Product Environmental Profile

Easy TeSys Protect 2.5-4A

Easy TeSys Protect

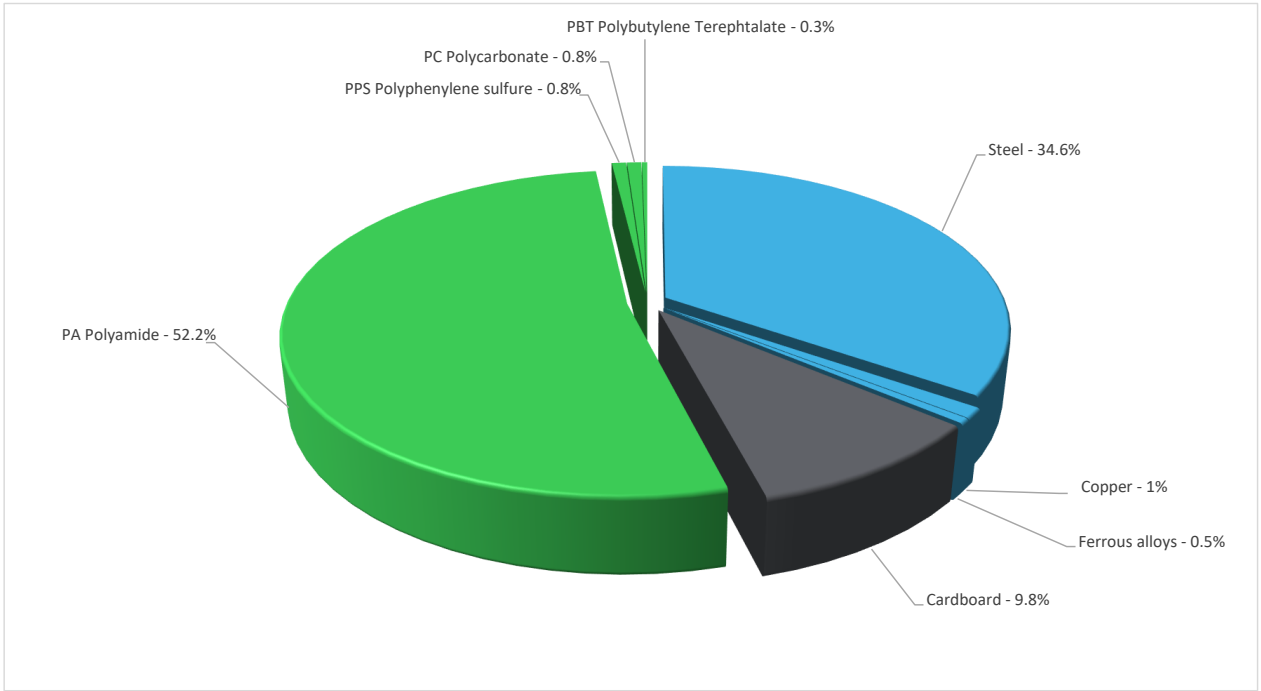


General information

Reference product	Easy TeSys Protect 2.5-4A - LRE08
Description of the product	The main purpose of the thermal overload relays is to detect overload currents in order to protect the motor.
Description of the range	This range consists of 2.5A-38A Easy TeSys Protect, the representative product used for the analysis is Easy TeSys Protect 2.5-4A(LRE08).
Functional unit	Other switchgear and controlgear solutions mentioned in the scope (e.g. fuses TC32, all-or-nothing relays TC94, Measuring relays and protection equipment TC95), apply the general rules of PCR and mention in the accompanying report the functional unit, the reference product characteristics, the reference lifetime and the use scenario which are applied consistently with the relevant IEC technical standards.
Specifications are:	Switch on and off during 20 years electrical power supply of a downstream installation with an electrical and mechanical control. The function unit is characterized by 3 poles, a control circuit voltage 24V with current 5A, and a power voltage 690V AC with thermal protection adjustment range 2.5-4 A.

Constituent materials

Reference product mass	168 g	including the product, its packaging, additional elements and accessories



Plastics	54.1%
Metals	36.1%
Others	9.8%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric website
https://www.se.com

Additional environmental information

End Of Life	Recyclability potential:	**39%**	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the EIME database and the related PSR was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - non-continuous operation			
Life cycle of the product	The manufacturing, the distribution, the installation, the use and the end of life were taken into consideration in this study			
Electricity consumption	The electricity consumed during manufacturing processes is considered for each part of the product individually, the final assembly generates a negligible consumption			
Installation elements	The product dose not rquire any installation			
Use scenario	load rate / rated current (In): 30 % of In percentage of utilization time: 30%			
Time representativeness	The collected data are representative of the year 2025			
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are similar and representative of the actual type of technologies used to make the product.			
Geographical representativeness	**Final assembly site**	**Use phase**		**End-of-life**
	China	India		India
Energy model used	**[A1 - A3]**	**[A5]**	**[B6]**	**[C1 - C4]**
	Electricity mix; Production mix; low voltage; 2022; China, CN	No energy used	Electricity mix; Production mix; low voltage; 2022; India, IN	Electricity mix; Production mix; low voltage; 2022; India, IN

Detailed results of 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.se.com/contact

Mandatory Indicators		Easy TeSys Protect 2.5-4A - LRE08						
Impact indicators	**Unit**	**Total (without Module D)**	**[A1 - A3] - Manufacturing**	**[A4] - Distribution**	**[A5] - Installation**	**[B1 - B7] - Use**	**[C1 - C4] - End of life**	**[D] - Benefits and loads**
Contribution to climate change	kg CO2 eq	6.71E+01	1.17E+00	7.24E-02	3.30E-02	6.56E+01	1.68E-01	-9.75E-05
Contribution to climate change-fossil	kg CO2 eq	6.70E+01	1.20E+00	7.24E-02	0*	6.55E+01	1.68E-01	-9.73E-05
Contribution to climate change-biogenic	kg CO2 eq	1.05E-01	-3.26E-02	0*	2.70E-02	1.10E-01	5.74E-04	-2.31E-07
Contribution to climate change-land use and land use change	kg CO2 eq	2.38E-06	2.09E-06	1.09E-07	1.14E-09	0.00E+00	1.80E-07	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	4.90E-07	9.97E-08	8.79E-10	2.19E-10	3.83E-07	6.25E-09	-3.00E-11
Contribution to acidification	mol H+ eq	5.09E-01	6.35E-03	1.20E-04	0*	5.01E-01	8.09E-04	-5.28E-07
Contribution to eutrophication, freshwater	kg P eq	2.69E-05	1.90E-05	2.75E-07	9.49E-09	6.95E-06	6.55E-07	-2.98E-10
Contribution to eutrophication, marine	kg N eq	5.44E-02	9.07E-04	2.33E-05	8.30E-06	5.34E-02	1.29E-04	-5.33E-08
Contribution to eutrophication, terrestrial	mol N eq	6.20E-01	9.62E-03	2.55E-04	1.11E-04	6.08E-01	1.60E-03	-5.97E-07
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.82E-01	3.18E-03	8.02E-05	2.34E-05	1.78E-01	4.13E-04	-2.29E-07
Contribution to resource use, minerals and metals	kg Sb eq	7.07E-03	7.07E-03	0*	0*	3.55E-06	0*	-1.42E-08
Contribution to resource use, fossils	MJ	1.07E+03	2.45E+01	1.30E+00	1.18E-01	1.04E+03	3.55E+00	-1.35E-03
Contribution to water use	m3 eq	3.76E+00	2.97E-01	2.62E-03	0*	3.44E+00	1.96E-02	-4.36E-05

Inventory flows Indicators		Easy TeSys Protect 2.5-4A - LRE08						
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to renewable primary energy used as energy	MJ	5.53E+01	4.35E-01	0*	9.38E-03	5.48E+01	1.33E-01	-9.23E-06
Contribution to renewable primary energy used as raw material	MJ	3.50E-01	3.50E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to total renewable primary energy	MJ	5.57E+01	7.85E-01	0*	9.38E-03	5.48E+01	1.33E-01	-9.23E-06
Contribution to non renewable primary energy used as energy	MJ	1.07E+03	2.21E+01	1.30E+00	1.18E-01	1.04E+03	3.55E+00	-1.35E-03
Contribution to non renewable primary energy used as raw material	MJ	2.39E+00	2.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to total non renewable primary energy	MJ	1.07E+03	2.45E+01	1.30E+00	1.18E-01	1.04E+03	3.55E+00	-1.35E-03
Contribution to use of secondary material	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to net use of fresh water	m³	8.77E-02	6.93E-03	6.09E-05	0*	8.01E-02	5.57E-04	-1.02E-06
Contribution to hazardous waste disposed	kg	9.18E+00	7.05E+00	0*	6.39E-03	2.09E+00	3.74E-02	-1.03E-03
Contribution to non hazardous waste disposed	kg	1.22E+01	3.57E-01	6.70E-03	0*	1.18E+01	8.98E-02	-3.43E-05
Contribution to radioactive waste disposed	kg	5.68E-04	1.37E-04	5.31E-06	3.69E-07	4.13E-04	1.25E-05	-1.63E-08
Contribution to components for reuse	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to materials for recycling	kg	6.67E-02	4.71E-03	0.00E+00	0.00E+00	0.00E+00	6.19E-02	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Contribution to exported energy	MJ	6.62E-04	4.97E-05	0.00E+00	0.00E+00	0.00E+00	6.13E-04	0.00E+00

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

Contribution to biogenic carbon content of the product	kg of C	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg of C	4.83E-03

** The calculation of the biogenic carbon is based on the Ademe for the Cardboard (28%), EN16485 for Wood (39,52%), and APESA/RECORD for Paper (37,8%)*

Mandatory Indicators		Easy TeSys Protect 2.5-4A - LRE08							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	6.56E+01	0	0.00E+00	0	0	0	6.56E+01	0
Contribution to climate change-fossil	kg CO2 eq	6.55E+01	0	0.00E+00	0	0	0	6.55E+01	0
Contribution to climate change-biogenic	kg CO2 eq	1.10E-01	0	0.00E+00	0	0	0	1.10E-01	0
Contribution to climate change-land use and land use change	kg CO2 eq	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to ozone depletion	kg CFC-11 eq	3.83E-07	0	0.00E+00	0	0	0	3.83E-07	0
Contribution to acidification	mol H+ eq	5.01E-01	0	0.00E+00	0	0	0	5.01E-01	0
Contribution to eutrophication, freshwater	kg P eq	6.95E-06	0	0.00E+00	0	0	0	6.95E-06	0
Contribution to eutrophication marine	kg N eq	5.34E-02	0	0.00E+00	0	0	0	5.34E-02	0
Contribution to eutrophication, terrestrial	mol N eq	6.08E-01	0	0.00E+00	0	0	0	6.08E-01	0
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.78E-01	0	0.00E+00	0	0	0	1.78E-01	0
Contribution to resource use, minerals and metals	kg Sb eq	3.55E-06	0	0.00E+00	0	0	0	3.55E-06	0
Contribution to resource use, fossils	MJ	1.04E+03	0	0.00E+00	0	0	0	1.04E+03	0
Contribution to water use	m3 eq	3.44E+00	0	0.00E+00	0	0	0	3.44E+00	0

Inventory flows Indicators		Easy TeSys Protect 2.5-4A - LRE08							
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5.48E+01	0	0.00E+00	0	0	0	5.48E+01	0
Contribution to use of renewable primary energy resources used as raw material	MJ	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to total use of renewable primary energy resources	MJ	5.48E+01	0	0.00E+00	0	0	0	5.48E+01	0
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.04E+03	0	0.00E+00	0	0	0	1.04E+03	0
Contribution to use of non renewable primary energy resources used as raw material	MJ	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to total use of non-renewable primary energy resources	MJ	1.04E+03	0	0.00E+00	0	0	0	1.04E+03	0
Contribution to use of secondary material	kg	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to net use of freshwater	m³	8.01E-02	0	0.00E+00	0	0	0	8.01E-02	0
Contribution to hazardous waste disposed	kg	2.09E+00	0	0.00E+00	0	0	0	2.09E+00	0
Contribution to non hazardous waste disposed	kg	1.18E+01	0	0.00E+00	0	0	0	1.18E+01	0
Contribution to radioactive waste disposed	kg	4.13E-04	0	0.00E+00	0	0	0	4.13E-04	0
Contribution to components for reuse	kg	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to materials for recycling	kg	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to materials for energy recovery	kg	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0
Contribution to exported energy	MJ	0.00E+00	0	0.00E+00	0	0	0	0.00E+00	0

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

Life cycle assessment performed with EIME version v6.3.3, database version 2024-01 in compliance with ISO14044, EF3.1 method is applied, for biogenic carbon storage, assessment methodology -1/1 is used

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request

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.

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		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Date of issue	10/2026	*Information and reference documents*	www.pep-ecopassport.org
		Validity period	5 years

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)

PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022

The components of the present PEP may not be compared with components from any other program.

Document complies with ISO 14021:2016 "Environmental labels and declarations. Type II environmental declarations"

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

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