Product Environmental Profile

Multi9 - C60N - Miniature Circuit Breaker - 1P/2P/3P/4P - 1A to 63A
General information

Representative product

Multi9 - C60N - Miniature Circuit Breaker - 1P/2P/3P/4P - 1A to 63A - M9F11116

Description of the product

The main function of C60 circuit breaker is to ensure protection against overload and short-circuits in low voltage electrical installations.

Description of the range

The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.

In addition of the reference product, this PEP covers all Multi9 C60 miniature circuit breakers 1P/2P/3P/4P.

Functional unit

Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 240VAC and rated current 16A (I<sub>n</sub>). This protection is ensured in accordance with the following parameters:
- Number of poles: 1
- Rated breaking capacity I<sub>cu</sub>: 10kA
- Tripping curve: C

Constituent materials

Reference product mass

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

Functional unit

Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 240VAC and rated current 16A (I<sub>n</sub>). This protection is ensured in accordance with the following parameters:
- Number of poles: 1
- Rated breaking capacity I<sub>cu</sub>: 10kA
- Tripping curve: C

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
Environmental impacts

Reference service life time: 20 years

Product category: Circuit-breakers

Installation elements: No special components needed

Use scenario:
- Load rate: 50% of 16A (In)
- Use time rate: 30% of the time over 20 years (RLT)

Geographical representativeness: Europe

Technological representativeness: The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product

Energy model used:
- Electricity Mix; Production mix; Low voltage; 2018; BG
- Electricity Mix; Production mix; Low voltage; 2018; UE-27

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact
# Inventory flows Indicators

## Multi9 - C60N - Miniature Circuit Breaker - 1P/2P/3P/4P - 1A to 63A - M9F11116

<table>
<thead>
<tr>
<th>Inventory flows</th>
<th>Unit</th>
<th>Total</th>
<th>Manufact.</th>
<th>Distribution</th>
<th>Installation</th>
<th>Use</th>
<th>End of Life</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>[A1 - A3]</td>
<td>[A4]</td>
<td>[A5]</td>
<td>[B1 - B7]</td>
<td>[C1 - C4]</td>
<td>[D]</td>
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<tr>
<td>Contribution to use of renewable primary energy excluding renewable primary energy used as raw material</td>
<td>MJ</td>
<td>6.88E+01</td>
<td>2.02E-01</td>
<td>0*</td>
<td>0*</td>
<td>6.85E+01</td>
<td>5.48E-02</td>
<td>-5.58E-02</td>
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<td>0*</td>
<td>0*</td>
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<td>2.19E-01</td>
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<td>3.57E+02</td>
<td>1.14E+01</td>
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<td>0*</td>
<td>0*</td>
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<td>0.00E+00</td>
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<td>3.82E+02</td>
<td>1.35E+01</td>
<td>2.19E-01</td>
<td>0*</td>
<td>3.57E+02</td>
<td>1.14E+01</td>
<td>-5.50E+01</td>
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<tr>
<td>Contribution to use of secondary material</td>
<td>kg</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0.00E+00</td>
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<tr>
<td>Contribution to use of renewable secondary fuels</td>
<td>MJ</td>
<td>0.00E+00</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
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<td>0*</td>
<td>0*</td>
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<td>Contribution to net use of freshwater</td>
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<td>8.45E-04</td>
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<td>Contribution to hazardous waste disposed</td>
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<td>7.41E+00</td>
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<td>Contribution to radioactive waste disposed</td>
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<td>Contribution to components for reuse</td>
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<td>0*</td>
<td>0*</td>
<td>0*</td>
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<td>Contribution to materials for recycling</td>
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<td>Contribution to materials for energy recovery</td>
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<td>0*</td>
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<td>0.00E+00</td>
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<td>Contribution to exported energy</td>
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<td>2.47E-03</td>
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<tr>
<td>Contribution to biogenic carbon content of the product</td>
<td>kg de C</td>
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<td>Contribution to biogenic carbon content of the associated packaging</td>
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* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request

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.
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<th>Registration number</th>
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<td>03/2023</td>
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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 Julie ORGELET (DDemain)

PEP are compliant with XP C08-100-1 :2016

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

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