

# Product Environmental Profile

## Extended rotary handle for EZC100





## General information

### Representative product

Extended rotary handle for EZC100 -EZAROTE

### Description of the product

The main function of the Extended rotary handle for EZC100 (EZAROTE) circuit-breaker is to allow the Off, On and tripped operation from the front face of the switchboard.

The EZC100 is installed inside of the switchboard. It also allows the circuit-breaker locking.

### Functional unit

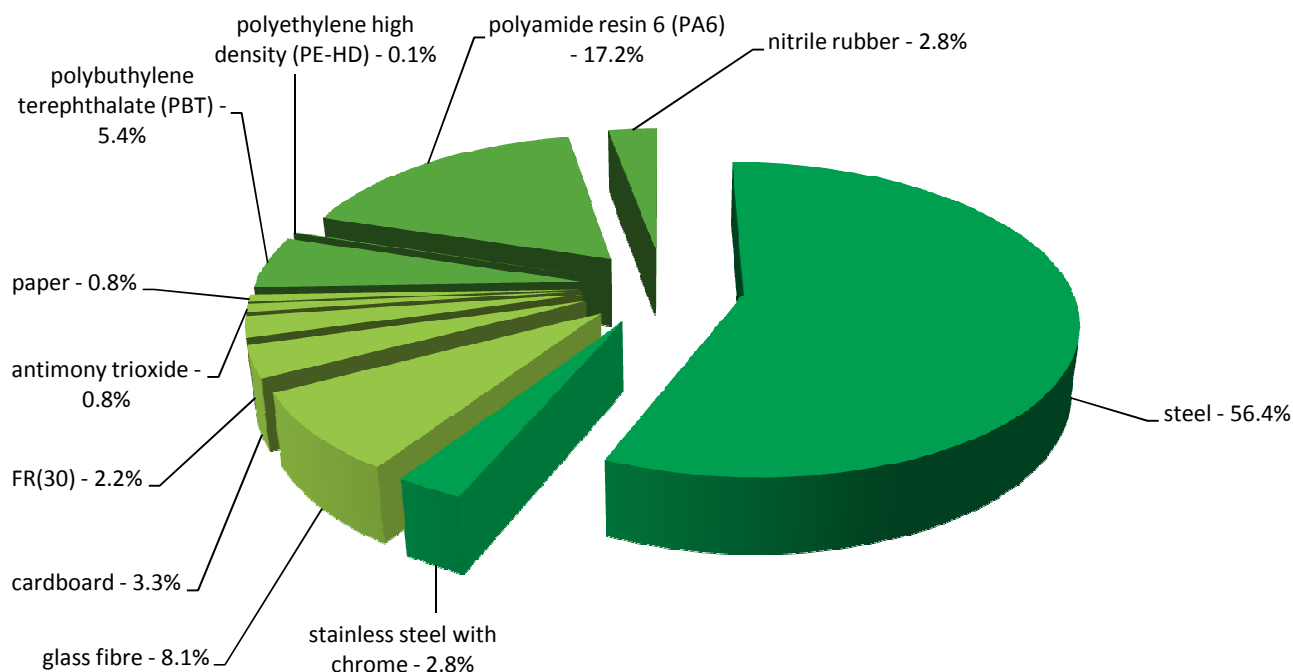
To allow the circuit breaker On,Off and tripped operation from the front face of switchboard during 20 years.



## Constituent materials

### Reference product mass

741 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

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>



## Additional environmental information

The Extended rotary handle for EZC100 presents the following relevant environmental aspects

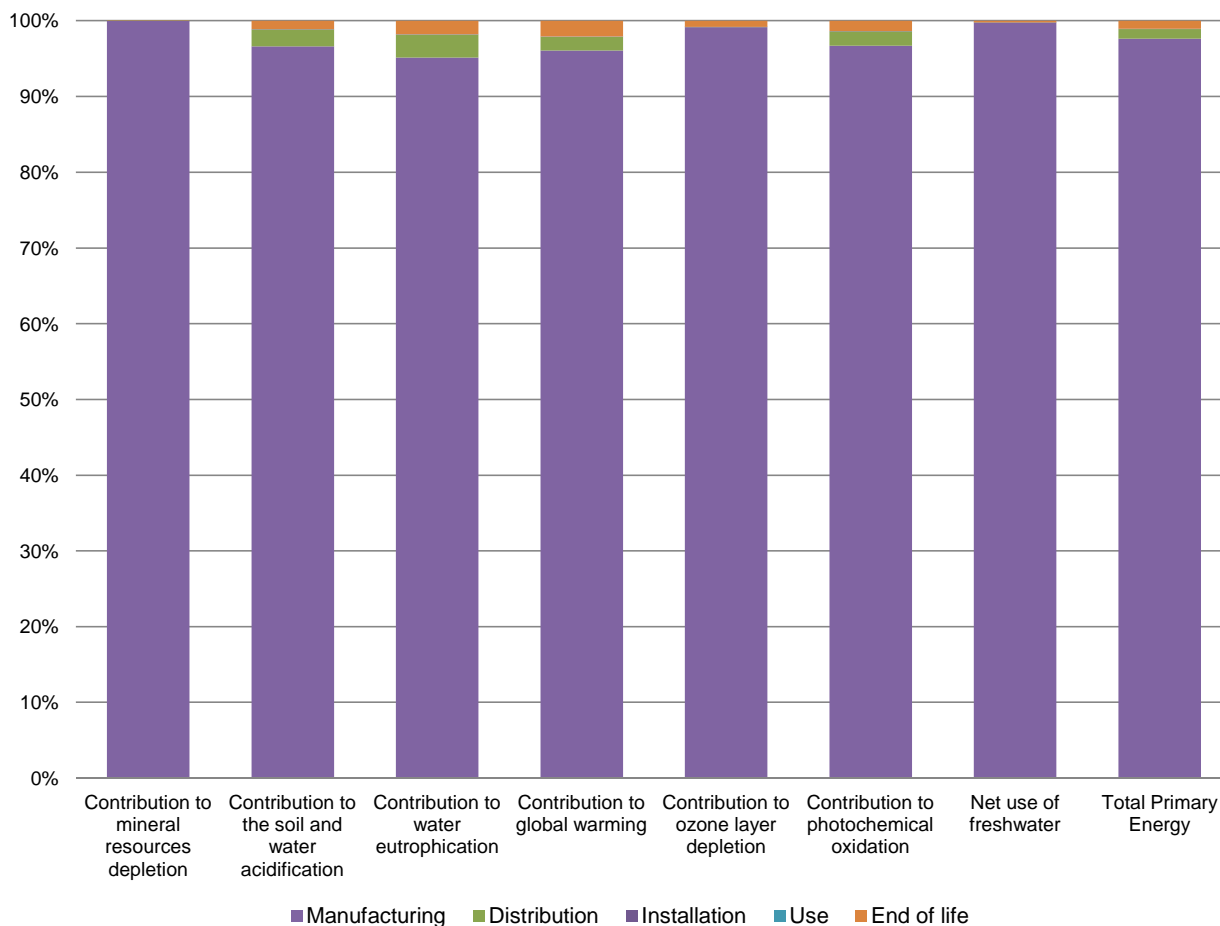
<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 30.3 g, consisting of The EZ rotary handle packaging weight is 30.3 g. It consists of Cardboard (24.6g) and Paper (5.7g).
<b>Installation</b>	Ref EZAROTE does not require any installation operations
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: <b>58%</b> 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).



## Environmental impacts

<b>Reference life time</b>	20 years			
<b>Product category</b>	Passive products - non-continuous operation			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	Product dissipation is 0 W full load, loading rate is 30% and service uptime percentage is 30% The EZ rotary handle doesn't require any energy consumption			
<b>Geographical representativeness</b>	Europe			
<b>Technological representativeness</b>	The main function of the Extended rotary handle for EZC100 (EZAROTE) circuit-breaker is to allow the Off, On and tripped operation from the front face of the switchboard. The EZC100 is installed inside of the switchboard. It also allows the circuit-breaker locking.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: Tailand	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		Extended rotary handle for EZC100 - EZAROTE					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	6.14E-03	6.14E-03	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1.94E-02	1.88E-02	4.37E-04	8.67E-06	0*	2.13E-04
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	3.32E-03	3.15E-03	1.01E-04	2.04E-06	0*	5.86E-05
Contribution to global warming	kg CO <sub>2</sub> eq	5.25E+00	5.04E+00	9.56E-02	2.81E-03	0*	1.08E-01
Contribution to ozone layer depletion	kg CFC11 eq	6.06E-07	6.01E-07	1.94E-10	1.77E-10	0*	4.75E-09
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	1.65E-03	1.59E-03	3.12E-05	9.41E-07	0*	2.23E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.38E-02	4.36E-02	8.56E-06	0*	0*	9.57E-05
Total Primary Energy	MJ	1.08E+02	1.05E+02	1.35E+00	4.85E-02	0*	1.16E+00



Optional indicators		Extended rotary handle for EZC100 - EZAROTE					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	6.84E+01	6.61E+01	1.34E+00	3.99E-02	0*	9.50E-01
Contribution to air pollution	m <sup>3</sup>	1.12E+03	1.11E+03	4.07E+00	3.09E-01	0*	7.52E+00
Contribution to water pollution	m <sup>3</sup>	2.14E+02	1.89E+02	1.57E+01	3.30E-01	0*	8.93E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.62E-04	2.62E-04	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.04E+00	1.04E+00	1.80E-03	0*	0*	1.16E-03
Total use of non-renewable primary energy resources	MJ	1.07E+02	1.04E+02	1.35E+00	4.85E-02	0*	1.15E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	4.34E-01	4.31E-01	1.80E-03	4.92E-05	0*	1.16E-03
Use of renewable primary energy resources used as raw material	MJ	6.07E-01	6.07E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.99E+01	9.73E+01	1.35E+00	4.85E-02	0*	1.15E+00
Use of non renewable primary energy resources used as raw material	MJ	7.02E+00	7.02E+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	4.87E+01	4.77E+01	0*	3.06E-02	0*	1.01E+00
Non hazardous waste disposed	kg	1.71E+00	1.70E+00	3.40E-03	0*	0*	3.19E-03
Radioactive waste disposed	kg	8.27E-04	8.19E-04	2.42E-06	2.06E-07	0*	5.02E-06
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	5.07E-01	6.43E-02	0*	3.01E-02	0*	4.12E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1.56E-02	1.98E-03	0*	0*	0*	1.36E-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 manufacturing 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.

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Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
<i>Independent verification of the declaration and data, in compliance with ISO 14025 : 2010</i>			
Internal	X	External	
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »</i>			

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