Product Environmental Profile

Resi9 RCBO 2MOD VD



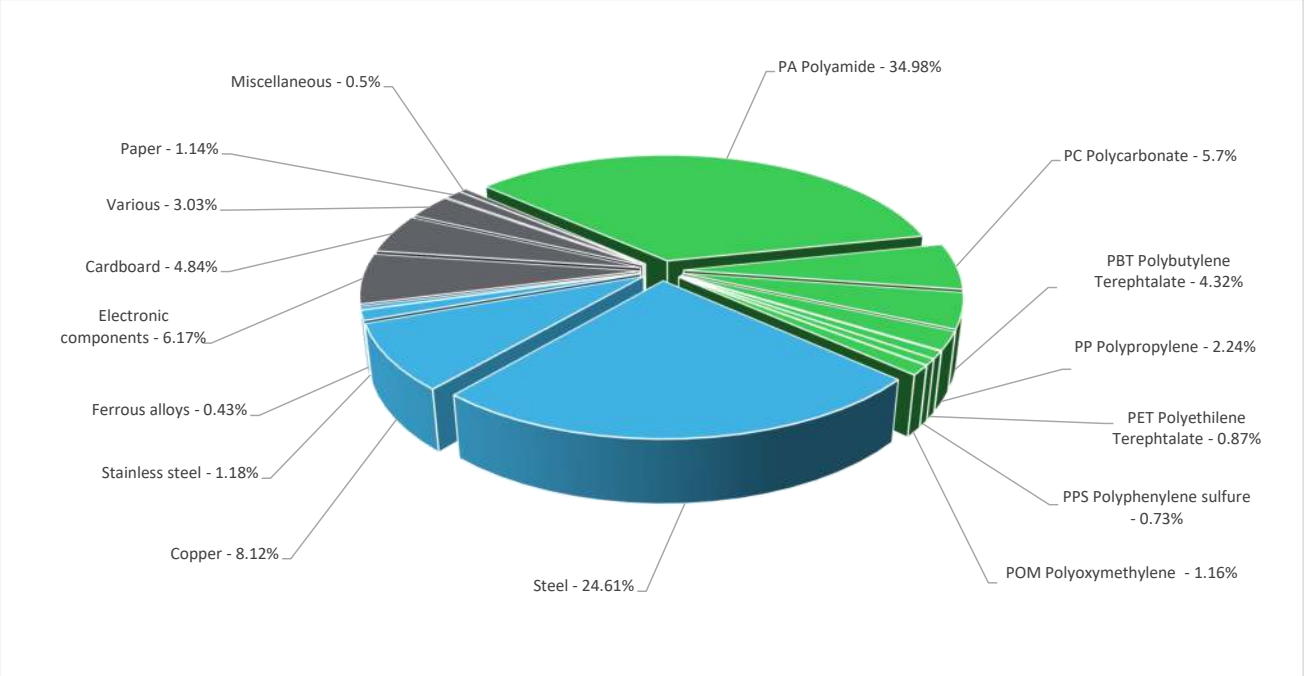
Schneider Electric

General information

Reference product	Resi9 RCBO 2MOD VD - R9D08616
Description of the product	Resi9 one-pole RCBO R9D08616 is designed to protect the installation against overloads and short circuits and protect people and premises at risk of fire or explosion against insulation defects.
Functional unit	Protect during 20 years the installation against overloads and short-circuits and people and premises at risk of fire or explosion against insulation defects in circuit with assigned voltage 230V and rated current 16A. This protection is ensured in accordance with the following parameters: - Number of poles Np = 1P+N - Rated breaking capacity Icn = 6000A - Tripping curve Cd = C - Sensitivity S = 30mA - Type of differential protection Tp = A Type

Constituent materials

Reference product mass	210 g	including the product, its packaging and additional elements and accessories



Plastics	50%
Metals	34.3%
Others	15.7%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

Additional environmental information

End Of Life	Recyclability potential:	**36%**	Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	20 years
Product category	Differential circuit breaker
Installation elements	The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal).
Use scenario	Load rate: 50% of Rated current (In) 16 A Use time rate: 30% of the time over 20 years
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production.
Geographical representativeness	New Zealand

Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; CN	Electricity mix; AC; consumption mix, at consumer; 230V; NZ	Electricity mix; AC; consumption mix, at consumer; 230V; NZ	Electricity mix; AC; consumption mix, at consumer; 230V; NZ

Mandatory Indicators		**Resi9 RCBO 2MOD VD - R9D08616**						
Impact indicators	**Unit**	**Total**	**Manufacturing** [A1 - A3]	**Distribution** [A4]	**Installation** [A5]	**Use** [B1 - B7]	**End of Life** [C1 - C4]	**Benefits** [D]
Contribution to climate change	kg CO2 eq	3.72E+00	2.23E+00	6.05E-02	2.28E-02	9.09E-01	5.00E-01	-7.46E-01
Contribution to climate change-fossil	kg CO2 eq	3.70E+00	2.21E+00	6.05E-02	2.18E-02	9.09E-01	4.95E-01	-7.41E-01
Contribution to climate change-biogenic	kg CO2 eq	2.10E-02	1.53E-02	0*	1.01E-03	0*	4.68E-03	-5.34E-03
Contribution to climate change-land use and land use change	kg CO2 eq	5.98E-08	2.17E-09	0*	0*	0*	5.76E-08	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	3.46E-07	2.78E-07	5.34E-08	1.51E-09	8.84E-09	4.90E-09	-1.15E-07
Contribution to acidification	mol H+ eq	2.36E-02	1.81E-02	2.63E-04	9.04E-05	3.37E-03	1.69E-03	-6.95E-03
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	1.46E-04	2.28E-05	0*	1.64E-07	1.85E-08	1.23E-04	-1.24E-06
Contribution to eutrophication marine	kg N eq	3.59E-03	2.34E-03	1.21E-04	2.39E-05	4.73E-04	6.35E-04	-4.55E-04
Contribution to eutrophication, terrestrial	mol N eq	3.46E-02	2.54E-02	1.31E-03	1.81E-04	5.21E-03	2.45E-03	-5.26E-03
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.10E-02	8.03E-03	4.30E-04	4.82E-05	1.76E-03	7.37E-04	-1.97E-03
Contribution to resource use, minerals and metals	kg Sb eq	2.50E-04	2.46E-04	0*	0*	4.52E-08	3.46E-06	-2.37E-04
Contribution to resource use, fossils	MJ	5.38E+01	3.44E+01	7.35E-01	2.37E-01	6.27E+00	1.21E+01	-1.65E+01
Contribution to water use	m3 eq	8.15E+00	0*	3.07E-03	9.72E-03	2.53E-02	8.16E+00	-4.25E-01

Inventory flows Indicators		**Resi9 RCBO 2MOD VD - R9D08616**						
Inventory flows	**Unit**	**Total**	**Manufact.** [A1 - A3]	**Distribution** [A4]	**Installation** [A5]	**Use** [B1 - B7]	**End of Life** [C1 - C4]	**Benefits** [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.21E+01	7.14E-01	0*	1.70E-02	1.12E+01	1.19E-01	-1.40E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	1.03E-01	1.03E-01	0*	0*	0*	0*	-9.76E-02
Contribution to total use of renewable primary energy resources	MJ	1.22E+01	8.16E-01	0*	1.70E-02	1.12E+01	1.19E-01	-2.37E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.08E+01	3.14E+01	7.35E-01	2.37E-01	6.27E+00	1.21E+01	-1.65E+01
Contribution to use of non renewable primary energy resources used as raw material	MJ	2.99E+00	2.99E+00	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	5.38E+01	3.44E+01	7.35E-01	2.37E-01	6.27E+00	1.21E+01	-1.65E+01

Contribution to use of secondary material	kg	8.09E-03	8.09E-03	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m^3	2.13E-01	0*	7.15E-05	2.26E-04	5.90E-04	2.13E-01	-9.89E-03
Contribution to hazardous waste disposed	kg	9.05E+00	8.83E+00	0*	0*	1.60E-02	2.06E-01	-1.90E+01
Contribution to non hazardous waste disposed	kg	1.16E+00	9.08E-01	0*	7.40E-02	8.43E-02	9.81E-02	-7.09E-01
Contribution to radioactive waste disposed	kg	5.43E-04	5.10E-04	1.20E-05	9.94E-06	6.37E-06	4.48E-06	-2.68E-04
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	8.35E-02	0*	0*	1.25E-02	0*	7.10E-02	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

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

Life cycle assessment performed with EIME version 5.9.4, database version 2022-01 in compliance with ISO14044.

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 :	ENVPEP2307022_V1	*Drafting rules*	PEP-PCR-ed4-2021 09 06
Validity period	5 years	*Supplemented by*	PSR-0005-ed2-2016 03 29
Date of issue	09/2023	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data, in compliance with ISO 14021 : 2016

Internal X External

The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)

PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019

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. Type II environmental declarations »

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