Product Environmental Profile

ELECTRIC VEHICLE CHARGING STATION
General information

Representative product
ELECTRIC VEHICLE CHARGING STATION - EVF2S22P44R

Description of the product
The EVLink Parking charging station product is designed to charge the electric vehicle and meet the requirements of secure parking lots (closed, with filtered access, or under surveillance):
- Parking lots for vehicle fleets;
- Paid-access car parts;
- Shopping mall parking lots…
The stations can be installed outdoors or indoors.

The representative product used for the analysis is EVF2S22P44R (Floor-standing / 22kW / 2x T2S socket-outlet / RFID reader).

Functional unit
Charging an electrical vehicle with power 22 kW, with RFID reader, with 2 x T2S outlet during 10 years.

Constituent materials

Reference product mass
50700 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:
### Additional environmental information

The ELECTRIC VEHICLE CHARGING STATION presents the following relevant environmental aspects

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td>Manufactured at a Schneider Electric production site ISO14001 certified</td>
</tr>
</tbody>
</table>
| **Distribution**  | Weight and volume of the packaging optimized, based on the European Union’s packaging directive  
                     Packaging weight is 13948 g, consisting of Cardboard (96%), Paper (4%)  
                     Product distribution optimised by setting up local distribution centres |
| **Installation**  | Ref EVF2S22P44R 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 PCBA (342g), PCBA TI (194) 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  

Recyclability potential: **92%**  

### Environmental impacts

<table>
<thead>
<tr>
<th>Reference life time</th>
<th>10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product category</td>
<td>Passive products - non-continuous operation</td>
</tr>
<tr>
<td>Installation elements</td>
<td>No special components needed</td>
</tr>
</tbody>
</table>
| Use scenario        | Product dissipation is 100 W full load, loading rate is 30% and service uptime percentage is 30%  
                     The product is in active mode 50% of the time with a power use of 100 W and in stand-by mode 50% of the time with a power use of 33 W, for 10 years |
| Geographical representativeness | France |
| Technological representativeness | The EVlink Parking charging station product is designed to charge the electric vehicle and meet the requirements of secure parking lots (closed, with filtered access, or under surveillance): Parking lots for vehicle fleets; Paid-access car parts; Shopping mall parking lots…  
                     The stations can be installed outdoors or indoors.  
                     The representative product used for the analysis is EVF2S22P44R (Floor-standing / 22kW / 2x T2S socket-outlet / RFID reader). |
### Compulsory indicators

#### Contributions to mineral resources depletion

<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>8.95E-03</td>
<td>8.76E-03</td>
<td>0*</td>
<td>0*</td>
<td>1.95E-04</td>
<td>0*</td>
</tr>
<tr>
<td>Contribution to the soil and water acidification</td>
<td>kg SO₂ eq</td>
<td>1.50E+00</td>
<td>6.88E-01</td>
<td>2.99E-02</td>
<td>3.99E-03</td>
<td>7.64E-01</td>
<td>1.17E-02</td>
</tr>
<tr>
<td>Contribution to water eutrophication</td>
<td>kg PO₄³⁻ eq</td>
<td>1.46E+00</td>
<td>1.24E+00</td>
<td>6.88E-03</td>
<td>9.38E-04</td>
<td>2.12E-01</td>
<td>3.14E-03</td>
</tr>
</tbody>
</table>

#### Contributions to global warming

<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 global warming</td>
<td>kg CO₂ eq</td>
<td>1.07E+03</td>
<td>3.95E+02</td>
<td>6.54E+00</td>
<td>1.30E+00</td>
<td>6.66E+02</td>
<td>5.65E+00</td>
</tr>
<tr>
<td>Contribution to ozone layer depletion</td>
<td>kg CFC11 eq</td>
<td>7.50E-05</td>
<td>2.45E-05</td>
<td>1.33E-08</td>
<td>8.15E-08</td>
<td>5.02E-05</td>
<td>2.80E-07</td>
</tr>
</tbody>
</table>

#### Contributions to photochemical oxidation

<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 photochemical oxidation</td>
<td>kg C₆H₄ eq</td>
<td>1.51E-01</td>
<td>6.58E-02</td>
<td>2.13E-03</td>
<td>4.33E-04</td>
<td>8.21E-02</td>
<td>1.24E-03</td>
</tr>
</tbody>
</table>

#### Resources use

<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>Net use of freshwater</td>
<td>m³</td>
<td>1.57E+01</td>
<td>3.17E+00</td>
<td>0*</td>
<td>1.58E-03</td>
<td>1.25E+01</td>
<td>5.36E-03</td>
</tr>
<tr>
<td>Total Primary Energy</td>
<td>MJ</td>
<td>8.65E+04</td>
<td>4.73E+03</td>
<td>8.77E+01</td>
<td>1.96E+01</td>
<td>8.16E+04</td>
<td>5.71E+01</td>
</tr>
</tbody>
</table>

#### Impact indicators

- 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

#### Impact indicators

- Manufacturing
- Distribution
- Installation
- Use
- End of Life

### Optional indicators

#### Contributions to fossil resources depletion

<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 fossil resources depletion</td>
<td>MJ</td>
<td>1.44E+04</td>
<td>5.01E+03</td>
<td>9.19E+01</td>
<td>1.84E+01</td>
<td>9.18E+03</td>
<td>5.33E+01</td>
</tr>
<tr>
<td>Contribution to air pollution</td>
<td>m³</td>
<td>8.09E+04</td>
<td>3.05E+04</td>
<td>2.78E+02</td>
<td>1.42E+02</td>
<td>4.96E+04</td>
<td>4.14E+02</td>
</tr>
<tr>
<td>Contribution to water pollution</td>
<td>m³</td>
<td>1.69E+05</td>
<td>1.31E+05</td>
<td>1.08E+03</td>
<td>1.52E+02</td>
<td>3.64E+04</td>
<td>8.37E+02</td>
</tr>
</tbody>
</table>

#### Resources use

<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>Use of secondary material</td>
<td>kg</td>
<td>6.00E+00</td>
<td>6.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Total use of renewable primary energy resources</td>
<td>MJ</td>
<td>1.62E+02</td>
<td>1.49E+02</td>
<td>1.23E-01</td>
<td>2.27E-02</td>
<td>1.30E+01</td>
<td>6.43E-02</td>
</tr>
<tr>
<td>Total use of non-renewable primary energy resources</td>
<td>MJ</td>
<td>8.63E+04</td>
<td>4.58E+03</td>
<td>8.76E+01</td>
<td>1.96E+01</td>
<td>8.16E+04</td>
<td>5.70E+01</td>
</tr>
<tr>
<td>Use of renewable primary energy excluding renewable primary energy used as raw material</td>
<td>MJ</td>
<td>-9.21E+01</td>
<td>-1.05E+02</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Use of renewable primary energy resources used as raw material</td>
<td>MJ</td>
<td>2.54E+02</td>
<td>2.54E+02</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Use of non renewable primary energy excluding non renewable primary energy used as raw material</td>
<td>MJ</td>
<td>8.57E+04</td>
<td>3.93E+03</td>
<td>8.76E+01</td>
<td>1.96E+01</td>
<td>8.16E+04</td>
<td>5.70E+01</td>
</tr>
</tbody>
</table>
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.

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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