

Product Environmental Profile

MAX9 RESIDUAL CURRENT BREAKER WITH OVERCURRENT PROTECTION DEVICE

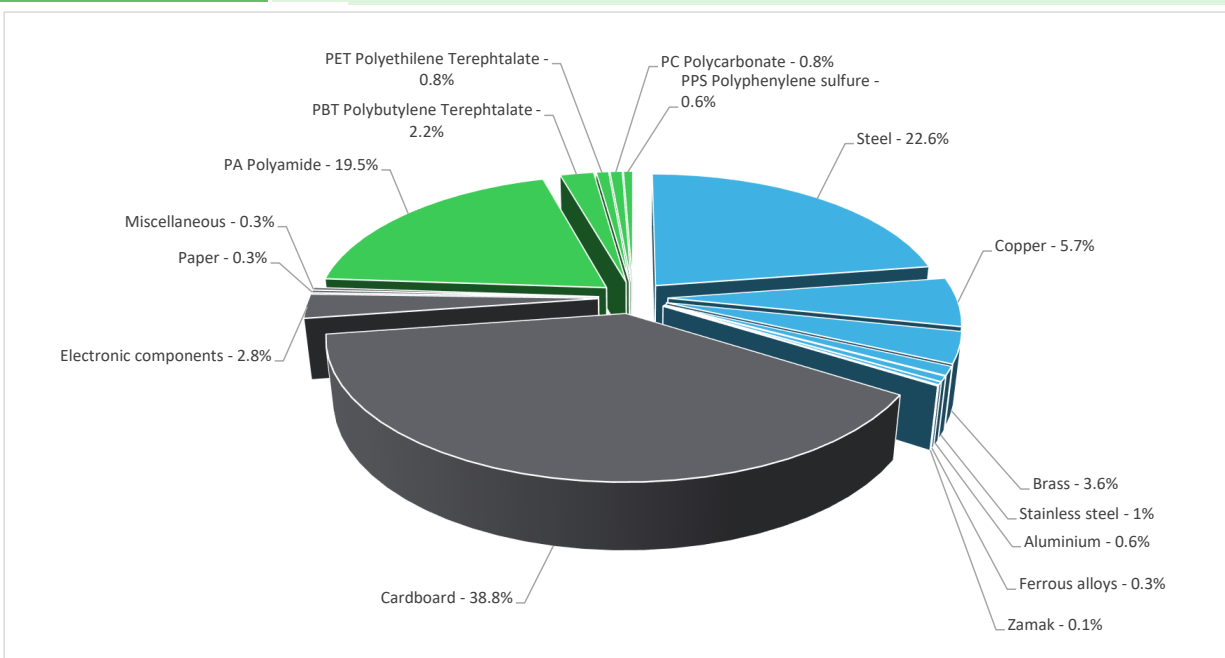


General information

Reference product	MAX9 RCBO 1PN C 20A 30mA A SLIM - MX9R3120
Description of the product	The main function of SLIM MAX9 RCBO is to ensure protection of persons against electric shocks, overloads and short circuits.
Functional unit	<p>Protect during 10 years the installation against overloads and short-circuits in circuit with assigned voltage [U] 240V and rated current [In] 20A. This protection is ensured in accordance with the following parameters:</p> <ul style="list-style-type: none"> - Number of poles (Np) - 1P+N - Rated breaking capacity (Icn) - 6000A - Tripping curve (Cd) - C - Sensitivity (S) - 30mA - Type of differential protection (Tp) - AC <p>It has an IP20 degree of protection (as per IEC 60529 standard) and becomes IP40 (as per IEC 62262 standard) once in modular enclosure. The product complies IEC 61009,EN/IEC 61009 & AS/NZS 61009 standards.</p>

Constituent materials

Reference product mass	142 g including the product, its packaging.
------------------------	---



Plastics	23.9%
Metals	33.9%
Others	42.2%

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:	55%	Recyclability rate has been calculated based on REEECYLAB 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	10 years		
Product category	Circuit-breakers		
Installation elements	The disposal of the packaging materials are accounted during the installation phase (including transport to disposal).		
Use scenario	Full load is 3.84 W power losses. The product is used 30% of the time with a power use of 0.96 W for 10 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	Australia		
Energy model used	[A1 - A3]	[A5]	[B6]
	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; AUS	Electricity Mix; Production mix; Low voltage; AUS
			[C1 - C4]
			Electricity Mix; Production mix; Low voltage; AUS

Detailed results, including all the impact indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

Mandatory Indicators		MAX9 RESIDUAL CURRENT BREAKER WITH OVERCURRENT PROTECTION DEVICE - MX9R3120						
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	2.58E+01	1.58E+00	2.36E-01	1.65E-01	2.34E+01	3.69E-01	-1.02E+00
Contribution to climate change-fossil	kg CO2 eq	2.58E+01	1.57E+00	2.36E-01	1.58E-01	2.34E+01	3.66E-01	-1.01E+00
Contribution to climate change-biogenic	kg CO2 eq	3.04E-02	8.37E-03	0*	7.34E-03	1.14E-02	3.29E-03	-1.04E-02
Contribution to climate change-land use and land use change	kg CO2 eq	4.81E-08	3.45E-09	0*	0*	0*	4.47E-08	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	6.35E-07	2.99E-07	2.09E-07	1.09E-08	1.14E-07	3.29E-09	-1.60E-07
Contribution to acidification	mol H+ eq	1.71E-01	1.45E-02	1.04E-03	6.56E-04	1.54E-01	1.32E-03	-7.93E-03
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	1.11E-04	1.44E-05	2.77E-08	1.19E-06	1.66E-07	9.55E-05	-2.51E-06
Contribution to eutrophication marine	kg N eq	2.00E-02	1.97E-03	4.78E-04	1.74E-04	1.70E-02	3.98E-04	-6.30E-04
Contribution to eutrophication, terrestrial	mol N eq	2.23E-01	2.13E-02	5.17E-03	1.31E-03	1.93E-01	2.15E-03	-7.03E-03
Contribution to photochemical ozone formation - human health	kg COVNM eq	6.63E-02	6.70E-03	1.69E-03	3.50E-04	5.68E-02	6.77E-04	-2.52E-03
Contribution to resource use, minerals and metals	kg Sb eq	2.49E-04	2.46E-04	0*	0*	3.62E-07	2.69E-06	-2.46E-04
Contribution to resource use, fossils	MJ	4.04E+02	2.37E+01	2.87E+00	1.72E+00	3.62E+02	1.38E+01	-1.99E+01
Contribution to water use	m3 eq	5.24E+00	1.17E-01	1.20E-02	7.06E-02	9.28E-01	4.11E+00	-4.91E-01

Inventory flows Indicators		MAX9 RESIDUAL CURRENT BREAKER WITH OVERCURRENT PROTECTION DEVICE - MX9R3120						
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	2.77E+01	1.26E-01	0*	1.23E-01	2.74E+01	8.24E-02	2.25E-02
Contribution to use of renewable primary energy resources used as raw material	MJ	5.52E-01	5.52E-01	0*	0*	0*	0*	-4.98E-01
Contribution to total use of renewable primary energy resources	MJ	2.82E+01	6.78E-01	0*	1.23E-01	2.74E+01	8.24E-02	-4.75E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.03E+02	2.22E+01	2.87E+00	1.72E+00	3.62E+02	1.38E+01	-1.99E+01
Contribution to use of non renewable primary energy resources used as raw material	MJ	1.46E+00	1.46E+00	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	4.04E+02	2.37E+01	2.87E+00	1.72E+00	3.62E+02	1.38E+01	-1.99E+01
Contribution to use of secondary material	kg	7.05E-02	7.05E-02	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	m³	1.33E-01	2.73E-03	2.79E-04	1.64E-03	2.16E-02	1.07E-01	-1.14E-02
Contribution to hazardous waste disposed	kg	9.72E+00	8.98E+00	0*	1.95E-03	5.98E-01	1.44E-01	-1.96E+01
Contribution to non hazardous waste disposed	kg	5.60E+00	1.24E+00	0*	5.38E-01	3.77E+00	5.23E-02	-1.54E+00
Contribution to radioactive waste disposed	kg	7.87E-04	2.94E-04	4.70E-05	7.22E-05	3.71E-04	2.70E-06	-4.91E-04
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.71E-01	3.27E-03	0*	9.08E-02	0*	7.74E-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 v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

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 :	ENVPEP2207002_V1	Drafting rules	PEP-PCR-ed4-2021 09 06
Validity period	5 years	Supplemented by	PSR-0005-ed2-2016 03 29
Date of issue	03/2024	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 »			

Schneider Electric Industries SAS
 Country Customer Care Center
<http://www.schneider-electric.com/contact>
 35, rue Joseph Monier
 CS 30323
 F- 92500 Rueil Malmaison Cedex
 RCS Nanterre 954 503 439
 Capital social 928 298 512 €

www.se.com

ENVPEP2207002_V1

Published by Schneider Electric

©2023 - Schneider Electric – All rights reserved

03/2024