

Product Environmental Profile

Acti 9 ARA - Automatic Recloser Auxiliary





General information

Representative product

Acti 9 ARA - Automatic Recloser Auxiliary -A9C70134

Description of the product

The product performs automatic reclosing of the associated protection device, after tripping. Increase the availability of installations without supervision, isolated, hard of access and demanding very great availability (mobile telephony systems, motorways, pumping stations, airports, railways, meteorological stations, public lighting, tunnels, etc.) by restoring them to operation without intervention by personnel in the event of a transient fault (atmospheric disturbances, industrial overvoltages, etc.)

Functional unit

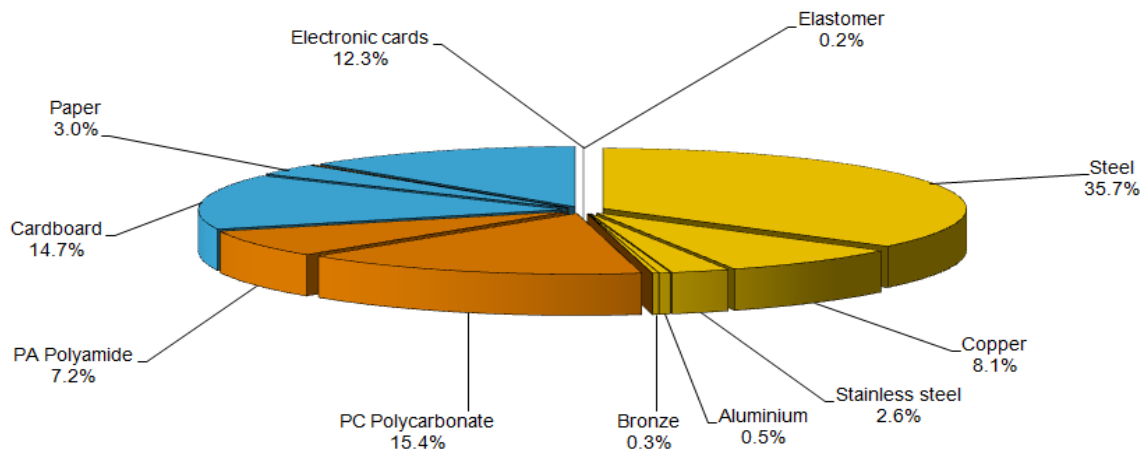
The product is able to reclose associated protection devices 10 000 times during 20 years. The functional unit is characterized by: control circuit voltage U_c : 230VAC and I_p : 13A



Constituent materials

Reference product mass

519.6 g including the product and packaging



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>

Additional environmental information

The Acti 9 ARA - Automatic Recloser Auxiliary presents the following relevant environmental aspects

| | |
|----------------------|--|
| Manufacturing | Manufactured at a Schneider Electric production site ISO14001 certified |
| Distribution | Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 98.7 g, consisting of Cardboard (83%); Paper (17%) |
| Installation | Ref A9C70134 does not require any installation operations |
| Use | The product does not require special maintenance operations. |
| End of life | <p>End of life optimized to decrease the amount of waste and allow recovery of the product components and materials</p> <p>This product contains 1. Plastic with brominate FR (AAV56777)-2.3g; 2. PCBA RM TERMINAL CONNECTOR BOARD (AAV80923)-32g 3. PCBA POWER (AAV63331)-21g 4. PCBA CPU RM230V (AAV63342)-16g that should be separated from the stream of waste so as to optimize end-of-life treatment.</p> <p>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</p> <p>Recyclability potential: 57% 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).</p> |

Environmental impacts

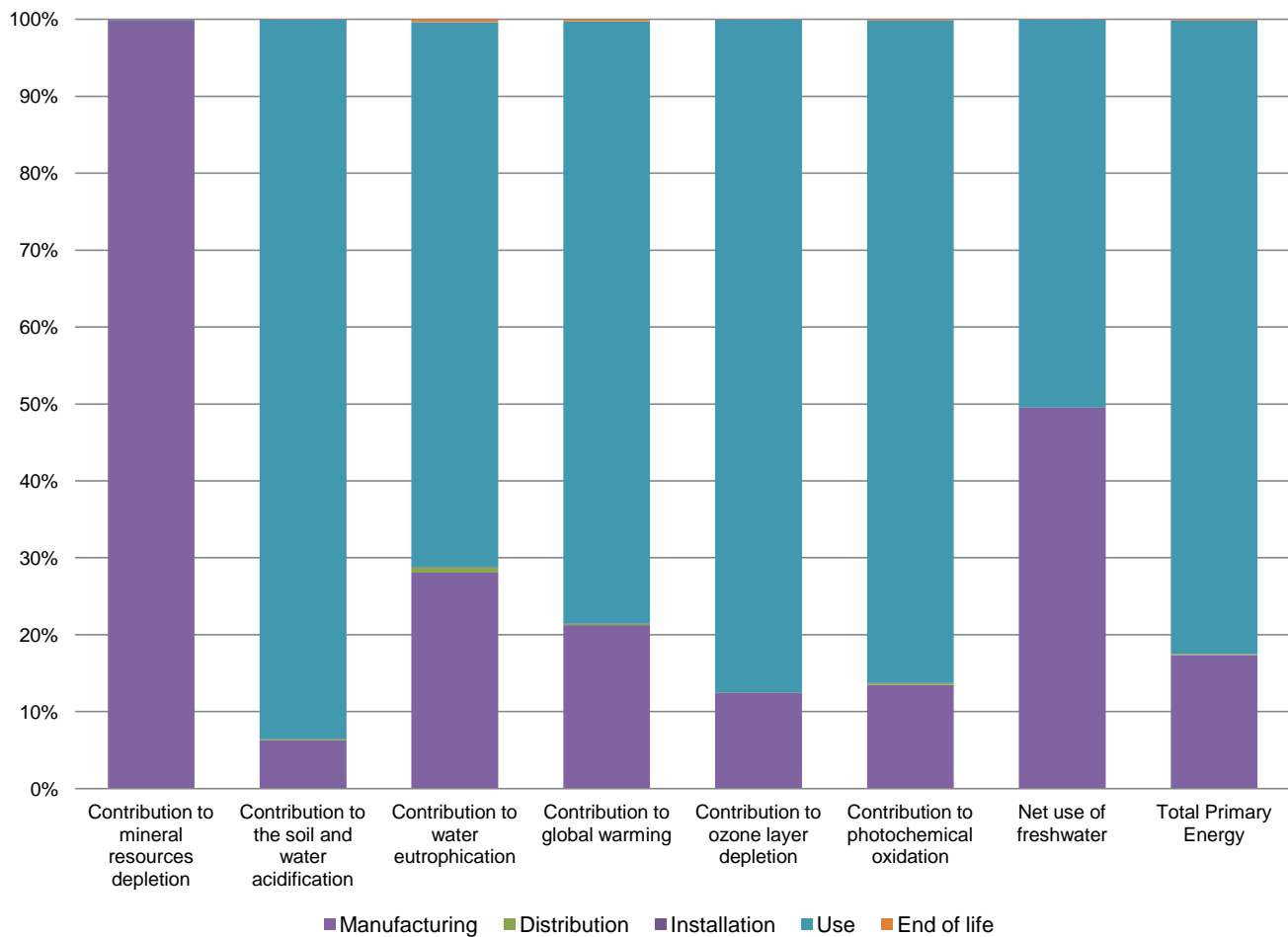
| | | | | |
|---|--|---|---|---|
| Reference life time | 20 years | | | |
| Product category | Passive products - non-continuous operation | | | |
| Installation elements | No special components needed | | | |
| Use scenario | <p>The electrical power consumed by the Automatic recloser or Remote control range is 3 kW in active pulse mode for opening and closing during 200 ms and 1 W in standby mode for the rest time.</p> <p>The product is able to run 10 000 times in active mode during its cycle of life. As PSR requires, the load factor is 50% of I_p, this means the product is 750 W ($3kW \cdot 0.5 \cdot 0.5$) with 0,000076% active mode and 0.25 ($1W \cdot 0.5 \cdot 0.5$) with 99.999924% standby mode</p> <p>The product is in active mode 0.000076% of the time with power use of 3kW and in stand-by mode 99.999924% of the time with power use of 1W, for 20 years.</p> | | | |
| Geographical representativeness | Europe | | | |
| Technological representativeness | The product performs automatic reclosing of the associated protection device, after tripping. Increase the availability of installations without supervision, isolated, hard of access and demanding very great availability (mobile telephony systems, motorways, pumping stations, airports, railways, meteorological stations, public lighting, tunnels, etc.) by restoring them to | | | |
| Energy model used | Manufacturing | Installation | Use | End of life |
| | Energy model used: SPAIN | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 |

Compulsory indicators

Acti 9 ARA - Automatic Recloser Auxiliary - A9C70134

| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
|--|-------------------------------------|----------|---------------|--------------|--------------|----------|-------------|
| Contribution to mineral resources depletion | kg Sb eq | 9,51E-04 | 9,50E-04 | 0* | 0* | 1,19E-06 | 0* |
| Contribution to the soil and water acidification | kg SO ₂ eq | 2,10E-01 | 1,32E-02 | 3,06E-04 | 2,82E-05 | 1,97E-01 | 1,34E-04 |
| Contribution to water eutrophication | kg PO ₄ ³⁻ eq | 1,04E-02 | 2,92E-03 | 7,05E-05 | 6,65E-06 | 7,37E-03 | 3,92E-05 |
| Contribution to global warming | kg CO ₂ eq | 3,32E+01 | 7,06E+00 | 6,70E-02 | 9,16E-03 | 2,60E+01 | 7,87E-02 |
| Contribution to ozone layer depletion | kg CFC11 eq | 7,23E-06 | 9,01E-07 | 0* | 0* | 6,32E-06 | 3,49E-09 |
| Contribution to photochemical oxidation | kg C ₂ H ₄ eq | 1,08E-02 | 1,45E-03 | 2,18E-05 | 3,06E-06 | 9,30E-03 | 1,38E-05 |

| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
|-----------------------|------|----------|---------------|--------------|--------------|----------|-------------|
| Net use of freshwater | m3 | 1,35E-01 | 6,66E-02 | 0* | 0* | 6,79E-02 | 6,39E-05 |
| Total Primary Energy | MJ | 6,40E+02 | 1,11E+02 | 9,48E-01 | 1,58E-01 | 5,27E+02 | 7,21E-01 |



| Optional indicators | | Acti 9 ARA - Automatic Recloser Auxiliary - A9C70134 | | | | | |
|---------------------|------|--|---------------|--------------|--------------|-----|-------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |

| | | | | | | | |
|---|----------------|--------------|----------------------|---------------------|---------------------|------------|--------------------|
| Contribution to fossil resources depletion | MJ | 3,51E+02 | 8,16E+01 | 9,42E-01 | 1,30E-01 | 2,68E+02 | 5,94E-01 |
| Contribution to air pollution | m ³ | 2,25E+03 | 1,13E+03 | 2,85E+00 | 1,01E+00 | 1,12E+03 | 4,67E+00 |
| Contribution to water pollution | m ³ | 2,04E+03 | 9,31E+02 | 1,10E+01 | 1,08E+00 | 1,09E+03 | 5,89E+00 |
| Resources use | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Use of secondary material | kg | 8,05E-03 | 8,05E-03 | 0* | 0* | 0* | 0* |
| Total use of renewable primary energy resources | MJ | 4,04E+01 | 2,69E+00 | 0* | 0* | 3,77E+01 | 0* |
| Total use of non-renewable primary energy resources | MJ | 5,99E+02 | 1,08E+02 | 9,47E-01 | 1,58E-01 | 4,89E+02 | 7,20E-01 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 3,84E+01 | 7,05E-01 | 0* | 0* | 3,77E+01 | 0* |
| Use of renewable primary energy resources used as raw material | MJ | 1,98E+00 | 1,98E+00 | 0* | 0* | 0* | 0* |
| Use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 5,96E+02 | 1,05E+02 | 9,47E-01 | 1,58E-01 | 4,89E+02 | 7,20E-01 |
| Use of non renewable primary energy resources used as raw material | MJ | 3,70E+00 | 3,70E+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 | 3,35E+01 | 3,28E+01 | 0* | 9,96E-02 | 0* | 6,30E-01 |
| Non hazardous waste disposed | kg | 1,01E+02 | 4,08E+00 | 0* | 0* | 9,73E+01 | 0* |
| Radioactive waste disposed | kg | 8,03E-02 | 9,52E-04 | 0* | 0* | 7,93E-02 | 0* |
| Other environmental information | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life |
| Materials for recycling | kg | 3,93E-01 | 4,95E-02 | 0* | 9,82E-02 | 0* | 2,46E-01 |
| Components for reuse | kg | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |
| Materials for energy recovery | kg | 1,31E-02 | 9,02E-04 | 0* | 0* | 0* | 1,22E-02 |
| Exported Energy | MJ | 0,00E+00 | 0* | 0* | 0* | 0* | 0* |

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

Life cycle assessment performed with EIME version EIME v5.5, 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).

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 N° | ENVPEP110613EN_V1 | Drafting rules | PCR-ed3-EN-2015 04 02 |
| Date of issue | 08/2016 | Supplemented by | PSR-0005-ed2-EN-2016 03 29 |
| Validity period | 5 years | Information and reference | www.pep-ecopassport.org |

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

Internal X External

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

CATHERINE COLIN

catherine.colin@fr.schneider-electric.com

Country Customer Care Center" "<http://www2.schneider-electric.com/sites/corporate/en/support/operations/local-operations/local-operations.page>

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

ENVPEP110613EN_V1

© 2016 - Schneider Electric – All rights reserved

08/2016