|               | Recyclability potential:37%Based on "ECO'DEEE recyclability and recoverability calculation method"<br>(version V1, 20 Sep. 2008 presented to the French Agency for Environment<br>and Energy Management: ADEME). |  |  |  |  |  |  |

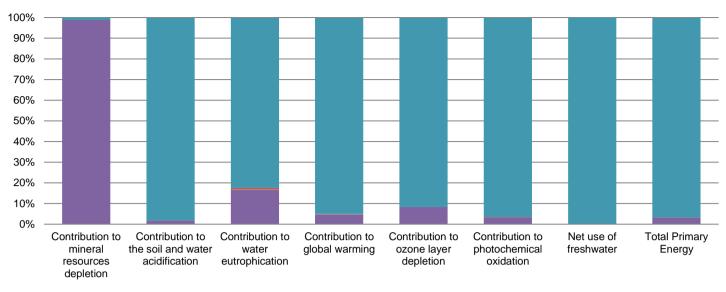
## **C** Environmental impacts

| Energy model used                   | Energy model used: Latvia   | Electricity grid mix; AC;<br>consumption mix, at<br>consumer; < 1kV; EU-27 | Electricity grid mix; AC;<br>consumption mix, at<br>consumer; < 1kV; EU-27 | Electricity grid mix;<br>AC; consumption mix,<br>at consumer; < 1kV;<br>EU-27 |  |  |
|-------------------------------------|---|--|--|---|--|--|
|                                     | Manufacturing   | Installation   | Use  | End of life   |  |  |
| Technological<br>representativeness | The main function of this product is automatically switch loads (inductive, capacitive, resistive). |  |  |   |  |  |
| Geographical representativeness     | France, Russia, Spain   |  |  |   |  |  |
| Use scenario                        | Load rate: 50% of In<br>Use time rate: 30% of RLT   |  |  |   |  |  |
| Installation elements               | No special components needed  |  |  |   |  |  |
| Product category                    | Switches  |  |  |   |  |  |
| Reference life time                 | 20 years  |  |  |   |  |  |

| Compulsory indicators                            |                                     |          | NSORS WITH RE<br>/ITY - NU352718 | LAY OR DIMM  | IER ACTUATO  | OR, WITH AN | d w/o ble   |
|--|-------------------------------------|----------|----------------------------------|--------------|--------------|-------------|-------------|
| Impact indicators                                | Unit                                | Total    | Manufacturing                    | Distribution | Installation | Use         | End of Lif  |
| Contribution to mineral resources depletion      | kg Sb eq                            | 3,84E-04 | 3,79E-04                         | 0*           | 0*           | 4,64E-06    | 0*          |
| Contribution to the soil and water acidification | kg SO <sub>2</sub> eq               | 2,27E-01 | 3,95E-03                         | 1,01E-04     | 0*           | 2,23E-01    | 3,50E-05    |
| Contribution to water eutrophication             | kg PO <sub>4</sub> <sup>3-</sup> eq | 1,64E-02 | 2,73E-03                         | 2,33E-05     | 1,29E-04     | 1,35E-02    | 1,31E-05    |
| Contribution to global warming                   | kg CO <sub>2</sub> eq               | 5,63E+01 | 2,69E+00                         | 2,22E-02     | 8,24E-02     | 5,34E+01    | 3,40E-02    |
| Contribution to ozone layer depletion            | kg CFC11<br>eq                      | 3,80E-06 | 3,15E-07                         | 0*           | 0*           | 3,48E-06    | 1,29E-09    |
| Contribution to photochemical oxidation          | kg $C_2H_4$ eq                      | 1,27E-02 | 4,13E-04                         | 7,23E-06     | 1,93E-05     | 1,22E-02    | 3,32E-06    |
| Resources use                                    | Unit                                | Total    | Manufacturing                    | Distribution | Installation | Use         | End of Life |
| Net use of freshwater                            | m3                                  | 1,94E+02 | 2,16E-02                         | 0*           | 0*           | 1,94E+02    | 0*          |
| Total Primary Energy                             | MJ                                  | 1,10E+03 | 3,54E+01                         | 3,14E-01     | 0*           | 1,07E+03    | 1,61E-01    |
|  |                                     | 1,10E+03 | 3,54E+01                         | 3,14E-01     | 0*           |             | 1,07E+03    |

ENVPEP1803002\_V1-EN - SCHN-00318-V01.01-EN

# SCHN-00318-V01.01-EN - PEP ECOPASSPORT<sup>®</sup> - MOTION SENSORS WITH RELAY OR DIMMER ACTUATOR, WITH AND W/O BLE CONNECTIVITY



Manufacturing Distribution Installation Use End of life

| Optional indicators   |      |          | NSORS WITH REI<br>ITY - NU352718 | LAY OR DIMM  | ER ACTUATC   | OR, WITH AN | D W/O BLE   |
|---|------|----------|----------------------------------|--------------|--------------|-------------|-------------|
| Impact indicators   | Unit | Total    | Manufacturing                    | Distribution | Installation | Use         | End of Life |
| Contribution to fossil resources depletion  | MJ   | 6,40E+02 | 3,27E+01                         | 3,12E-01     | 0*           | 6,07E+02    | 1,49E-01    |
| Contribution to air pollution   | m³   | 2,75E+03 | 4,42E+02                         | 9,43E-01     | 9,50E-01     | 2,30E+03    | 1,17E+00    |
| Contribution to water pollution   | M3   | 2,48E+03 | 2,68E+02                         | 3,65E+00     | 3,15E+00     | 2,20E+03    | 1,86E+00    |
| Resources use   | Unit | Total    | Manufacturing                    | Distribution | Installation | Use         | End of Life |
| Use of secondary material   | kg   | 7,35E-02 | 7,35E-02                         | 0*           | 0*           | 0*          | 0*          |
| Total use of renewable primary energy resources   | MJ   | 1,38E+02 | 2,10E+00                         | 0*           | 0*           | 1,36E+02    | 0*          |
| Total use of non-renewable primary energy resources   | MJ   | 9,65E+02 | 3,33E+01                         | 3,13E-01     | 0*           | 9,32E+02    | 1,61E-01    |
| Use of renewable primary energy excluding renewable primary energy used as raw material         | MJ   | 1,38E+02 | 1,98E+00                         | 0*           | 0*           | 1,36E+02    | 0*          |
| Use of renewable primary energy resources used as raw material                                  | MJ   | 1,23E-01 | 1,23E-01                         | 0*           | 0*           | 0*          | 0*          |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ   | 9,64E+02 | 3,17E+01                         | 3,13E-01     | 0*           | 9,32E+02    | 1,61E-01    |
| Use of non renewable primary energy resources used as raw material                              | MJ   | 1,68E+00 | 1,68E+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   | 1,43E+00 | 1,24E+00                         | 0*           | 0*           | 2,79E-02    | 1,70E-01    |
| Non hazardous waste disposed  | kg   | 2,01E+02 | 1,19E+00                         | 0*           | 7,67E-02     | 1,99E+02    | 0*          |
| Radioactive waste disposed  | kg   | 1,33E-01 | 4,11E-04                         | 0*           | 0*           | 1,33E-01    | 0*          |
| Other environmental information   | Unit | Total    | Manufacturing                    | Distribution | Installation | Use         | End of Life |
| Materials for recycling   | kg   | 5,01E-02 | 1,48E-02                         | 0*           | 0*           | 0*          | 3,53E-02    |
| Components for reuse  | kg   | 0,00E+00 | 0*                               | 0*           | 0*           | 0*          | 0*          |
| Materials for energy recovery   | kg   | 8,07E-03 | 2,65E-04                         | 0*           | 0*           | 0*          | 7,80E-03    |
| Exported Energy   | MJ   | 3,55E-02 | 1,78E-02                         | 0*           | 1,78E-02     | 0*          | 0*          |

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

Life cycle assessment performed with EIME version EIME v5.6.0.1, database version 2016-11 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).

# SCHN-00318-V01.01-EN - PEP ECOPASSPORT<sup>®</sup> - MOTION SENSORS WITH RELAY OR DIMMER ACTUATOR, WITH AND W/O BLE CONNECTIVITY

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 :                   | SCHN-00318-V01.01-EN                  | Drafting rules                          | PCR-ed3-EN-2015 04 02      |  |  |
|---|---------------------------------------|---|----------------------------|--|--|
| Verifier accreditation N°               | VH08                                  | Supplemented by                         | PSR-0005-ed2-EN-2016 03 29 |  |  |
| Date of issue                           | 05/2018                               | Information and reference documents     | www.pep-ecopassport.org    |  |  |
|   |                                       | Validity period                         | 5 years                    |  |  |
| Independent verification of             | the declaration and data, in compliar | nce with ISO 14025 : 2010               |                            |  |  |
| Internal                                | External X                            |   |                            |  |  |
| The PCR review was condu                | ucted by a panel of experts chaired b | y Philippe Osset (SOLINNEN)             |                            |  |  |
| PEP are compliant with XP               | C08-100-1 :2014                       |   |                            |  |  |
| The elements of the preser              | nt PEP cannot be compared with elem   | nents from another program.             |                            |  |  |
| Document in compliance w declarations » | ith ISO 14025 : 2010 « Environmenta   | al labels and declarations. Type III en | vironmental                |  |  |

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

SCHN-00318-V01.01-EN

 $\ensuremath{\mathbb{C}}$  2017 - Schneider Electric – All rights reserved

05/2018