# **Product Environmental Profile**

### **MOLDED CASE CIRCUIT BREAKER 600V 250A**







### **General information**

Representative product MOLDED CASE CIRCUIT BREAKER 600V 250A - JLL36250U31X

Description of the product MOLDEI

MOLDED CASE CIRCUIT BREAKER 600V 250A with Micrologic 3.2 trip unit is designed to protect electrical systems from damage caused by overloads and short circuits.

Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage 600V AC and rated current 250A. This protection is ensured in accordance with the following parameters:

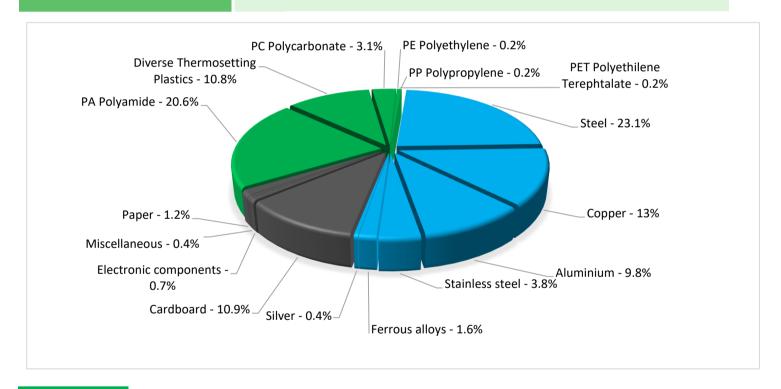
- Number of poles 3p
- Rated breaking capacity 50 kA
- Tripping curve D

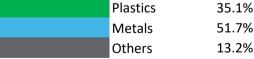
## Constituent materials

Reference product mass

Functional unit

2363.9 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 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate – BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a>

## (I) Additional environmental information

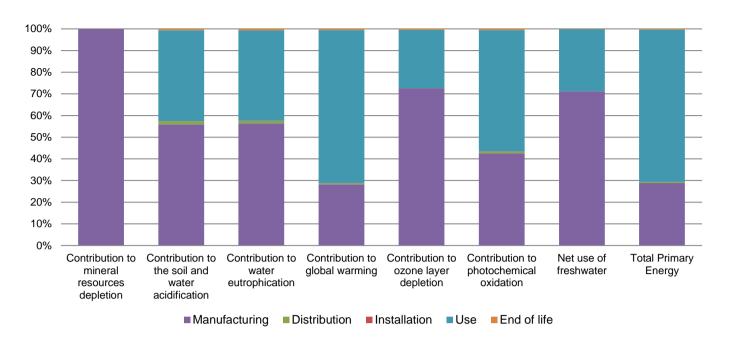
The MOLDED CASE CIRCUIT BREAKER 600V 250A presents the following relevent environmental aspects					
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified				
	Weight and volume of the packaging optimized, based on the European Union's packaging directive				
Distribution	Packaging weight is 285.9 g, consisting of cardboard (88.5%), PE film (1.4%), paper (10.1%)				
Installation	Ref JLL36250U31X does not require any installation operations.				
Use	The product does not require special maintenance operations.				
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials				
	This product contains electronic card (16.9726g), plastic containing brominated flame retardants(7.105g) that should be separated from the stream of waste so as to optimize end-of-life treatment.				
End of life	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				
	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**

Reference life time	20 years					
Product category	Circuit-breakers					
Installation elements	No special components needed					
Use scenario	Load rate: 50% of In Use time rate: 30% of RLT					
Geographical representativeness	US					
Technological representativeness	MOLDED CASE CIRCUIT BREAKER 600V 250A with Micrologic 3.2 trip unit is designed to protect electrical systems from damage caused by overloads and short circuits.					
	Manufacturing	Installation	Use	End of life		
Energy model used	Energy model used: US	Electricity mix; AC; consumption mix, at consumer; 120V; US	Electricity mix; AC; consumption mix, at consumer; 120V; US	Electricity mix; AC; consumption mix, at consumer; 120V; US		

Compulsory indicators		MOLDED CASE CIRCUIT BREAKER 600V 250A - JLL36250U31X					
Impact indicators	Unit	Total	Manufactu ring	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	8.29E-03	8.29E-03	0*	0*	0*	0*
Contribution to the soil and water acidification	$kg SO_2 eq$	9.41E-02	5.26E-02	1.39E-03	6.07E-05	3.94E-02	6.11E-04
Contribution to water eutrophication	kg PO <sub>4</sub> 3- eq	2.49E-02	1.40E-02	3.21E-04	1.61E-05	1.04E-02	1.71E-04
Contribution to global warming	kg CO <sub>2</sub> eq	5.83E+01	1.65E+01	3.05E-01	1.46E-02	4.12E+01	3.27E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.78E-06	2.02E-06	6.18E-10	0*	7.47E-07	1.42E-08
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	1.13E-02	4.81E-03	9.94E-05	4.54E-06	6.32E-03	6.36E-05
Resources use	Unit	Total	Manufactu ring	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.53E-01	1.80E-01	2.73E-05	0*	7.28E-02	2.81E-04
Total Primary Energy	MJ	7.90E+02	2.28E+02	4.31E+00	1.90E-01	5.54E+02	2.98E+00

. - - - -



Optional indicators	MOLDED CASE CIRCUIT BREAKER 600V 250A - JLL36250U31X						
Impact indicators	Unit	Total	Manufactu ring	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	6.54E+02	1.45E+02	4.28E+00	1.88E-01	5.01E+02	2.39E+00
Contribution to air pollution	m³	7.28E+03	3.75E+03	1.30E+01	0*	3.50E+03	2.14E+01
Contribution to water pollution	m³	4.74E+03	2.62E+03	5.02E+01	2.20E+00	2.03E+03	3.03E+01
Resources use	Unit	Total	Manufactu ring	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.97E-01	2.97E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	4.07E+01	7.36E+00	5.75E-03	0*	3.33E+01	0*
Total use of non-renewable primary energy resources	MJ	7.49E+02	2.20E+02	4.31E+00	1.89E-01	5.21E+02	2.97E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3.99E+01	6.61E+00	5.75E-03	0*	3.33E+01	0*
Use of renewable primary energy resources used as raw material	MJ	7.53E-01	7.53E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7.32E+02	2.03E+02	4.31E+00	1.89E-01	5.21E+02	2.97E+00
Use of non renewable primary energy resources used as raw material	MJ	1.71E+01	1.71E+01	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	Manufactu ring	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	1.13E+02	1.09E+02	0*	0*	1.10E+00	2.91E+00
Non hazardous waste disposed	kg	2.21E+01	1.58E+01	1.08E-02	5.50E-03	6.30E+00	9.10E-03
Radioactive waste disposed	kg	9.91E-03	9.24E-03	7.72E-06	0*	6.48E-04	1.45E-05
Other environmental information	Unit	Total	Manufactu ring	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.61E+00	2.24E-01	0*	2.61E-01	0*	1.13E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	4.39E-02	0*	0*	0*	0*	4.39E-02
Exported Energy	MJ	8.26E-04	7.77E-05	0*	7.49E-04	0*	0*

<sup>\*</sup> represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.8.1, database version 2016-11 in compliance with ISO14044.

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.

Registration number	ENVPEP1311009_V3-EN	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	09/2020	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »

Schneider Electric Industries SAS

Country Customer Care Center http://www.schneider-electric.com/contact

35, rue Joseph Monier

CS 30323

F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439 Capital social 896 313 776 €

<u>www.schneider-electric.com</u> Published by Schneider Electric

ENVPEP1311009\_V3-EN © 2019 - Schneider Electric – All rights reserved 09/2020