# **Product Environmental Profile**

#### **Harmony XA2 Emergency Stop Pushbutton**







ENVPEP2308018\_V1 10/2023

#### **General information**

Reference product

Harmony XA2 Emergency Stop Pushbutton - XA2ES542

Description of the product

An emergency stop button is a button that is only used when the functions of a machine must be immediately stopped. When anything about the machines functions or the operators surroundings poses a threat to production or safety then these buttons can be pressed.

Functional unit

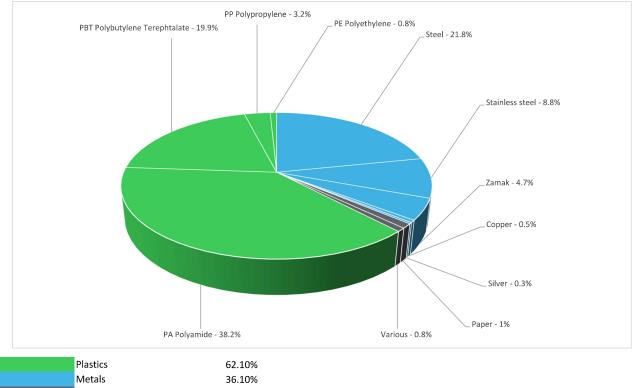
Emergency stop push button which helps to shut off machinery in an emergency situation when there is a risk of injury or the workflow requires stopping. This product has power consumption of 0.002 W at use rate of 71% during 10 years life span and adhering to the international standards IEC 60947-1 and IEC 60204 -1.



#### Constituent materials

Reference product mass

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



Others

### 1.80%

**Substance assessment** 

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <a href="https://www.se.com/ww/en/work/support/green-premium/">https://www.se.com/ww/en/work/support/green-premium/</a>

## (1) Additional environmental information

End Of Life

Recyclability potential:

37%

Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).

ENVPEP2308018 V1 10/2023

#### **P** Environmental impacts

Reference service life time	10 years					
Product category	Other equipments - Active product					
Installation elements	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation.					
Use scenario	The product is in active mode 71% of the time with a power use of 0.002 W and in off mode 29% of the time with a power use of 0 W for 10 years					
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)					
Geographical representativeness	China					
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]		
	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; CN		

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

Mandatory Indicators			Harmony XA2 Emergency Stop Pushbutton - XA2ES542					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	Benefits
impact indicators	Offic	Total	[A1 <b>-</b> A3]	[A4]	[A5]	[B1 <b>-</b> B7]	[C1 - C4]	[D]
Contribution to climate change	kg CO2 eq	7.50E-01	4.82E-01	2.13E-02	1.21E-03	1.09E-01	1.36E-01	-2.61E-02
Contribution to climate change-fossil	kg CO2 eq	7.48E-01	4.80E-01	2.13E-02	1.16E-03	1.09E-01	1.36E-01	-2.60E-02
Contribution to climate change-biogenic	kg CO2 eq	2.05E-03	1.93E-03	0*	4.85E-05	1.56E-05	6.11E-05	-1.54E-04
Contribution to climate change-land use and land use char	ge kg CO2 eq	1.02E-09	0*	0*	0*	0*	1.02E-09	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	8.93E-08	6.93E-08	1.88E-08	7.25E-11	6.20E-10	4.96E-10	-3.95E-09
Contribution to acidification	mol H+ eq	3.68E-03	2.52E-03	9.30E-05	5.10E-06	8.13E-04	2.40E-04	-1.97E-04
Contribution to eutrophication, freshwater	kg (PO4)³¯eq	9.50E-06	7.29E-06	2.50E-09	7.93E-09	2.29E-08	2.18E-06	-5.21E-08
Contribution to eutrophication marine	kg N eq	5.85E-04	4.08E-04	4.27E-05	1.51E-06	8.69E-05	4.60E-05	-1.62E-05
Contribution to eutrophication, terrestrial	mol N eq	6.18E-03	4.20E-03	4.63E-04	1.26E-05	9.84E-04	5.25E-04	-1.83E-04
Contribution to photochemical ozone formation - human health	kg COVNM eq	2.30E-03	1.68E-03	1.52E-04	3.31E-06	2.90E-04	1.74E-04	-6.55E-05
Contribution to resource use, minerals and metals	kg Sb eq	2.13E-04	2.13E-04	0*	0*	0*	6.34E-08	-7.76E-06
Contribution to resource use, fossils	MJ	1.53E+01	8.83E+00	2.59E-01	1.31E-02	1.76E+00	4.44E+00	-5.65E-01
Contribution to water use	m3 eq	1.40E-01	1.03E-01	1.08E-03	4.67E-04	4.79E-03	3.08E-02	-1.31E-02

Additional indicators for the French regulation are available as well

Inventory flows Indicators			Harmony XA2 Emergency Stop Pushbutton - XA2ES542					
Inventory flows	Unit	Total	Manufact.	Distribution	Installation	Use	End of Life	Benefits
inventory flows	Unit	lotai	[A1 <b>-</b> A3]	[A4]	[A5]	[B1 <b>-</b> B7]	[C1 - C4]	[D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.97E-01	1.08E-01	0*	8.18E-04	1.86E-01	1.91E-03	9.61E-04
Contribution to use of renewable primary energy resources used as raw material	MJ	1.06E-02	1.06E-02	0*	0*	0*	0*	-1.08E-02
Contribution to total use of renewable primary energy resources	MJ	3.07E-01	1.19E-01	0*	8.18E-04	1.86E-01	1.91E-03	-9.84E-03
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.41E+01	7.58E+00	2.59E-01	1.31E-02	1.76E+00	4.44E+00	-5.65E-01
Contribution to use of non renewable primary energy resources used as raw material	MJ	1.24E+00	1.24E+00	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	1.53E+01	8.83E+00	2.59E-01	1.31E-02	1.76E+00	4.44E+00	-5.65E-0
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	3.26E-03	2.40E-03	2.52E-05	1.09E-05	1.12E-04	7.18E-04	-3.05E-04
Contribution to hazardous waste disposed	kg	2.25E+00	2.19E+00	0*	0*	3.30E-03	5.73E-02	-6.17E-01
Contribution to non hazardous waste disposed	kg	1.31E-01	8.39E-02	2.17E-05	3.56E-03	1.89E-02	2.49E-02	-3.47E-02
Contribution to radioactive waste disposed	kg	4.64E-05	3.97E-05	4.24E-06	4.80E-07	7.74E-07	1.18E-06	-9.40E-0
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+0
Contribution to materials for recycling	kg	2.17E-02	0*	0*	6.00E-04	0*	2.11E-02	0.00E+0
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+0
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+0
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+0
Contribution to biogenic carbon content of the associated backaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+0

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

ENVPEP2308018\_V1 10/2023

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

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-ed2-2016 03 29					
Date of issue	10/2023	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)								
PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019								
The elements of the present PEP cannot be compared with elements from another program.								
Document in compliance with ISO 14021 : 2016 « Environmental labels and declarations. Type II environmental declarations »								

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ENVPEP2308018\_V1 10/2023