# **Product Environmental Profile**

### **PRISMA P CUBICLE 1000A**











### **General information**

#### Representative product

PRISMA P CUBICLE 1000A - The product used for the analysis is the typical Prisma P Cubicles 1000A product, which is comprised of the following commercial references: 03482, 03690, 03802, 03803, 04486, 04926, 03412, 03612, 04424, 04426, 03420, 03243, 03802, 04404, 03401, 03204, 04014, 04239, 03203, 04004, 4504, 04651, 04922, 08403, 08407, 08506, 08513, 08538, 08433, 08438, 08733, 08738, 08750, 08773, 08794, 04657, 04502, 08493, 08497

The main functions of Prisma P cubicle 1000A is:

- · Mounting plates and front plates
- · Distribution blocks, busbars...
- · Other switchboards on site, connections, terminal blocks, cable tie supports etc

#### Description of the product

The product used for the analysis is a Prisma P 1000A Cubicle, a few items that can be attached include:

- 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)

#### Functional unit

The combined fucntions of this product are:

- 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 700 x 500 (mm), while protecting against mechanical impacts (IK=10) and the penetration of solid objects and liquids (IP=55).
- The distributing electricity is up to 1000W and for 1000V, within the enclosure.

### Constituent materials

#### Reference product mass 190300 g including the product, its packaging and additional elements and accessories Aluminium - 7.3% Steel - 68.5% Copper - 5.1% Zamak - 1.2% Glass - 5.1% Cardboard - 2.9% Various - 0.9% Paper - 0.7% Miscellaneous - 0.3% PEI Polyetherimide - 2.8% PA Polyamide - 1.7% Diverse Thermosetting Plastics - 1.7% PE Polyethylene - 0.9% PC Polycarbonate - 0.4% PVC Polychlorure de vinyle - 0.2% EPS Expandable Polystyrene - 0.2% **Plastics** 7.9% Metals 82.1%

Others

9.9%

# Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate - BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a>

## (19) Additional environmental information

The PRISMA P CUBICLE 1000A presents the following relevent environmental aspects						
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified					
	Weight and volume of the packaging optimized, based on the European Union's packaging directive					
Distribution	Packaging weight is 9234.8 g, consisting of Carboard (76%), PELD (14%), paper (5%), PET (4%), PSE (1%)					
Distribution	Packaging recycled materials is 78% of total packaging mass.					
	Product distribution optimised by setting up local distribution centres					
Installation	No Special components included					
Use	The product does not require special maintenance operations.					
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials					
	This product contains the Prisma Plus system P range is made of several products which can contain printed circuit boards. The switchboards configuration can be different depending on the customer's needs. Some sub-assemblies that should be separated from the stream of waste so as to optimize end-of-life treatment.					
End of life	The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website					
	http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page					
	Based on "ECO'DEEE recyclability and recoverability calculation method"  Recyclability potential: 80% (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	Other equipments - Passive product - continuous operation						
Installation elements	The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal).						
Use scenario	load rate / rated current (In): 30 % of 3520 Amps percentage of utilization time: 100%						
Geographical representativeness	Europe						
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.						
	Manufacturing	Installation	Use	End of life			
Energy model used	Energy model used: France	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU- 27			

Compulsory indicators			PRISMA P CUBICLE 1000A				
npact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of L
Contribution to mineral resources depletion	kg Sb eq	2.12E-02	2.11E-02	0*	0*	8.35E-05	0*
contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1.63E+01	2.25E+00	1.12E-01	2.46E-03	1.39E+01	5.05E-0
ontribution to water eutrophication	kg PO <sub>4</sub> 3- eq	8.78E-01	3.19E-01	2.58E-02	1.27E-03	5.20E-01	1.23E-0
ontribution to global warming	kg CO <sub>2</sub> eq	2.67E+03	7.94E+02	2.46E+01	6.05E-01	1.83E+03	1.82E+
ontribution to ozone layer depletion	kg CFC11 eq	8.40E-04	3.93E-04	0*	0*	4.46E-04	1.08E-
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	9.07E-01	2.38E-01	8.00E-03	1.86E-04	6.56E-01	5.42E-
esources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of L
let use of freshwater	m3	5.88E+01	5.40E+01	0*	0*	4.78E+00	2.05E-
otal Primary Energy	MJ	6.04E+04	2.26E+04	3.47E+02	8.44E+00	3.72E+04	2.80E+
100%							

■Manufacturing ■Distribution ■Installation ■Use ■End of life

depletion

oxidation

eutrophication

acidification

depletion

Optional indicators			DI	RISMA P CUBI	CLE 1000A		
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
			•				
Contribution to fossil resources depletion	MJ	2.94E+04	9.94E+03	3.45E+02	8.17E+00	1.89E+04	2.30E+02
Contribution to air pollution	m³	2.32E+05	1.51E+05	1.04E+03	3.98E+01	7.87E+04	1.79E+03
Contribution to water pollution	m³	1.37E+05	5.44E+04	4.04E+03	8.46E+01	7.70E+04	1.96E+03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	6.25E+01	6.25E+01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	2.91E+03	2.51E+02	4.63E-01	0*	2.66E+03	0*
Total use of non-renewable primary energy resources	MJ	5.75E+04	2.24E+04	3.47E+02	8.38E+00	3.45E+04	2.80E+02
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.89E+03	2.35E+02	4.63E-01	0*	2.66E+03	0*
Use of renewable primary energy resources used as raw material	MJ	1.63E+01	1.63E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.70E+04	2.19E+04	3.47E+02	8.38E+00	3.45E+04	2.80E+02
Use of non renewable primary energy resources used as raw material	MJ	4.67E+02	4.67E+02	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	1.95E+03	1.74E+03	0*	0*	0*	2.09E+02
Non hazardous waste disposed	kg	7.18E+03	3.14E+02	8.72E-01	1.90E+00	6.86E+03	7.77E-01
Radioactive waste disposed	kg	5.80E+00	2.04E-01	6.21E-04	0*	5.59E+00	1.20E-03

Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.63E+02	1.68E+01	0*	7.54E+00	0*	1.39E+02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	6.55E-01	0*	0*	0*	0*	6.55E-01
Exported Energy	MJ	2.15E-02	2.02E-03	0*	1.95E-02	0*	0*

<sup>\*</sup> represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.8.1, database version 2018-11 in compliance with ISO14044.

The use 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.

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Date of issue	10/2020	Information and reference documents	www.pep-ecopassport.org		
		Validity period	5 years		
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010					

Internal External X

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)

PEP are compliant with XP C08-100-1:2016

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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