

ABB JUNCTION AND MOUNTING BOX ACCESSORIES

Product Environmental Profile

Environmental Product Declaration



Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"

ORGANIZATION		CONTACT INFORMATION			
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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.

Scan QR code for more information



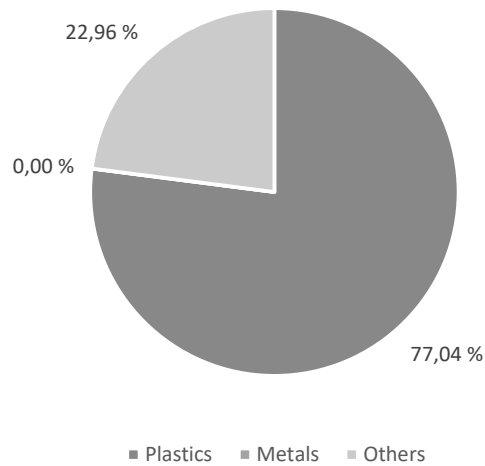
General Information

Reference product	2TKA00003876 - AS9.10
Description of the product	Different types of accessories for ABB WA's junction and mounting boxes made from recycled polypropylene, to provide variability and support how the products are used and installed. The accessories can be for example strain reliefs or box supports.
Functional unit	Provide installation support and use variability for different junction and mounting boxes during 20 years.
Other products covered	2TKA001714G1 - AS27 2TKA001715G1 - AS27.12 2TKA00004251 - AS101 2TKA00005777 - AS4.2

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Constituent materials



Total weight of Reference product

3,77 g including the product and its main packaging

Plastics as % of weight		Metals as % of weight		Others as % of weight	
Description	Weight-%	Description	Weight-%	Description	Weight-%
Recycled Polypropylene	71,87	–	–	Carton	22,96
PE-based red color	1,33	–	–	–	–
Plastic film	3,84	–	–	–	–

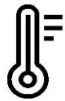
The reference product and other products in this range comply with the RoHS Directive 2011/65/EU (covering 2015/863(EU)) and national legislation. The recycled plastic used in the product is from post-consumer plastic waste, which is collected from Finnish households

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Additional Environmental Information

Manufacturing	Manufactured at an ISO 14001 certified production site
Distribution	Product distribution optimised by setting up local distribution centres.
Installation	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials is accounted during the installation phase.
Use	The product does not require special maintenance operations
End of life	No special end-of-life treatment required. This product can enter the usual end-of-life treatment process according to countries' best practices.
Benefits and loads beyond the system boundaries	Net benefits and loads calculated according to PCR ed 4 and formulas given in Annex G of the EN 50693



Environmental impacts

Reference lifetime	20 years
Product category	Other equipments
Installation elements	No additional installation elements needed
Use scenario	Non applicable
Geographical representativeness	Europe, with great emphasis on Nordic countries
Technological representativeness	The manufacturing processes considered are representative of the products production
Software and database used	Software: SimaPro version 9.4.0.2 Database: ecoinvent 3.8, Industry data 2.0, and ELCD

Energy model used

Manufacturing	Electricity, low voltage {LT} market for Cut-off, S
Installation	Electricity, low voltage {SE} market for Cut-off, S
Use	-
End of life	Electricity, low voltage {SE} market for Cut-off, S

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Common base of mandatory indicators

Inventory flows indicator – Resource use indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
PERE	MJ	5,48E-02	5,24E-02	1,40E-06	1,09E-03	0,00E+00	1,39E-03	-5,98E-03
PERM	MJ	2,97E-02	2,97E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	8,46E-02	8,21E-02	1,40E-06	1,09E-03	0,00E+00	1,39E-03	-5,98E-03
PENRE	MJ	3,25E-02	1,96E-02	1,25E-03	6,60E-03	0,00E+00	5,06E-03	1,18E-01
PENRM	MJ	2,09E-01	2,09E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,41E-01	2,28E-01	1,25E-03	6,60E-03	0,00E+00	5,06E-03	1,18E-01
PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials								
PERM = Use of renewable primary energy resources used as raw materials								
PERT = Total Use of renewable primary energy resources								
PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials								
PENRM = Use of non-renewable primary energy resources used as raw materials								
PENRT = Total Use of non-renewable primary energy resources								

Inventory flows indicator – Indicators describing the use of secondary materials, water, and energy resources

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
SM	kg	5,62E-03	5,62E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	1,10E-04	9,65E-05	1,09E-08	3,67E-06	0,00E+00	9,92E-06	6,31E-06
SM = Use of secondary material								
RSF = Use of renewable secondary fuels								
NRSF = Use of non-renewable secondary fuels								
FW = Use of net fresh water								

Inventory flows indicator – Waste category indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Hazardous waste disposed	kg	2,29E-07	2,11E-07	0,00E+00	9,34E-09	0,00E+00	8,47E-09	4,39E-08
Non-hazardous waste disposed	kg	1,70E-04	1,30E-04	3,11E-06	2,07E-05	0,00E+00	1,53E-05	-5,47E-06
Radioactive waste disposed	kg	1,05E-06	9,77E-07	2,19E-09	1,76E-08	0,00E+00	5,24E-08	-2,66E-07

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Common base of mandatory indicators

Inventory flows indicator – Output flow indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Components for re-use	kg	2,12E-05	0,00E+00	0,00E+00	2,12E-05	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	1,45E-03	0,00E+00	0,00E+00	7,22E-04	0,00E+00	7,29E-04	0,00E+00
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
Exported energy	MJ	3,00E-02	0,00E+00	0,00E+00	6,55E-03	0,00E+00	2,35E-02	0,00E+00

Inventory flow indicator – other indicators

Indicator	Unit	Total
Biogenic carbon content of the product	kg of C	0,00E+00
Biogenic carbon content of the associated packaging	kg of C	3,90E-04

Optional indicators

Environmental indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Total use of primary energy during the life cycle	MJ	3,26E-01	3,10E-01	1,25E-03	7,69E-03	0,00E+00	6,46E-03	-3,43E+00
Emissions of fine particles	inci- dence of dis- eases	6,07E-10	5,58E-10	7,85E-12	2,25E-11	0,00E+00	1,87E-11	9,28E-11
Ionizing radiation, human health	kBq U235 eq.	3,94E-03	3,66E-03	2,15E-07	5,29E-05	0,00E+00	2,25E-04	-1,94E-02
Ecotoxicity (fresh water)	CTUe	1,79E-01	1,54E-01	6,03E-05	1,04E-02	0,00E+00	1,43E-02	-6,58E+01
Human toxicity, carcinogenic effects	CTUh	1,25E-11	1,12E-11	1,55E-15	3,44E-13	0,00E+00	9,67E-13	7,79E-10
Human toxicity, non-carcinogenic effects	CTUh	1,63E-10	1,34E-10	3,89E-14	8,22E-12	0,00E+00	2,08E-11	-1,06E-07
Impact related to land use/soil quality		2,63E-01	2,56E-01	0,00E+00	3,19E-03	0,00E+00	3,74E-03	-2,43E+00

Other indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
No Other indicators used								

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Verifier accreditation number:	Information and reference documents:	
VH32	www.pep-ecopassport.org	
Date of issue:	Validity period:	5 years
05-2023		

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

Internal ☐ 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 or EN 50693:2019
The components of the present PEP may not be compared with components from any other program.

Document in compliance with ISO 14025: 2006 "Environmental labels and declarations. Type III environmental declarations"



Environmental Impact Indicator Glossary

Impact indicators

Indicator	Description	Unit
Global warming potential (GWP) - total	Indicator of potential global warming caused by emissions to air contributing to the greenhouse effect. The total global warming potential (GWP-total) is the sum of three sub-categories of climate change. GWP-total = GWP-fossil + GWP-biogenic + GWP- land use and land use change	kg CO ₂ eq.
Ozone depletion (ODP)	Emissions to air that contribute to the destruction of the stratospheric ozone layer	kg CFC-11 eq.
Acidification of soil and water (A)	Acidification of soils and water caused by the release of certain gases to the atmosphere, such as nitrogen oxides and sulphur oxides	H+ 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. This indicator is divided to three: freshwater, marine and terrestrial.	kg P eq., kg N eq., mole N 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 NMVOC eq.
Depletion of abiotic resources – elements (ADPe)	Indicator of the depletion of natural non-fossil resources	kg Sb eq.
Depletion of abiotic resources – fossil fuels (ADPf)	The use of non-renewable fossil resources in an unsustainable way (e.g. from material to waste)	MJ (lower heating value)
Water Deprivation potential (WDP)	Deprivation-weighted water consumption. Assesses the potential of water deprivation, to either humans or ecosystems, building on the assumption that the less water remaining available per area, the more likely another user will be deprived.	m ³ e depr.

Resource use indicators

Indicator	Description	Unit
Total use of primary energy	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) + Total use of renewable primary energy re-sources (primary energy and primary energy resources used as raw materials)	MJ (lower heating value)

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