Product Environmental Profile

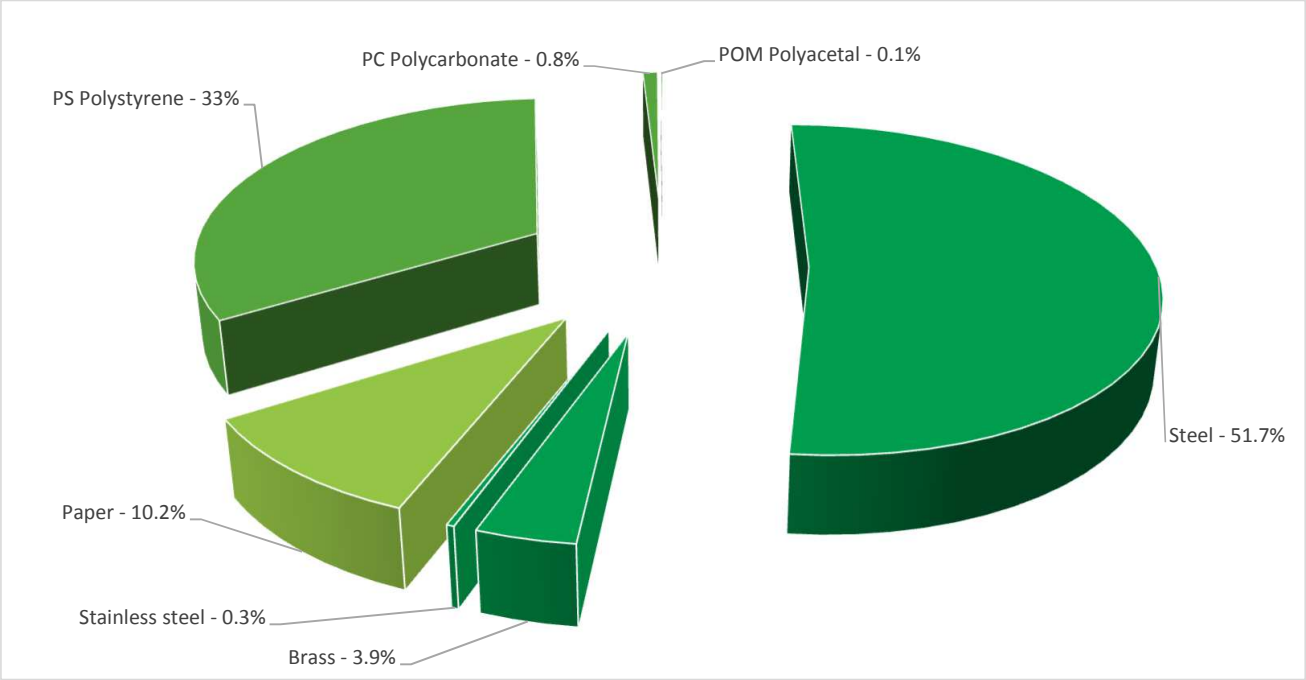
Resi9 KV Modular Hybrid Enclosure

General information

Representative product	Resi9 KV Modular Hybrid Enclosure - R9H10837
Description of the product	The main function of the Resi9 KV Modular Enclosure range is to housing electrical devices in order to realise an assembly or an electrical installation. The Resi9 KV enclosure (R9H10837) used for the analysis is the 3-row 12-modules flush-mounted having a rated current of 63A and rated voltage 230/400Vac and IP30.
Functional unit	Protect persons during 20 years against direct contact with live parts and allow grouping monitoring, control and protection devices in a single enclosure or a cabinet having the following dimensions 624mm x 344mm x 100mm, while protecting against mechanical impacts (IK07) and the penetration of solid objects and liquids(IP30)

Constituent materials

Reference product mass	4402 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

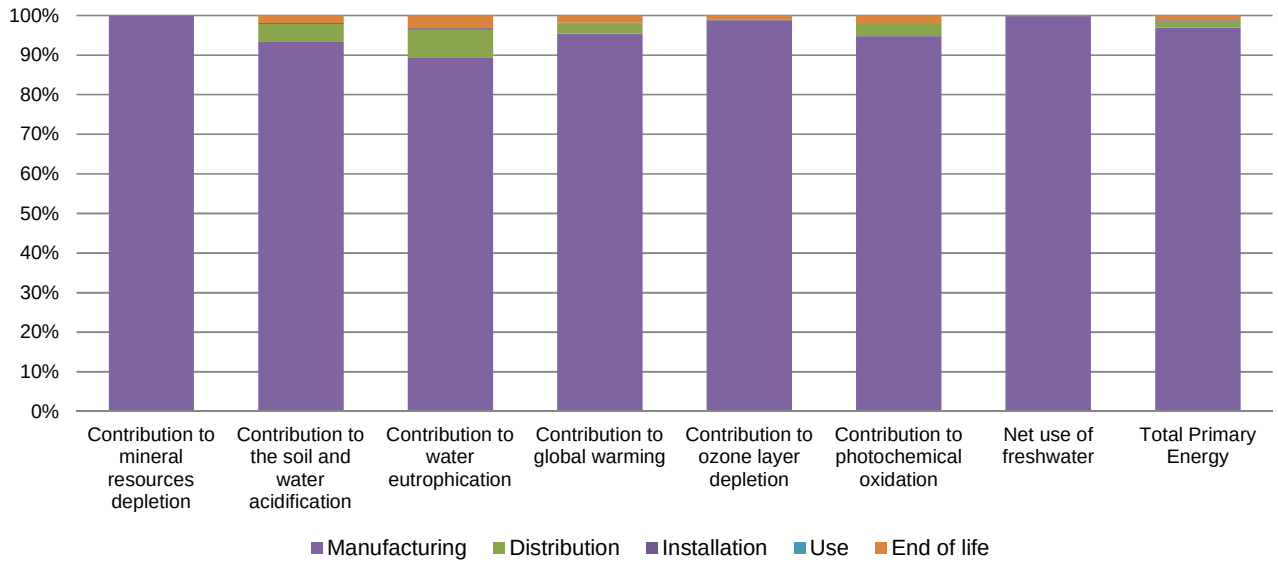
Additional environmental information

The Resi9 KV Modular Hybrid Enclosure presents the following relevent 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 442 g, consisting of cardboard (100%)
Installation	Ref R9H10837 doesn't require any installation operations
Use	The product does not require special maintenance operations.
End of life	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: **88%** 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	Enclosures			
Installation elements	No special components needed			
Use scenario	This product does not have any energy consumption			
Geographical representativeness	Europe			
Technological representativeness	The main function of the Resi9 KV Modular Enclosure range is to housing electrical devices in order to realise an assembly or an electrical installation. The Resi9 KV enclosure (R9H10837) used for the analysis is the 3-row 12-modules flush-mounted having a rated current of 63A and rated voltage 230/400Vac and IP30.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: Germany	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators	**Resi9 KV Modular Hybrid Enclosure - R9H10837**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3.35E-03	3.35E-03	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO_2 eq	5.83E-02	5.45E-02	2.59E-03	1.27E-04	0*	1.13E-03
Contribution to water eutrophication	kg PO_4^{3-} eq	8.49E-03	7.59E-03	5.97E-04	2.97E-05	0*	2.76E-04
Contribution to global warming	kg CO_2 eq	2.23E+01	2.13E+01	5.68E-01	4.11E-02	0*	4.14E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.08E-06	2.05E-06	1.15E-09	2.58E-09	0*	2.37E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	6.11E-03	5.79E-03	1.85E-04	1.37E-05	0*	1.22E-04
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.49E-01	2.48E-01	5.08E-05	5.02E-05	0*	4.62E-04
Total Primary Energy	MJ	4.67E+02	4.52E+02	8.03E+00	6.40E-01	0*	5.68E+00



Optional indicators		Resi9 KV Modular Hybrid Enclosure - R9H10837					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	3.25E+02	3.12E+02	7.98E+00	5.82E-01	0*	5.17E+00
Contribution to air pollution	m³	5.91E+03	5.84E+03	2.42E+01	4.51E+00	0*	4.02E+01
Contribution to water pollution	m³	1.17E+03	1.03E+03	9.34E+01	4.82E+00	0*	4.41E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	4.07E-02	4.07E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.27E+01	1.26E+01	1.07E-02	0*	0*	6.36E-03
Total use of non-renewable primary energy resources	MJ	4.54E+02	4.40E+02	8.02E+00	6.39E-01	0*	5.67E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	4.88E+00	4.86E+00	1.07E-02	7.19E-04	0*	6.36E-03
Use of renewable primary energy resources used as raw material	MJ	7.78E+00	7.78E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.83E+02	3.69E+02	8.02E+00	6.39E-01	0*	5.67E+00
Use of non renewable primary energy resources used as raw material	MJ	7.09E+01	7.09E+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	2.70E+02	2.65E+02	0*	4.46E-01	0*	4.40E+00
Non hazardous waste disposed	kg	1.43E+01	1.43E+01	2.02E-02	1.98E-03	0*	1.75E-02
Radioactive waste disposed	kg	8.56E-03	8.51E-03	1.44E-05	3.01E-06	0*	2.69E-05
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	4.44E+00	5.64E-01	0*	4.40E-01	0*	3.44E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1.88E-02	2.38E-03	0*	0*	0*	1.64E-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 2016-11.

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	ENVPEP1707003_V1-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	07/2017	*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, 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 »

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Published by Schneider Electric

ENVPEP1707003_V1-EN 07/2017