

# Product Environmental Profile

## PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit





## General information

### Representative product

PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit - JGL36250

### Description of the product

This product with thermal-magnetic Trip Unit is designed to protect electrical systems from damage caused by overloads and short circuits.

### Functional unit

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:

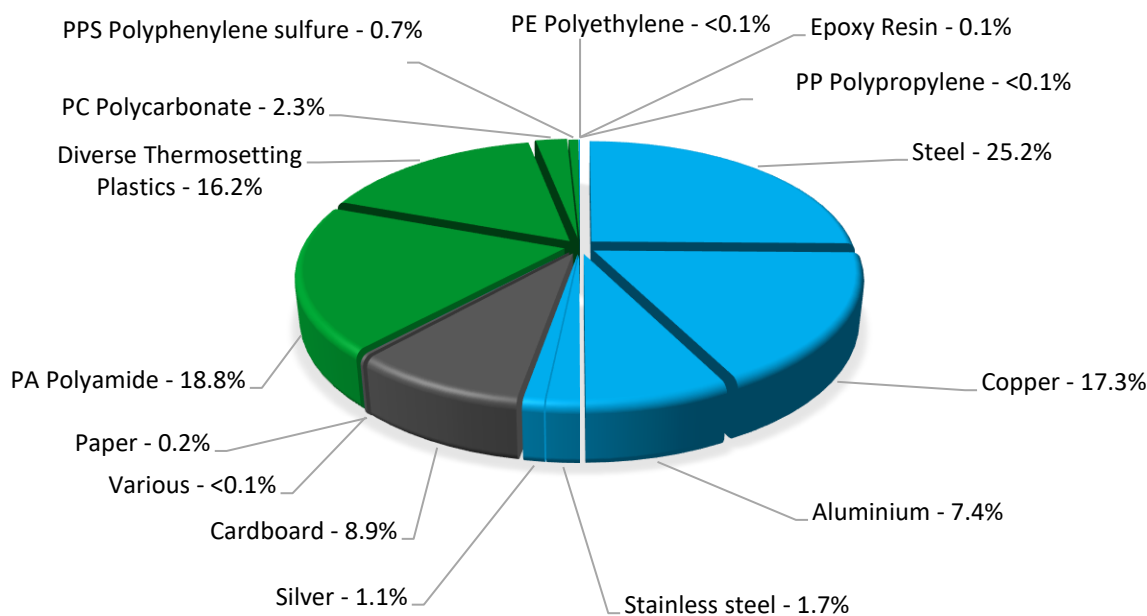
- Number of poles 3P
- Rated breaking capacity 18 kA
- Tripping curve D



## Constituent materials

### Reference product mass

2349.61 g including the product, its packaging and additional elements and accessories



Plastics	38.1%
Metals	52.7%
Others	9.2%



## 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

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



## Additional environmental information

The PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit 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 211.5 g, consisting of cardboard (97.8%), PE film (0.2%), paper (2.0%)
<b>Installation</b>	Ref JGL36250 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
	This product contains plastic containing brominated flame retardants(2.38g) that should be separated from the stream of waste so as to optimize end-of-life treatment.
	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 <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>
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

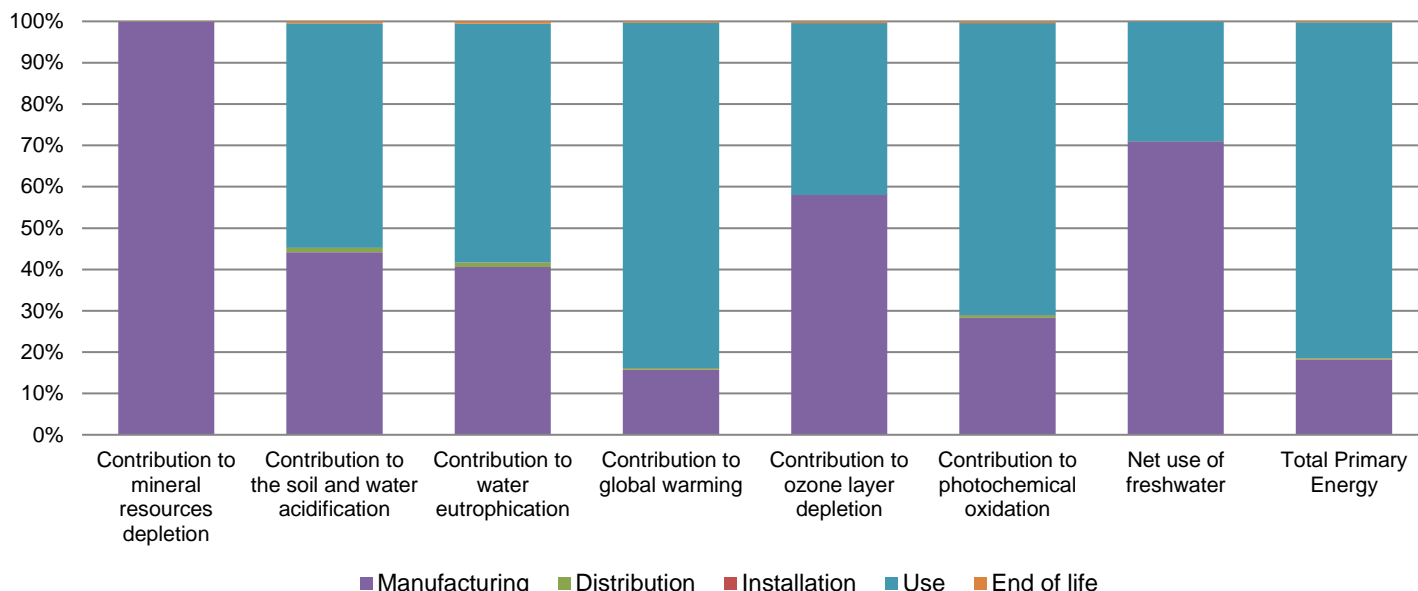
<b>Reference life time</b>	20 years			
<b>Product category</b>	Circuit-breakers			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	Load rate: 50% of In Use time rate: 30% of RLT			
<b>Geographical representativeness</b>	US			
<b>Technological representativeness</b>	This product with thermal-magnetic Trip Unit is designed to protect electrical systems from damage caused by overloads and short circuits.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	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

### PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit - JGL36250

Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.48E-02	2.48E-02	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1.27E-01	5.61E-02	1.38E-03	4.77E-05	6.90E-02	6.36E-04
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	3.15E-02	1.28E-02	3.19E-04	1.16E-05	1.82E-02	1.74E-04
Contribution to global warming	kg CO <sub>2</sub> eq	8.63E+01	1.36E+01	3.03E-01	1.14E-02	7.21E+01	3.20E-01
Contribution to ozone layer depletion	kg CFC11 eq	3.15E-06	1.82E-06	6.14E-10	0*	1.31E-06	1.42E-08
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	1.56E-02	4.42E-03	9.88E-05	3.56E-06	1.11E-02	6.67E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.40E-01	3.12E-01	0*	0*	1.27E-01	2.85E-04
Total Primary Energy	MJ	1.19E+03	2.16E+02	4.29E+00	1.49E-01	9.70E+02	3.11E+00

ENVPEP1311008\_V3-EN - Product Environmental Profile - PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit



Optional indicators		PowerPact J-frame Molded Case Circuit Breaker with Thermal-magnetic Trip Unit - JGL36250						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Contribution to fossil resources depletion	MJ	1.01E+03	1.23E+02	4.26E+00	1.48E-01	8.77E+02	2.50E+00	
Contribution to air pollution	m <sup>3</sup>	1.03E+04	4.14E+03	1.29E+01	0*	6.12E+03	2.24E+01	
Contribution to water pollution	m <sup>3</sup>	4.73E+03	1.10E+03	4.99E+01	1.74E+00	3.55E+03	2.66E+01	
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Use of secondary material	kg	1.40E-01	1.40E-01	0*	0*	0*	0*	
Total use of renewable primary energy resources	MJ	6.97E+01	1.14E+01	0*	0*	5.83E+01	0*	
Total use of non-renewable primary energy resources	MJ	1.12E+03	2.05E+02	4.28E+00	1.49E-01	9.12E+02	3.10E+00	
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.56E+01	7.29E+00	0*	0*	5.83E+01	0*	
Use of renewable primary energy resources used as raw material	MJ	4.11E+00	4.11E+00	0*	0*	0*	0*	
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.11E+03	1.88E+02	4.28E+00	1.49E-01	9.12E+02	3.10E+00	
Use of non renewable primary energy resources used as raw material	MJ	1.72E+01	1.72E+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	Manufacturing	Distribution	Installation	Use	End of Life	
Hazardous waste disposed	kg	1.56E+02	1.51E+02	0*	0*	1.93E+00	3.02E+00	
Non hazardous waste disposed	kg	2.69E+01	1.59E+01	1.08E-02	0*	1.10E+01	9.53E-03	
Radioactive waste disposed	kg	8.69E-03	7.53E-03	7.67E-06	0*	1.13E-03	1.50E-05	
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Materials for recycling	kg	1.67E+00	2.31E-01	0*	2.10E-01	0*	1.23E+00	
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	
Materials for energy recovery	kg	3.97E-02	0*	0*	0*	0*	3.97E-02	
Exported Energy	MJ	6.68E-04	6.27E-05	0*	6.05E-04	0*	0*	

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

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

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

ENVPEP1311008\_V3-EN - Product Environmental Profile - PowerPact J-frame Molded Case Circuit  
Breaker with Thermal-magnetic Trip Unit

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	ENVPEP1311008_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	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
<i>Independent verification of the declaration and data</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 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i>			

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 €  
[www.schneider-electric.com](http://www.schneider-electric.com)

Published by Schneider Electric

ENVPEP1311008\_V3-EN

© 2019 - Schneider Electric – All rights reserved

09/2020