Product Environmental Profile

SWITCH 63A 2P BICONNECT
**General information**

<table>
<thead>
<tr>
<th>Representative product</th>
<th>SWITCH 63A 2P BICONNECT -12461</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the product</td>
<td>Establish, support and interrupt for 20 years rated currents in normal conditions of circuit characterized by the current $I_{th}=63A$, including any conditions specified for overload in operation characterized by the current $I_{e}=63A$, for the operating voltage $U_{e}=400V$ and a current for short-circuit $I_{cw}=756A$ for a specified time.</td>
</tr>
</tbody>
</table>

**Consistent materials**

| Reference product mass | 159 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:

# Environmental impacts

<table>
<thead>
<tr>
<th>Reference life time</th>
<th>20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product category</td>
<td>switches</td>
</tr>
<tr>
<td>Installation elements</td>
<td>No special components needed</td>
</tr>
</tbody>
</table>
| Use scenario        | Load Factor : 50% of In (63A)  
Use time rate : 30% of RLT (20 Years) |
| Geographical representativeness | Europe |
| Technological representativeness | The main function of the 25/63 A SWITCH product range is the opening and closure in charge of a circuit already protected against the overload. Provides also the severing function. |
| Energy model used   | Manufacturing  
Energy model used: Belgium  
Installation  
Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27  
Use  
Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27  
End of life  
Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 |
### Compulsory indicators

<table>
<thead>
<tr>
<th>Impact indicators</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to mineral resources depletion</td>
<td>kg Sb eq</td>
<td>2.16E-04</td>
<td>2.15E-04</td>
<td>0*</td>
<td>0*</td>
<td>1.27E-06</td>
<td>0*</td>
</tr>
<tr>
<td>Contribution to the soil and water acidification</td>
<td>kg SO₂ eq</td>
<td>2.13E-01</td>
<td>1.84E-03</td>
<td>9.37E-05</td>
<td>0*</td>
<td>2.11E-01</td>
<td>4.80E-05</td>
</tr>
<tr>
<td>Contribution to water eutrophication</td>
<td>kg PO₄³⁻ eq</td>
<td>1.09E-02</td>
<td>2.96E-03</td>
<td>2.16E-05</td>
<td>0*</td>
<td>7.92E-03</td>
<td>1.37E-05</td>
</tr>
<tr>
<td>Contribution to global warming</td>
<td>kg CO₂ eq</td>
<td>2.91E+01</td>
<td>1.13E+00</td>
<td>2.05E-02</td>
<td>0*</td>
<td>2.79E+01</td>
<td>2.67E-02</td>
</tr>
<tr>
<td>Contribution to ozone layer depletion</td>
<td>kg CFC11 eq</td>
<td>6.98E-06</td>
<td>1.96E-07</td>
<td>0*</td>
<td>0*</td>
<td>6.78E-06</td>
<td>1.10E-09</td>
</tr>
<tr>
<td>Contribution to photochemical oxidation</td>
<td>kg C₂H₄ eq</td>
<td>1.02E-02</td>
<td>2.17E-04</td>
<td>6.68E-06</td>
<td>0*</td>
<td>9.88E-03</td>
<td>4.98E-06</td>
</tr>
</tbody>
</table>

### Resources use

<table>
<thead>
<tr>
<th>Resources use</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net use of freshwater</td>
<td>m³</td>
<td>7.99E-02</td>
<td>6.98E-03</td>
<td>0*</td>
<td>0*</td>
<td>7.28E-02</td>
<td>2.22E-05</td>
</tr>
<tr>
<td>Total Primary Energy</td>
<td>MJ</td>
<td>4.98E+02</td>
<td>1.58E+01</td>
<td>2.75E-01</td>
<td>0*</td>
<td>4.82E+02</td>
<td>2.26E-01</td>
</tr>
</tbody>
</table>

### Impact indicators

**Manufacturing**

- Contribution to mineral resources depletion
- Contribution to the soil and water acidification
- Contribution to water eutrophication
- Contribution to global warming
- Contribution to ozone layer depletion
- Contribution to photochemical oxidation
- Net use of freshwater
- Total Primary Energy

**Distribution**

- Contribution to mineral resources depletion
- Contribution to the soil and water acidification
- Contribution to water eutrophication
- Contribution to global warming
- Contribution to ozone layer depletion
- Contribution to photochemical oxidation
- Net use of freshwater
- Total Primary Energy

**Installation**

- Contribution to mineral resources depletion
- Contribution to the soil and water acidification
- Contribution to water eutrophication
- Contribution to global warming
- Contribution to ozone layer depletion
- Contribution to photochemical oxidation
- Net use of freshwater
- Total Primary Energy

**Use**

- Contribution to mineral resources depletion
- Contribution to the soil and water acidification
- Contribution to water eutrophication
- Contribution to global warming
- Contribution to ozone layer depletion
- Contribution to photochemical oxidation
- Net use of freshwater
- Total Primary Energy

**End of Life**

- Contribution to mineral resources depletion
- Contribution to the soil and water acidification
- Contribution to water eutrophication
- Contribution to global warming
- Contribution to ozone layer depletion
- Contribution to photochemical oxidation
- Net use of freshwater
- Total Primary Energy
### Waste categories

<table>
<thead>
<tr>
<th>Waste categories</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste disposed</td>
<td>kg</td>
<td>3.04E+00</td>
<td>2.78E+00</td>
<td>0*</td>
<td>9.12E-03</td>
<td>0*</td>
<td>2.47E-01</td>
</tr>
<tr>
<td>Non hazardous waste disposed</td>
<td>kg</td>
<td>1.05E+02</td>
<td>1.97E-01</td>
<td>0*</td>
<td>0*</td>
<td>1.04E+02</td>
<td>0*</td>
</tr>
<tr>
<td>Radioactive waste disposed</td>
<td>kg</td>
<td>8.53E-02</td>
<td>1.42E-04</td>
<td>0*</td>
<td>0*</td>
<td>8.52E-02</td>
<td>0*</td>
</tr>
</tbody>
</table>

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

### Other environmental information

<table>
<thead>
<tr>
<th>Materials for recycling</th>
<th>Unit</th>
<th>Total</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg</td>
<td>8.92E-02</td>
<td>1.13E-02</td>
<td>0*</td>
<td>8.99E-03</td>
<td>0*</td>
<td>6.89E-02</td>
<td></td>
</tr>
</tbody>
</table>

### Components for reuse

| Components for reuse                  | kg   | 0.00E+00 | 0*           | 0*           | 0*           | 0*      | 0*          |

### Materials for energy recovery

| Materials for energy recovery         | kg   | 4.49E-03 | 5.70E-04      | 0*           | 0*           | 0*      | 3.92E-03    |

### Exported Energy

| Exported Energy                       | MJ   | 5.17E-03 | 5.17E-03      | 0*           | 0*           | 0*      | 0*          |

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).

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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-00123-V01.01-EN

**Verifier accreditation Number**

VH08

**Date of issue**

10/2016

Independent verification of the declaration and data, in compliance with ISO 14025 : 2010

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
<th>X</th>
</tr>
</thead>
</table>

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 »

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