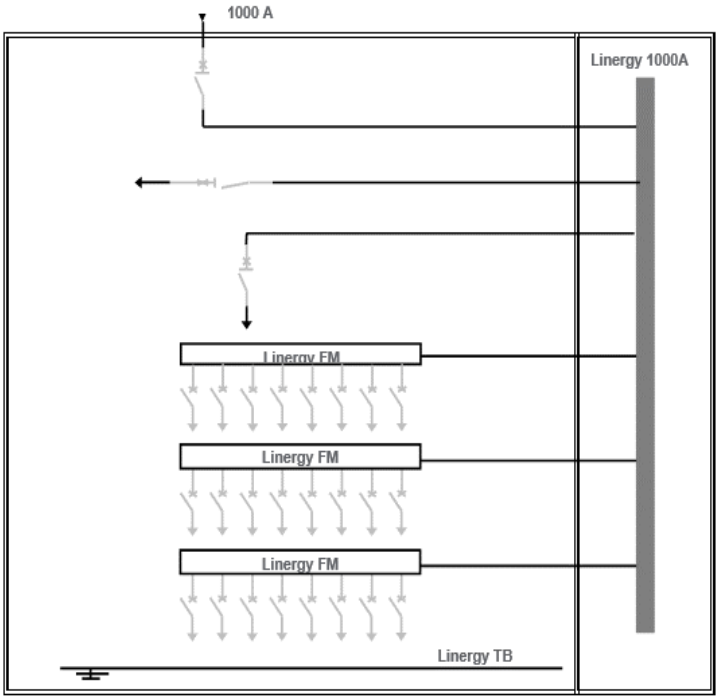
Product Environmental Profile

PrismaSet P Cubicles up to 4000A

General information

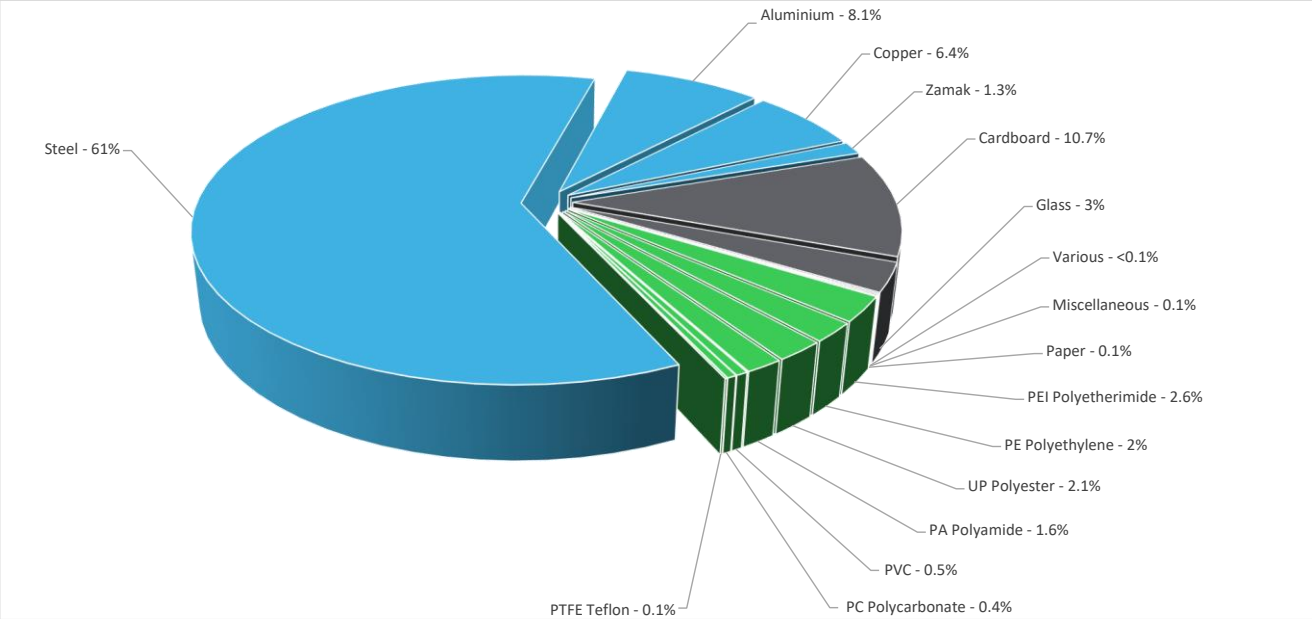
Reference product	PrismaSet P Cubicles up to 4000A - PrismaSet P 1000A
Product Configuration	The product used for the analysis is the typical PrismaSeT P 1000A product, which is comprised of the following commercial references: LVS03482; LVS03690; LVS03802; LVS03803; LVS04486; LVS04926; LVS03412; LVS03612; LVS04424; LVS04426; LVS03420; LVS03243; LVS04404; LVS03401; LVS03204; LVS04014; LVS04239; LVS03203; LVS04504; LVS04651; LVS04922; LVS08403; LVS08407; LVS08513; LVS08538; LVS08433; LVS08438; LVS08733; LVS08738; LVS08750; LVS08773; LVS08794; LVS04657; LVS04502; LVS08493; LVS08497; LVS08640; LVS08643
Description of the product	The main functions of PrismaSeT P Cubicle 1000A is to protect persons against direct contact with live parts and allow grouping monitoring, control and protection devices in a single enclosure with the following product structure. • Installing electrical devices (mounting plates and front plates) • Distribution of current (distribution blocks, busbars) • Connection of switchboards on site (connections, terminal blocks, cable tie supports) The product used for the analysis is a PrismaSeT P 1000A Cubicle with components for the following functional units: • For incoming : - 1000A fixed circuit breaker (typically Compact NS) • For outgoing : - 250A horizontal circuit breakers (typically Compact NSX) - 250A vertical circuit breakers (typically Compact NSX) - modular circuit breakers (typically 3 rows of Acti 9 devices)
Description of the range	Single product
Functional unit	To 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 2000 x 1100 x 400 (mm), while protecting against mechanical impacts (IK=10) and the penetration of solid objects and liquids (IP=55), in accordance with IEC 61439-1&2 compliant low-voltage electrical distribution switchboards. The distributing electricity is up to 1000W and for 1000V, within the enclosure.
Specifications are:	● Cabinet Dimension: 2000mm x 1100mm x 400mm ● IP degree of protection: IP55 conforming to IEC 60529 ● IK degree of protection : IK10 conforming to IEC 62262 ● Metal frames and panels: steel metal sheet with cataphoresis treatment with hot-polymerized polyester epoxy powder coating



Note: Circuit Breakers are not included in the Analysis.

Constituent materials

Reference product mass	204058 g	including the product, its packaging and additional elements and accessories



Plastics	9.3%
Metals	76.8%
Others	13.9%

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:	**92%**	The recyclability rate was calculated from the recycling rates of each material making up the product with the exception of data using the ESR database. For materials or components using the ESR database or the absence of data the conservative hypothesis "0% recyclability" was used.

Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - continuous operation			
Installation elements	The product does not require special installation operation.			
Use scenario	As Per PSR @ Load rate 30% and RLT 100%, The power dissipated by the PrismaSet P Cubicle 1000A is 197 W for 20 years.			
Time representativeness	The collected data are representative of the year 2023			
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 représentaive of the actual type of technologies used to make the product.			
Geographical representativeness	Europe			
Energy model used	**[A1 - A3]**	**[A5]**	**[B6]**	**[C1 - C4]**
	Electricity Mix; Low voltage; 2018; France, FR	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27

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.schneider-electric.com/contact

Mandatory Indicators		PrismaSet P Cubicles up to 4000A - PrismaSet P 1000A						
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	3.01E+03	1.24E+03	3.98E+01	2.42E+01	1.27E+03	4.33E+02	-7.74E+02
Contribution to climate change-fossil	kg CO2 eq	2.99E+03	1.23E+03	3.98E+01	2.31E+01	1.27E+03	4.27E+02	-7.61E+02
Contribution to climate change-biogenic	kg CO2 eq	2.64E+01	1.69E+01	0*	1.12E+00	1.70E+00	6.65E+00	-1.30E+01
Contribution to climate change-land use and land use change	kg CO2 eq	1.53E-03	1.40E-03	0*	2.39E-06	0*	1.22E-04	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.70E-04	2.61E-04	6.09E-08	3.17E-07	5.44E-06	2.58E-06	-1.14E-04
Contribution to acidification	mol H+ eq	1.75E+01	8.21E+00	2.52E-01	6.92E-02	7.26E+00	1.72E+00	-6.61E+00
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$eq	1.04E-01	1.60E-02	1.49E-05	5.49E-04	3.49E-03	8.39E-02	-2.03E-03
Contribution to eutrophication marine	kg N eq	2.38E+00	1.06E+00	1.18E-01	3.00E-02	8.25E-01	3.44E-01	-4.73E-01
Contribution to eutrophication, terrestrial	mol N eq	2.92E+01	1.14E+01	1.29E+00	2.09E-01	1.24E+01	3.85E+00	-5.30E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	8.00E+00	3.74E+00	3.26E-01	4.80E-02	2.65E+00	1.24E+00	-1.91E+00
Contribution to resource use, minerals and metals	kg Sb eq	3.42E-02	3.14E-02	0*	0*	9.22E-05	2.66E-03	-1.68E-01
Contribution to resource use, fossils	MJ	1.08E+05	4.78E+04	5.54E+02	2.33E+02	3.24E+04	2.70E+04	-1.49E+04
Contribution to water use	m3 eq	6.98E+02	4.24E+02	1.51E-01	2.37E+00	4.50E+01	2.26E+02	-3.52E+02

Inventory flows Indicators		PrismaSet P Cubicles up to 4000A - PrismaSet P 1000A						
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 use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.80E+03	4.76E+02	7.40E-01	3.06E+01	6.23E+03	6.82E+01	-2.10E+02
Contribution to use of renewable primary energy resources used as raw material	MJ	1.39E+02	1.39E+02	0*	0*	0*	0*	-3.25E+02
Contribution to total use of renewable primary energy resources	MJ	6.94E+03	6.15E+02	7.40E-01	3.06E+01	6.23E+03	6.82E+01	-5.35E+02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.07E+05	4.71E+04	5.54E+02	2.33E+02	3.24E+04	2.70E+04	-1.48E+04
Contribution to use of non renewable primary energy resources used as raw material	MJ	6.70E+02	6.70E+02	0*	0*	0*	0*	-1.03E+01
Contribution to total use of non-renewable primary energy resources	MJ	1.08E+05	4.78E+04	5.54E+02	2.33E+02	3.24E+04	2.70E+04	-1.49E+04
Contribution to use of secondary material	kg	1.76E+01	1.76E+01	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	1.63E+01	9.90E+00	3.51E-03	5.51E-02	1.05E+00	5.27E+00	-8.19E+00
Contribution to hazardous waste disposed	kg	2.64E+03	2.61E+03	0*	5.86E-01	2.38E+01	0*	-1.35E+04
Contribution to non hazardous waste disposed	kg	1.08E+03	8.61E+02	1.39E+00	1.04E+01	1.83E+02	2.23E+01	-7.87E+02
Contribution to radioactive waste disposed	kg	9.06E-01	8.62E-01	9.93E-04	1.28E-03	3.83E-02	3.15E-03	-4.87E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.91E+02	2.30E+01	0*	2.19E-01	0*	1.68E+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	2.72E+00	2.42E-01	0*	9.60E-01	0*	1.52E+00	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 de C	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	6.18E+00

Mandatory Indicators		PrismaSet P Cubicles up to 4000A - PrismaSet P 1000A							
Impact indicators	**Unit**	**[B1 - B7] - Use**	**[B1]**	**[B2]**	**[B3]**	**[B4]**	**[B5]**	**[B6]**	**[B7]**
Contribution to climate change	kg CO2 eq	1.27E+03	0*	0*	0*	0*	0*	1.27E+03	0*
Contribution to climate change-fossil	kg CO2 eq	1.27E+03	0*	0*	0*	0*	0*	1.27E+03	0*
Contribution to climate change-biogenic	kg CO2 eq	1.70E+00	0*	0*	0*	0*	0*	1.70E+00	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	5.44E-06	0*	0*	0*	0*	0*	5.44E-06	0*
Contribution to acidification	mol H+ eq	7.26E+00	0*	0*	0*	0*	0*	7.26E+00	0*
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$eq	3.49E-03	0*	0*	0*	0*	0*	3.49E-03	0*
Contribution to eutrophication marine	kg N eq	8.25E-01	0*	0*	0*	0*	0*	8.25E-01	0*
Contribution to eutrophication, terrestrial	mol N eq	1.24E+01	0*	0*	0*	0*	0*	1.24E+01	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	2.65E+00	0*	0*	0*	0*	0*	2.65E+00	0*
Contribution to resource use, minerals and metals	kg Sb eq	9.22E-05	0*	0*	0*	0*	0*	9.22E-05	0*
Contribution to resource use, fossils	MJ	3.24E+04	0*	0*	0*	0*	0*	3.24E+04	0*
Contribution to water use	m3 eq	4.50E+01	0*	0*	0*	0*	0*	4.50E+01	0*

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	6.23E+03	0*	0*	0*	0*	0*	6.23E+03	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	6.23E+03	0*	0*	0*	0*	0*	6.23E+03	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.24E+04	0*	0*	0*	0*	0*	3.24E+04	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	3.24E+04	0*	0*	0*	0*	0*	3.24E+04	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m^3	1.05E+00	0*	0*	0*	0*	0*	1.05E+00	0*
Contribution to hazardous waste disposed	kg	2.38E+01	0*	0*	0*	0*	0*	2.38E+01	0*
Contribution to non hazardous waste disposed	kg	1.83E+02	0*	0*	0*	0*	0*	1.83E+02	0*
Contribution to radioactive waste disposed	kg	3.83E-02	0*	0*	0*	0*	0*	3.83E-02	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	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 v6.2, database version 2024-05 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

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 :	SCHN-00690-V02.01-EN	*Drafting rules*	PCR-4-ed4-EN-2021 09 06
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Verifier accreditation N°	VH45	*Information and reference documents*	www.pep-ecopassport.org
Date of issue	05/2024	*Validity period*	5 years

Independent verification of the declaration and data, in compliance with ISO 14025 : 2006

Internal External X

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 14025:2006 "Environmental labels and declarations. Type III environmental declarations"

Schneider Electric Industries SAS
Country Customer Care Center
http://www.se.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

Published by Schneider Electric

SCHN-00690-V02.01-EN

05/2024