Product Environmental Profile

iC60N 1P 16A B
The main purpose of the iC60 circuit breaker is to ensure protection of low voltage electrical installation. Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 230/400V and rated current 16A. This protection is ensured in accordance with the following parameters:

- Number of poles $N_p: 1$
- Rated breaking capacity $I_{cn}: 6K(6000A)$
- Tripping curve $C_d: B$

The iC60N 1P 16A B presents the following relevant environmental aspects:

**Reference product mass**
119.15 g, including the product, its packaging and additional elements and accessories

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.


**Substance assessment**

Steel - 44.7%
Copper - 3.4%
Stainless steel - 1.9%
Aluminum - 0.8%
Zinc - 0.3%
Silver - 0.1%
Cardboard - 4.4%
PA Polyamide - 36.3%
PC Polycarbonate - 3.8%
PPS Polyphenylene sulfure - 1.1%
PBT Polybutylene Terephtalate - 1%
PET Polyethilene Terephtalate - 1%
POM Polyacetal - 0.5%

**Additional environmental information**

The iC60N 1P 16A B presents the following relevant environmental aspects.
## Environmental impacts

### Reference life time
20 years

### Product category
Passive products - continuous operation

### Installation elements
The packaging disposal is accounted for in the installation phase.

### Use scenario
Product dissipation is 1 W, loading rate is 50% and service uptime percentage is 100%

### Geographical
Europe

### Technological representativeness
The main purpose of the iC60 circuit breaker is to ensure protection of low voltage electrical installation

### Energy model used

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing</th>
<th>Installation</th>
<th>Use</th>
<th>End of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy model used:</td>
<td></td>
<td>Electricity grid mix; AC; consumption mix, at consumer; &lt; 1kV; EU-27</td>
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<tr>
<td></td>
<td>Sb eq</td>
<td>1.54E-04</td>
<td>1.51E-04</td>
<td>0*</td>
</tr>
<tr>
<td></td>
<td>SO2 eq</td>
<td>1.10E-01</td>
<td>2.33E-03</td>
<td>7.02E-05</td>
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<tr>
<td></td>
<td>PO4 3- eq</td>
<td>7.22E-03</td>
<td>6.95E-04</td>
<td>1.62E-05</td>
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<tr>
<td></td>
<td>CO2 eq</td>
<td>2.67E+01</td>
<td>8.64E-01</td>
<td>1.54E-02</td>
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<tr>
<td></td>
<td>CFC11 eq</td>
<td>2.00E-06</td>
<td>3.26E-07</td>
<td>0*</td>
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<tr>
<td></td>
<td>C2H4 eq</td>
<td>6.14E-03</td>
<td>2.24E-04</td>
<td>5.01E-06</td>
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</tbody>
</table>

### 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</td>
<td>1.54E-04</td>
<td>1.51E-04</td>
<td>0*</td>
<td>0*</td>
<td>2.24E-06</td>
<td>0*</td>
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<tr>
<td>Contribution to the soil and water acidification</td>
<td>kg</td>
<td>1.10E-01</td>
<td>2.33E-03</td>
<td>7.02E-05</td>
<td>0*</td>
<td>1.07E-01</td>
<td>3.44E-05</td>
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<tr>
<td>Contribution to water eutrophication</td>
<td>kg</td>
<td>7.22E-03</td>
<td>6.95E-04</td>
<td>1.62E-05</td>
<td>1.44E-05</td>
<td>6.49E-03</td>
<td>9.67E-06</td>
</tr>
<tr>
<td>Contribution to global warming</td>
<td>kg</td>
<td>2.67E+01</td>
<td>8.64E-01</td>
<td>1.54E-02</td>
<td>7.80E-03</td>
<td>2.58E+01</td>
<td>1.85E-02</td>
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<tr>
<td>Contribution to ozone layer depletion</td>
<td>kg</td>
<td>2.00E-06</td>
<td>3.26E-07</td>
<td>0*</td>
<td>0*</td>
<td>1.68E-06</td>
<td>7.75E-10</td>
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<tr>
<td>Contribution to photochemical oxidation</td>
<td>kg</td>
<td>6.14E-03</td>
<td>2.24E-04</td>
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<td>5.90E-03</td>
<td>3.58E-06</td>
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### Resources use

<table>
<thead>
<tr>
<th></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>9.34E+01</td>
<td>0*</td>
<td>0*</td>
<td>9.34E+01</td>
<td>0*</td>
<td></td>
</tr>
<tr>
<td>Total Primary Energy</td>
<td>MJ</td>
<td>5.25E+02</td>
<td>1.05E+01</td>
<td>2.17E-01</td>
<td>0*</td>
<td>5.14E+02</td>
<td>1.67E-01</td>
</tr>
</tbody>
</table>

Recyclability potential: 51%

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).
The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

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

Life cycle assessment performed with EIME version EIME v5.6, database version 2016-11.

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

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 »