

Product Environmental Profile

Spacelogic Controller AS-B 36 Hand





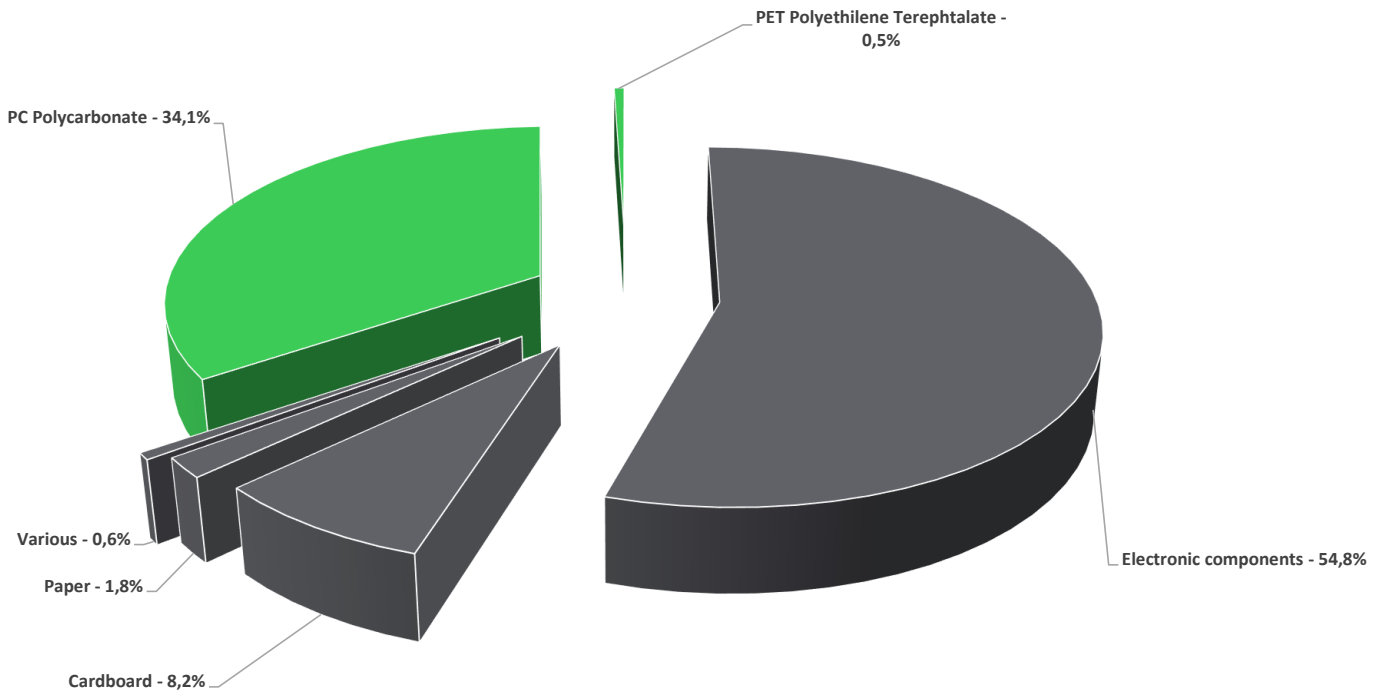
General information

Reference product	Spacelogic Controller AS-B 36 Hand - SXWASB36H10001
Description of the product	AS-B controller is a powerful device with built-in power supply and I/O. AS-B can act as a standalone server using its built-in I/O and also monitor and manage field bus devices. In a small installation, the embedded AS-B device acts as a standalone server, mounted in a small footprint. In medium and large installations, functionality is distributed over multiple SmartStruxure server devices that communicate over TCP/IP. (This document describes the different stages of the product, from manufacturing to its end of life. For its end of life optimization, any dismantling or separation of parts required is carried out as mentioned in the EOLI document and in accordance with EU regulations, viz. WEEE)
Description of the range	Single product
Functional unit	To monitor and manage field bus devices as a standalone server using its built-in 36 I/O points with a power consumption of 4,75W in active mode for 100% of the operational time, over a reference service life of 10 years.
Specifications are:	The AS-B Controller which can act as a standalone server using its built-in 36 I/O points and also monitor and manage field bus devices during 10 years.



Constituent materials

Reference product mass 580 g including the product, its packaging, additional elements and accessories



Plastics	34,60%
Others	65,40%



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:	0%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECYLAB 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).
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Environmental impacts

Reference service life time	10 years			
Product category	Other equipments - Active product			
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 doesnot require any installation operations. It is to be mounted on a horizontal DIN rail, with DIN rail clips and terminal blocks that are delivered with the device.			
Use scenario	The Spacelogic Controller AS-B 36 Hand operates continuously in active mode throughout its reference service life of 10 years, consuming a typical power of 4,75W. The device is mounted on a horizontal DIN rail, utilizing pluggable terminal blocks for connectivity. No special maintenance is required during its lifespan, ensuring uninterrupted control and management of I/O modules and field bus devices in medium to large automation systems.			
Time representativeness	The collected data are representative of the year 2024			
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.			
Final assembly site	Riga, Latvia			
Geographical representativeness	Global			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; High voltage; 2020; Latvia, LV	Electricity Mix; Low voltage; 2020; United States, US Electricity Mix; Low voltage; 2020; United Kingdom, GB Electricity Mix; Low voltage; 2020; Canada, CA Electricity Mix; Low voltage; 2020; Europe, EU-27 Asia Pacific, APAC	Electricity Mix; Low voltage; 2020; United States, US Electricity Mix; Low voltage; 2020; United Kingdom, GB Electricity Mix; Low voltage; 2020; Canada, CA Electricity Mix; Low voltage; 2020; Europe, EU-27 Asia Pacific, APAC	Electricity Mix; Low voltage; 2020; United States, US Electricity Mix; Low voltage; 2020; United Kingdom, GB Electricity Mix; Low voltage; 2020; Canada, CA Electricity Mix; Low voltage; 2020; Europe, EU-27 Asia Pacific, APAC

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		Spacelogic Controller AS-B 36 Hand - SXWASB36H10001							
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	1,89E+02	3,18E+01	2,22E-01	0*	1,55E+02	1,55E+00	3,37E-05	
Contribution to climate change-fossil	kg CO2 eq	1,88E+02	3,18E+01	2,22E-01	0*	1,55E+02	1,54E+00	-2,33E-04	
Contribution to climate change-biogenic	kg CO2 eq	2,70E-01	5,44E-03	0*	5,15E-04	2,61E-01	3,03E-03	2,67E-04	
Contribution to climate change-land use and land use change	kg CO2 eq	2,17E-04	2,17E-04	0*	0*	0*	0*	0,00E+00	
Contribution to ozone depletion	kg CFC-11 eq	4,77E-06	4,07E-06	0*	0*	7,02E-07	1,31E-09	-7,20E-12	
Contribution to acidification	mol H+ eq	9,93E-01	2,19E-01	1,41E-03	0*	7,71E-01	1,04E-03	-1,24E-06	
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	4,10E-04	6,19E-05	8,35E-08	0*	3,41E-04	7,36E-06	-3,66E-09	
Contribution to eutrophication marine	kg N eq	1,20E-01	2,38E-02	6,61E-04	1,44E-05	9,47E-02	5,07E-04	-3,76E-07	
Contribution to eutrophication, terrestrial	mol N eq	1,67E+00	2,55E-01	7,25E-03	0*	1,40E+00	5,25E-03	-3,10E-06	
Contribution to photochemical ozone formation - human health	kg COVNM eq	3,90E-01	8,46E-02	1,83E-03	0*	3,03E-01	1,27E-03	-8,01E-07	
Contribution to resource use, minerals and metals	kg Sb eq	4,21E-03	4,16E-03	0*	0*	4,34E-05	0*	-2,48E-11	
Contribution to resource use, fossils	MJ	4,11E+03	4,28E+02	3,10E+00	0*	3,67E+03	1,89E+00	-2,83E-03	
Contribution to water use	m3 eq	2,08E+01	1,05E+01	0*	5,39E-03	1,02E+01	5,93E-02	-5,80E-05	

Inventory flows Indicators		Spacelogic Controller AS-B 36 Hand - SXWASB36H10001						
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	8,65E+02	1,35E+01	0*	0*	8,52E+02	0*	7,83E-04
Contribution to use of renewable primary energy resources used as raw material	MJ	1,65E+00	1,65E+00	0*	0*	0*	0*	-3,39E-03
Contribution to total use of renewable primary energy resources	MJ	8,67E+02	1,51E+01	0*	0*	8,52E+02	0*	-2,61E-03
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4,09E+03	4,17E+02	3,10E+00	0*	3,67E+03	1,89E+00	-2,83E-03
Contribution to use of non renewable primary energy resources used as raw material	MJ	1,12E+01	1,12E+01	0*	0*	0*	0*	0,00E+00
Contribution to total use of non-renewable primary energy resources	MJ	4,11E+03	4,28E+02	3,10E+00	0*	3,67E+03	1,89E+00	-2,83E-03
Contribution to use of secondary material	kg	3,26E-05	3,26E-05	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	m³	4,87E-01	2,46E-01	0*	1,26E-04	2,40E-01	1,38E-03	-1,35E-06
Contribution to hazardous waste disposed	kg	6,69E+01	6,10E+01	0*	0*	5,56E+00	3,20E-01	-7,07E-06
Contribution to non hazardous waste disposed	kg	3,44E+01	8,10E+00	7,81E-03	5,86E-02	2,60E+01	2,24E-01	-1,41E-04
Contribution to radioactive waste disposed	kg	9,29E-03	3,51E-03	5,56E-06	0*	5,76E-03	1,01E-05	-6,44E-08
Contribution to components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*	0,00E+00
Contribution to materials for recycling	kg	9,61E-04	7,72E-04	0*	0*	0*	1,89E-04	0,00E+00
Contribution to materials for energy recovery	kg	1,03E-08	1,03E-08	0*	0*	0*	0*	0,00E+00
Contribution to exported energy	MJ	2,22E-05	1,03E-05	0*	0*	0*	1,19E-05	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	1,74E-02

* 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		Spacelogic Controller AS-B 36 Hand - SXWASB36H10001							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	1,55E+02	0*	0*	0*	0*	0*	1,55E+02	0*
Contribution to climate change-fossil	kg CO2 eq	1,55E+02	0*	0*	0*	0*	0*	1,55E+02	0*
Contribution to climate change-biogenic	kg CO2 eq	2,61E-01	0*	0*	0*	0*	0*	2,61E-01	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	7,02E-07	0*	0*	0*	0*	0*	7,02E-07	0*
Contribution to acidification	mol H+ eq	7,71E-01	0*	0*	0*	0*	0*	7,71E-01	0*
Contribution to eutrophication, freshwater	kg (PO4)³⁻ eq	3,41E-04	0*	0*	0*	0*	0*	3,41E-04	0*
Contribution to eutrophication marine	kg N eq	9,47E-02	0*	0*	0*	0*	0*	9,47E-02	0*
Contribution to eutrophication, terrestrial	mol N eq	1,40E+00	0*	0*	0*	0*	0*	1,40E+00	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	3,03E-01	0*	0*	0*	0*	0*	3,03E-01	0*
Contribution to resource use, minerals and metals	kg Sb eq	4,34E-05	0*	0*	0*	0*	0*	4,34E-05	0*
Contribution to resource use, fossils	MJ	3,67E+03	0*	0*	0*	0*	0*	3,67E+03	0*
Contribution to water use	m3 eq	1,02E+01	0*	0*	0*	0*	0*	1,02E+01	0*

Inventory flows Indicators		Spacelogic Controller AS-B 36 Hand - SXWASB36H10001							
Inventory flows	Unit	[B1 - B7] - U _{se}	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	8,52E+02	0*	0*	0*	0*	0*	8,52E+02	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	8,52E+02	0*	0*	0*	0*	0*	8,52E+02	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3,67E+03	0*	0*	0*	0*	0*	3,67E+03	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	3,67E+03	0*	0*	0*	0*	0*	3,67E+03	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	2,40E-01	0*	0*	0*	0*	0*	2,40E-01	0*
Contribution to hazardous waste disposed	kg	5,56E+00	0*	0*	0*	0*	0*	5,56E+00	0*
Contribution to non hazardous waste disposed	kg	2,60E+01	0*	0*	0*	0*	0*	2,60E+01	0*
Contribution to radioactive waste disposed	kg	5,76E-03	0*	0*	0*	0*	0*	5,76E-03	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 v6.2.2, database version 2024-01 in compliance with ISO14044, EF3.1 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.

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		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	12-09-2024	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"			

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