UNEQUIPPED ENCLOSURES AND CABINETS

Product Environmental Profile

Environmental Product Declaration

According to ISO 14040 and ISO 14044
"PCR Product Category Rules for Electrical, Electronic and HVAC-R Products" (PCR-ed3-EN-2015 04 02)
"PSR Specific Rules for Electrical Switchgear and control gear Solutions"(PSR-0005-ed2-EN—2016 03 29)
Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"

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ABB Purpose & Embedding Sustainability

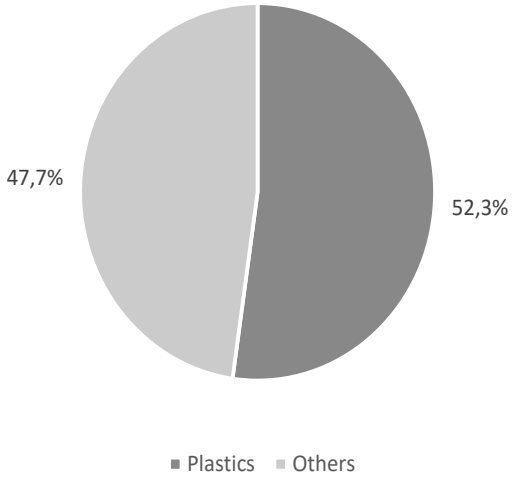
ABB is committed to continually promoting and embedding sustainability across its operations and value chain, aspiring to become a role model for others to follow.
With its ABB Purpose, ABB is focusing on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior.

ABB is also engaged with the Ellen MacArthur Foundation.

General Information

Reference product	2CLP200000N1101 Zenit blank 1M plate white
Description of the product	The Zenit blank plate family are a group of blank plate with high performances The Zenit blank plate family serves to protect persons against direct contact with live parts.
Functional unit	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 22*44mm
Other products covered	Zenit blank 1M plate (AN, BL, CV, PL) Zenit 1/2 M blank plate (AN, BL, CV, PL) Zenit blank 2M plate (AN, BL, CV, PL)

Constituent materials



Total weight of Reference product (with packaging)	7,08 g
Total weight of product packaging	3,38 g

Plastics as % of weight		**Metals as % of weight**		**Others as % of weight**	
Name and CAS number	**Weight-%**	**Name and CAS number**	**Weight-%**	**Name and CAS number**	**Weight-%**
PC	52,3	–	–	Carboard box and tray	47,7

Additional Environmental Information

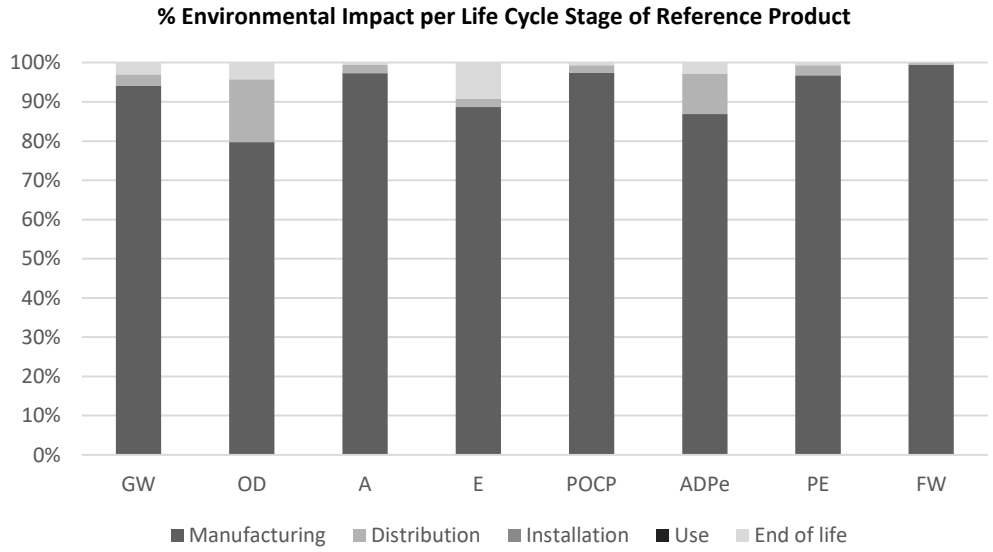
Manufacturing	Includes the environmental impacts associated with extraction and processing of the raw materials used to produce the product and its pacakging, transport to the manufacturing site and assembly.
Distribution	Includes the transportation in its pacakging from the manufacturer's last losgistic platform to the distributor.
Installation	Installation stage includes the installation of the products made manually.
Use	Under normal conditions of use, the product does not require spe-cial maintenance operations or consumables, so there is no impact taken into account in this stage.
End of life	Includes its transportation from the installation site to the final end of life treatment site, and end of life treatment processes. A value of 300 km transport by lorry is used for the transportation.
Software and database used	Simapro 9.3.0.3 and Ecoinvent v3.8
Standards	“PCR Product Category Rules for Electrical, Electronic and HVAC-R Products” (PCR-ed3-EN-2015 04 02) and - “PSR Specific Rules for Electrical Switchgear and control gear Solutions“(PSR-0005-ed2-EN—2016 03 29)

Environmental impacts

Reference lifetime	20 years
Product category	Unequipped enclosures and cabinets
Installation elements	Installation carried out manually
Use scenario	Italy
Geographical representativeness	Global
Technological representativeness	Materials and processes data are specific for the production of 2-way-switches and its family
Energy model used	
Manufacturing	A specific mix of ABB's trading company has been used (Confidential)
Installation	Non-applicable
Use	Non-applicable
End of life	Non-applicable

Compulsory Indicators

Impact indicators	Unit	Total	Manu-facturing	Distri-bution	Instal-lation	Use	End of life
Global warming (GW)	kg CO_2 eq.	4,84E-02	4,55E-02	1,41E-03	0,00E+00	0,00E+00	1,46E-03
Ozone depletion (OD)	kg CFC-11 eq.	1,63E-09	1,30E-09	2,61E-10	0,00E+00	0,00E+00	6,88E-11
Acidification of soil and water (A)	kg SO_2 eq.	2,12E-04	2,07E-04	4,48E-06	0,00E+00	0,00E+00	1,32E-06
Eutrophication (E)	kg $(PO_4)^3$ eq.	4,52E-05	4,01E-05	9,97E-07	0,00E+00	0,00E+00	4,12E-06
Photochemical ozone creation (POCP)	kg C_2H_4 eq.	9,59E-06	9,34E-06	1,83E-07	0,00E+00	0,00E+00	6,21E-08
Depletion of abiotic resources – elements (ADPe)	kg Sb eq.	4,76E-08	4,13E-08	4,94E-09	0,00E+00	0,00E+00	1,31E-09
Resource use indicators	**Unit**	**Total**	**Manu-facturing**	**Distri-bution**	**Instal-lation**	**Use**	**End of life**
Total use of primary energy (PE)	MJ	8,42E-01	8,14E-01	2,18E-02	0,00E+00	0,00E+00	5,70E-03
Net freshwater use (FW)	m^3	1,74E-02	1,73E-02	6,47E-05	0,00E+00	0,00E+00	2,12E-05



Optional Indicators

Resource use indicators	Unit	Total	Manu-facturing	Distri-bution	Instal-lation	Use	End of life
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	MJ	4,21E-02	4,17E-02	3,03E-04	0,00E+00	0,00E+00	9,12E-05
Use of renewable primary energy resources as raw materials	MJ	5,66E-02	5,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renewable primary energy resources	MJ	9,86E-02	9,82E-02	3,03E-04	0,00E+00	0,00E+00	9,12E-05
Use of non-renewable primary energy, excluding renewable primary energy resources used as raw materials	MJ	6,38E-01	6,11E-01	2,15E-02	0,00E+00	0,00E+00	5,61E-03
Use of non-renewable primary energy resources as raw materials	MJ	1,05E-01	1,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-renewable primary energy resources	MJ	7,43E-01	7,16E-01	2,15E-02	0,00E+00	0,00E+00	5,61E-03
Use of secondary materials	kg	1,79E-04	1,79E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Optional Indicators

Waste category indicators	Unit	Total	Manu-facturing	Distri-bution	Instal-lation	Use	End of life
Hazardous waste disposed	kg	2,97E-07	2,25E-07	5,61E-08	0,00E+00	0,00E+00	1,57E-08
Non-hazardous waste disposed	kg	6,04E-03	3,87E-03	1,11E-03	0,00E+00	0,00E+00	1,06E-03
Radioactive waste disposed	kg	2,78E-06	2,60E-06	1,45E-07	0,00E+00	0,00E+00	3,74E-08
Output flow indicators	**Unit**	**Total**	**Manu-facturing**	**Distri-bution**	**Instal-lation**	**Use**	**End of life**
Materials for recycling	kg	5,81E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,81E-03
Materials for energy recovery	kg	5,46E-04	2,09E-04	0,00E+00	0,00E+00	0,00E+00	3,37E-04
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

For other products than the Reference product covered by this PEP, the environmental im-pacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life
Zenit blank 1M plate BL polycarbonate	1,00	1,00	1,00	1,00	1,00
Zenit blank 1M plate AN blend	0,95	0,95	1,00	1,00	0,95
Zenit blank 1M plate CV blend	0,95	0,95	1,00	1,00	0,95
Zenit blank 1M plate PL blend	0,95	0,95	1,00	1,00	0,95
Zenit 1/2 M blank plate BL polycarbonate	0,68	0,68	1,00	1,00	0,68
Zenit 1/2 M blank plate AN blend	0,68	0,68	1,00	1,00	0,68
Zenit 1/2 M blank plate CV blend	0,68	0,68	1,00	1,00	0,68
Zenit 1/2 M blank plate PL blend	0,68	0,68	1,00	1,00	0,68
Zenit blank 2M plate BL polycarboante	1,74	1,74	1,00	1,00	1,74
Zenit blank 2M plate AN blend	1,65	1,65	1,00	1,00	1,65
Zenit blank 2M plate CV blend	1,65	1,65	1,00	1,00	1,65
Zenit blank 2M plate PL blend	1,65	1,65	1,00	1,00	1,65

Environmental Impact Indicator Glossary

Impact indicators	Description	Unit
Global warming (GW)	Indicator of potential global warming caused by emissions to air contributing to the greenhouse effect. Includes fossil and biogenic	kg CO_2 eq.
Ozone depletion (OD)	Indicator of emissions to air that contribute to the destruction of the ozone layer	kg CFC-11 eq.
Acidification of soil and water (A)	Indicator of the potential acidification of soils and water caused by the release of certain gases to the atmosphere	kg SO_2 eq.
Eutrophication (E)	Indicator of the contribution to eutrophication of water by the enrichment of the aquatic ecosystem with nutritional elements, e.g. industrial or domestic effluents, agriculture, etc.	kg $(PO_4)^3$ eq.
Photochemical ozone creation (POCP)	Indicator of emissions of gases that affect the creation of photochemical ozone in the lower atmosphere (smog) because of the rays of the sun.	kg C_2H_4 eq.
Depletion of abiotic resources – elements (ADPe)	Indicator of the depletion of natural non-fossil resources	kg Sb eq.

Resource use indicators	Description	Unit
Total use of primary energy (PE)	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) + Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ (lower heating value)

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Verifier accreditation number:		Information and reference documents:	
VH42		www.pep-ecopassport.org	
Date of issue:	12/2022	Validity period:	5 years

Independent verification of the declaration and data, in compliance with ISO 14025: 2010

Internal ○	External ◉

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

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