

# Product Environmental Profile

**FBM248 Redundant Adapter**  
**Standard 200 Series Redundant Adapters**





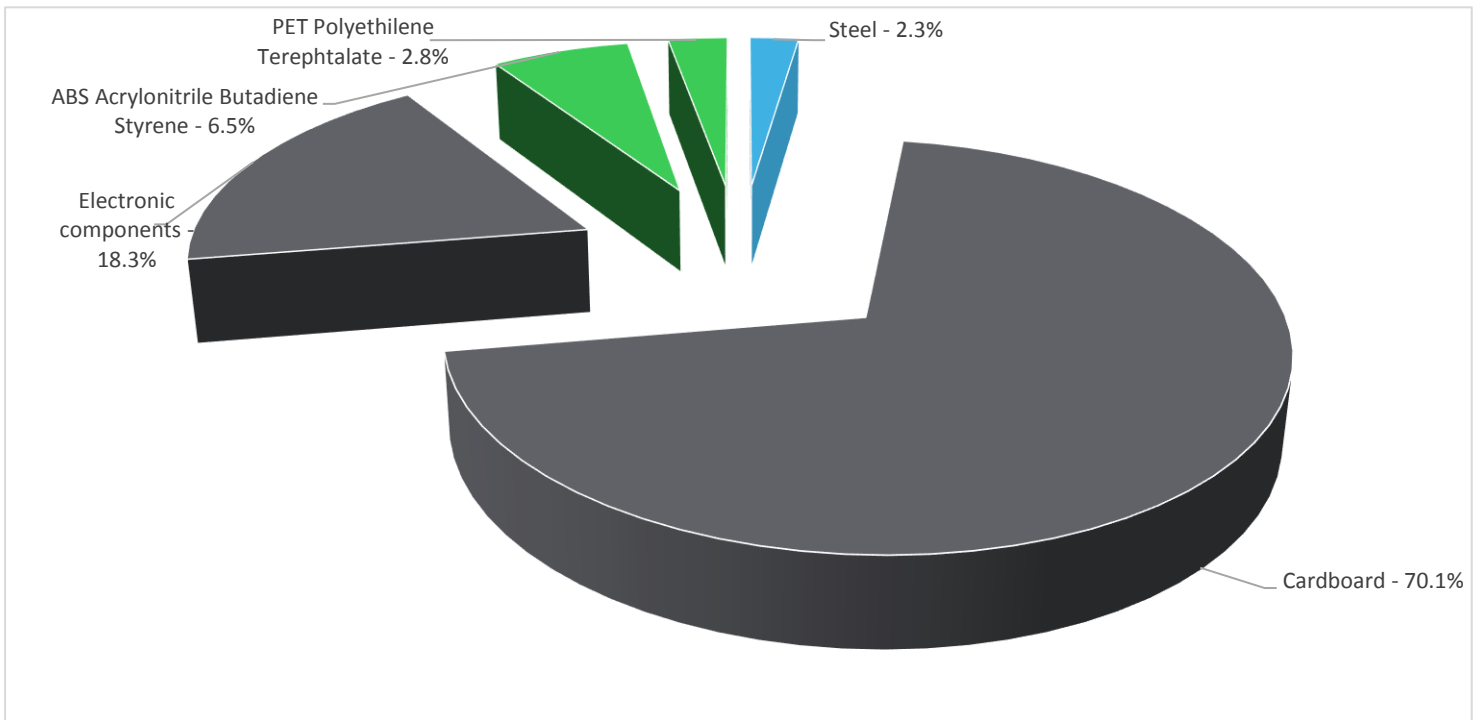
## General information

<b>Representative product</b>	FBM248 Redundant Adapter - FBM248 RA
<b>Description of the product</b>	For redundant FBM248 configurations, a redundant adapter is required for connection between the FBM baseplate and the termination cable.
<b>Description of the range</b>	Standard Redundant Adapters  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.
<b>Functional unit</b>	Passive products are traversed by the main current and do not require energy for their main function. They perform the contact, opening or conduction functions in the installation during 20 years life time and 100% use rate.



## Constituent materials

**Reference product mass** 349 g including the product, its packaging and additional elements and accessories



Plastics	9.3%
Metals	2.3%
Others	88.4%



## 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

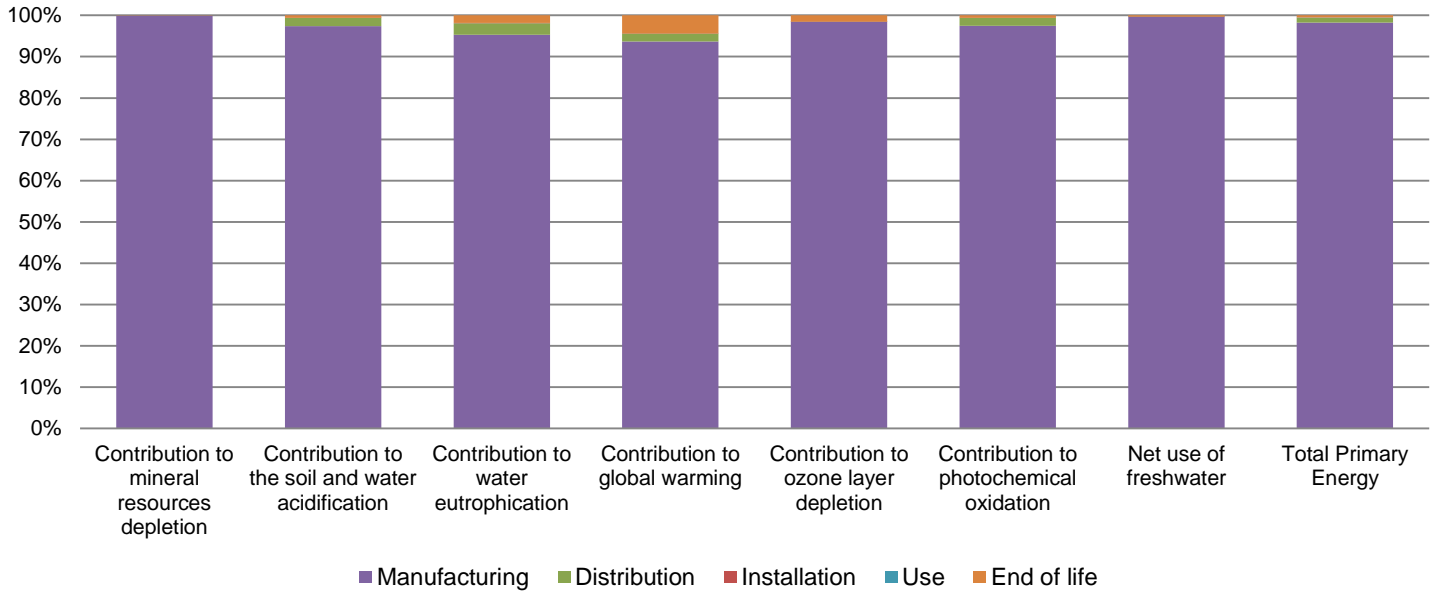
The FBM248 Redundant Adapter presents the following relevant environmental aspects

<b>Manufacturing</b>	Manufactured at a production site complying with the regulations
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 259 g, consisting of FBM248 RA does not require any installation operations.
<b>Installation</b>	FBM248 RA does not require any installation operations.
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	<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 Electronic boards (65.04 g) 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 <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></p> <p>Recyclability potential: <b>17%</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).</p>

## Environmental impacts

<b>Reference life time</b>	20 years			
<b>Product category</b>	Other equipments - Passive product - continuous operation			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	The product is in use 100% of the time with a power consumption of 0W for 20 years			
<b>Geographical representativeness</b>	USA			
<b>Technological representativeness</b>	For redundant FBM248 configurations, a redundant adapter is required for connection between the FBM baseplate and the termination cable.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: Mexico	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		FBM248 Redundant Adapter - FBM248 RA					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	1.44E-04	1.44E-04	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1.03E-02	9.98E-03	2.06E-04	5.91E-06	0*	5.74E-05
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1.70E-03	1.62E-03	4.74E-05	1.36E-06	0*	3.15E-05
Contribution to global warming	kg CO <sub>2</sub> eq	2.38E+00	2.23E+00	4.50E-02	1.31E-03	0*	1.04E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.37E-07	2.33E-07	9.12E-11	0*	0*	3.55E-09
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	7.79E-04	7.60E-04	1.47E-05	4.15E-07	0*	4.45E-06
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m <sup>3</sup>	1.98E-02	1.98E-02	4.03E-06	0*	0*	4.99E-05
Total Primary Energy	MJ	5.08E+01	4.99E+01	6.37E-01	1.85E-02	0*	2.37E-01



Optional indicators		FBM248 Redundant Adapter - FBM248 RA					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	3.26E+01	3.18E+01	6.33E-01	1.84E-02	0*	2.23E-01
Contribution to air pollution	m <sup>3</sup>	3.39E+02	3.35E+02	1.92E+00	5.60E-02	0*	1.71E+00
Contribution to water pollution	m <sup>3</sup>	2.82E+02	2.70E+02	7.40E+00	2.16E-01	0*	4.19E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.37E-01	2.37E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	6.68E+00	6.67E+00	8.48E-04	0*	0*	0*
Total use of non-renewable primary energy resources	MJ	4.41E+01	4.32E+01	6.36E-01	1.85E-02	0*	2.36E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5.74E+00	5.74E+00	8.48E-04	0*	0*	0*
Use of renewable primary energy resources used as raw material	MJ	9.34E-01	9.34E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.20E+01	4.11E+01	6.36E-01	1.85E-02	0*	2.36E-01
Use of non renewable primary energy resources used as raw material	MJ	2.08E+00	2.08E+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	6.52E-01	4.03E-01	0*	8.37E-03	0*	2.41E-01
Non hazardous waste disposed	kg	1.07E+00	1.07E+00	1.60E-03	0*	0*	6.07E-04
Radioactive waste disposed	kg	3.43E-04	3.40E-04	1.14E-06	3.75E-08	0*	1.69E-06
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.05E-01	3.76E-02	0*	2.51E-01	0*	1.66E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	2.93E-02	1.67E-04	0*	0*	0*	2.91E-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 v5.7.0.2, 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).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

Depending on the impact analysis, the environmental indicators of other products in this family may be proportional extrapolated by mass of the product.

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	ENVPEP1712004_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	03/2018	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>			

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