# **Product Environmental Profile**

### **Harmony ZBE Contact Block**







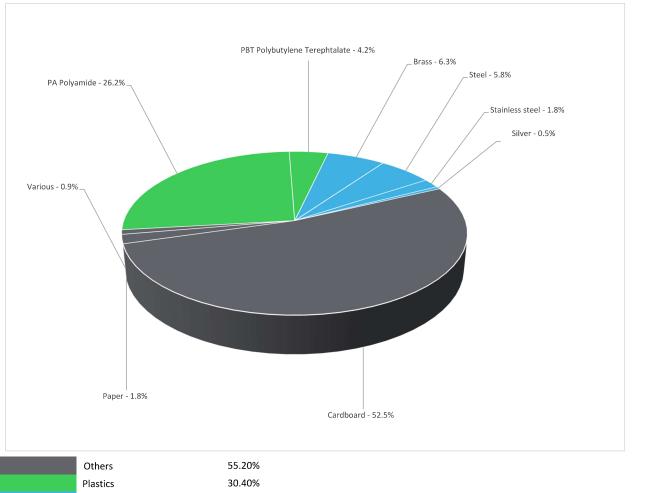
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### **General information**

Reference product	Harmony ZBE Contact Block - ZBE1015
Description of the product	A contact block is an electrical circuit connector that is used to turn on or turn off an electrical circuit. They control startup and shutdown for industrial equipment like emergency buttons
Description of the range	Single product
Functional unit	Push button contact blocks are an important electrical component used in a variety of applications. They provide a way to control, monitor and switch electrical circuits on and off. This contact block consumes 0.002 W with 35% utilisation rate and the product has a life of 10 years and adhering to international standards IEC 60947-1 & IEC 60947-5-4.
Specifications are:	IP20 degree of protection conforming to IEC 60529 Shock resistance 30 gn 18 ms half sine wave acceleration conforming to IEC 60068-2-27 Shock resistance 50 gn 11 ms half sine wave acceleration conforming to IEC 60068-2-27

### **Constituent materials**

11 g including the product, its packaging and additional elements and accessories



14.40% Metals

## **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/

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# (1) Additional environmental information

Recyclability potential:

31%

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	10 years							
Product category	Other equipments - Active product							
Installation elements	The product does not require any installation operations							
Use scenario	The product is in active mode 35% of the time with a power use of 0.002 W and 65% of the time with off mode with power use of 0W for 10 years							
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.							
Geographical representativeness	Rest of the World							
	[A1 - A3]	[A5]	[B6]	[C1 - C4]				
Energy model used		Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27				
	Electricity Mix; Low voltage; 2018; France, FR	Electricity Mix; Low voltage; 2018; United States, US	Electricity Mix; Low voltage; 2018; United States, US	Electricity Mix; Low voltage; 2018; United States, US				
		Electricity Mix; Low voltage; 2018; Asia Pacific, APAC	Electricity Mix; Low voltage; 2018; Asia Pacific, APAC	Electricity Mix; Low voltage; 2018; Asia Pacific, APAC				
		Electricity Mix; Low voltage; 2018; Brazil, BR	Electricity Mix; Low voltage; 2018; Brazil, BR	Electricity Mix; Low voltage; 2018; Brazil, BR				

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-

Mandatory Indicators	Harmony ZBE Contact Block - ZBE1015							
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	1.05E-01	6.20E-02	1.76E-03	2.36E-04	2.76E-02	1.30E-02	-5.10E-03
Contribution to climate change-fossil	kg CO2 eq	1.03E-01	6.03E-02	1.76E-03	2.37E-04	2.76E-02	1.29E-02	-4.96E-03
Contribution to climate change-biogenic	kg CO2 eq	1.88E-03	1.70E-03	0*	0*	3.19E-05	1.42E-04	-1.42E-04
Contribution to climate change-land use and land use chang	e kg CO2 eq	3.07E-09	6.84E-10	0*	0*	0*	2.39E-09	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	4.86E-09	4.65E-09	2.69E-12	9.40E-12	1.22E-10	8.29E-11	-1.01E-09
Contribution to acidification	mol H+ eq	6.55E-04	4.45E-04	1.17E-05	3.19E-06	1.62E-04	3.25E-05	-1.37E-04
Contribution to eutrophication, freshwater	kg (PO4)³ eq	6.29E-06	1.73E-06	6.59E-10	1.17E-09	6.03E-08	4.50E-06	-7.74E-09
Contribution to eutrophication marine	kg N eq	1.08E-04	7.62E-05	5.53E-06	1.51E-06	1.83E-05	6.39E-06	-3.72E-06
Contribution to eutrophication, terrestrial	mol N eq	1.19E-03	7.76E-04	6.07E-05	1.53E-05	2.60E-04	7.70E-05	-4.35E-05
Contribution to photochemical ozone formation - human health	kg COVNM eq	3.29E-04	2.30E-04	1.54E-05	3.68E-06	5.93E <b>-</b> 05	2.04E <b>-</b> 05	-2.12E-05
Contribution to resource use, minerals and metals	kg Sb eq	4.97E-05	4.96E-05	0*	0*	0*	1.43E-07	-1.97E-06
Contribution to resource use, fossils	MJ	1.79E+00	8.96E <b>-</b> 01	2.45E-02	2.71E-03	6.47E-01	2.17E-01	-1.03E-01
Contribution to water use	m3 eq	5.95E-03	0*	6.67E-06	5.60E-04	1.00E-03	5.45E-03	-6.92E-03

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Inventory flows Indicators	Harmony ZBE Contact Block - ZBE1015							
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	7.94E-02	0*	3.27E-05	0*	1.21E-01	3.49E-03	-3.50E-03
Contribution to use of renewable primary energy resources used as raw material	MJ	1.26E-01	1.26E-01	0*	0*	0*	0*	0.00E+00
Contribution to total use of renewable primary energy resources	MJ	2.05E-01	8.12E-02	3.27E-05	0*	1.21E-01	3.49E-03	-3.50E-03
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.70E+00	8.09E-01	2.45E-02	2.71E-03	6.47E-01	2.17E-01	-1.03E-01
Contribution to use of non renewable primary energy resources used as raw material	MJ	8.72E-02	8.72E-02	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	1.79E+00	8.96E-01	2.45E-02	2.71E-03	6.47E-01	2.17E-01	-1.03E-01
Contribution to use of secondary material	kg	0.00E+00	0*	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	1.39E-04	0*	1.55E-07	1.30E-05	2.33E-05	1.27E-04	-1.61E-04
Contribution to hazardous waste disposed	kg	2.68E-01	2.67E-01	0*	0*	5.53E-04	0*	-1.67E-01
Contribution to non hazardous waste disposed	kg	2.10E-01	1.96E-01	6.16E-05	6.12E-03	4.08E-03	3.75E-03	-2.82E-03
Contribution to radioactive waste disposed	kg	2.06E-05	1.96E-05	4.39E-08	4.96E-09	7.50E-07	1.46E-07	-1.34E-06
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.81E-03	2.43E-04	0*	0*	0*	1.57E-03	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	7.22E-05	5.67E-05	0*	0*	0*	1.55E-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 de C	0.00E+00						
Contribution to biogenic carbon content of the associated packaging	kg de C	1.73E-03						

Life cycle assessment performed with EIME version v6.2, database version 2023-02 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.

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		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08					
Date of issue	05-2024	Information and reference documents	www.pep-ecopassport.org					
		Validity period	5 years					
Independent verification of the declaration and data, in compliance with ISO 14021 : 2016								
Internal X 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 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 14021:2016 "Environmental labels and declarations. Type II 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

F- 92500 Rueil Malmaison Cedex RCS Nanterre 954 503 439 Capital social 928 298 512 €

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