

# Product Environmental Profile

## HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC

Integrate LED illumination with both continuous and flashing light, protection degree of IP66, IP67, IP69 and IP69K, and approx. 90 db of noise output.





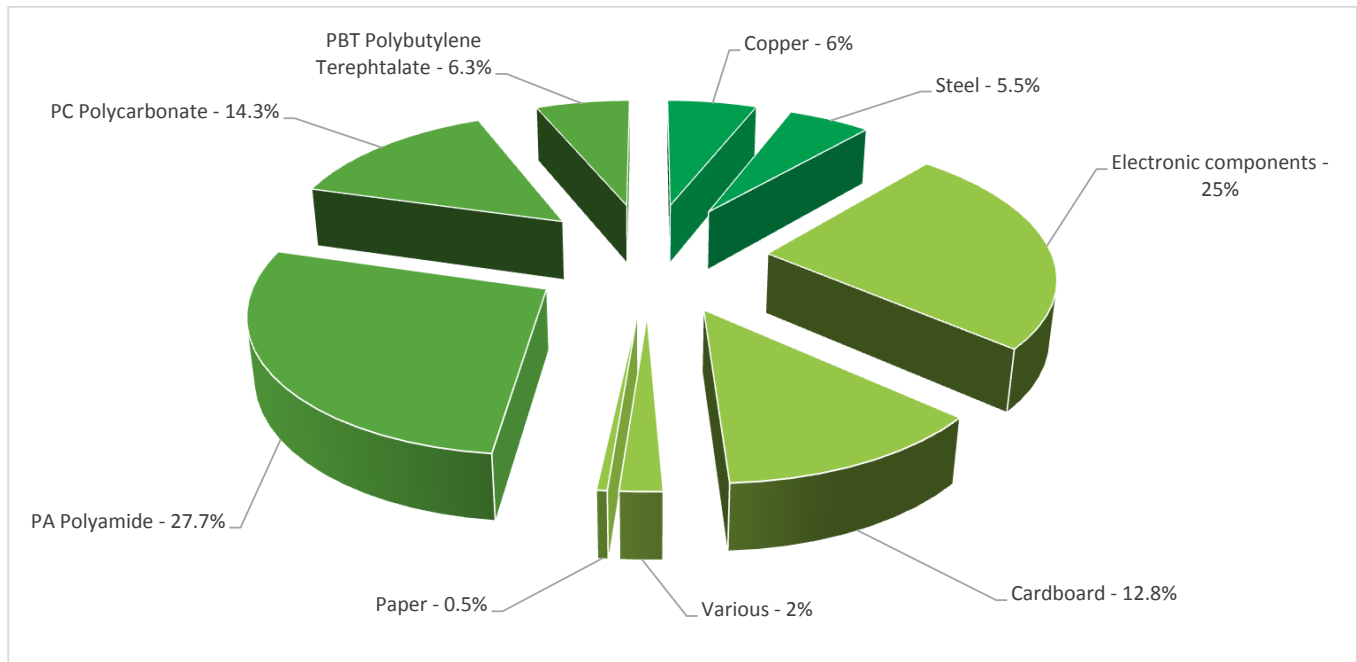
## General information

<b>Representative product</b>	HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC -XB5KS2M8
<b>Description of the product</b>	The function of Harmony+ Buzzer range is to provide audio and visual(Optional) signaling when receiving rated voltage input.
<b>Description of the range</b>	Integrate LED illumination with both continuous and flashing light, protection degree of IP66, IP67, IP69 and IP69K, and approx. 90 db of noise output.  The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.
<b>Functional unit</b>	Provide the audio and visual(Optional) signaling for 10 years at 5% use rate.



## Constituent materials

<b>Reference product mass</b>	27.62 g including the product, its packaging and additional elements and accessories
-------------------------------	--



## Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>



## Additional environmental information

The HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC presents the following relevant environmental aspects

<b>Design</b>	Good performance on climate change and efficiency by the reduction of power consumption and occupied space
<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 3.6 g, consisting of cardboard (96%), Paper (4%) Packaging recycled materials is 100% of total packaging mass. Product distribution optimised by setting up local distribution centres
<b>Installation</b>	XB5KS2M8 does not require any installation operations
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials  No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process.  Recyclability potential: <b>12%</b> Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).



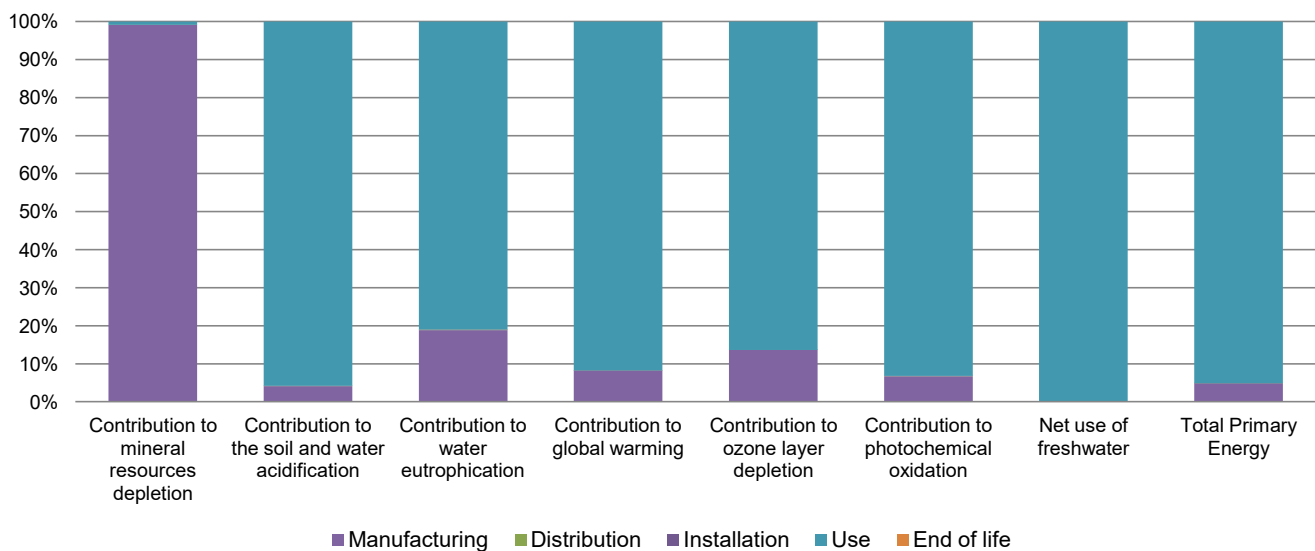
## Environmental impacts

<b>Reference life time</b>	10 years			
<b>Product category</b>	Active products			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	The product is in active mode 5% of the time with power use of 5 W and in stand-by mode 95% of the time with no power, for 10 years			
<b>Geographical representativeness</b>	Europe			
<b>Technological representativeness</b>	The function of Harmony+ Buzzer range is to provide audio and visual(Optional) signaling when receiving rated voltage input.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: Indonesia	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators		HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC - XB5KS2M8					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	1,05E-04	1,04E-04	0*	0*	9,32E-07	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	4,67E-02	1,93E-03	1,63E-05	0*	4,48E-02	7,39E-06
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	3,34E-03	6,30E-04	3,75E-06	0*	2,70E-03	2,16E-06
Contribution to global warming	kg CO <sub>2</sub> eq	1,17E+01	9,65E-01	3,56E-03	0*	1,07E+01	4,36E-03
Contribution to ozone layer depletion	kg CFC11 eq	8,09E-07	1,10E-07	0*	0*	6,99E-07	1,81E-10
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	2,64E-03	1,78E-04	1,16E-06	0*	2,46E-03	7,55E-07

Resources use		HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC - XB5KS2M8					
	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m <sup>3</sup>	3,89E+01	4,98E-03	0*	0*	3,89E+01	0*
Total Primary Energy	MJ	2,25E+02	1,10E+01	5,04E-02	0*	2,14E+02	3,53E-02



Optional indicators		HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC - XB5KS2M8					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1,33E+02	1,08E+01	5,01E-02	0*	1,22E+02	3,23E-02
Contribution to air pollution	m <sup>3</sup>	5,49E+02	8,71E+01	1,52E-01	0*	4,62E+02	2,58E-01
Contribution to water pollution	m <sup>3</sup>	5,48E+02	1,05E+02	5,86E-01	0*	4,43E+02	3,22E-01

Resources use		HARMONY+ BUZZER ILLUMINATED-YELLOW-230/240VAC - XB5KS2M8					
	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1,19E-03	1,19E-03	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	2,77E+01	4,37E-01	0*	0*	2,73E+01	0*
Total use of non-renewable primary energy resources	MJ	1,98E+02	1,06E+01	5,03E-02	0*	1,87E+02	3,53E-02
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2,76E+01	3,62E-01	0*	0*	2,73E+01	0*
Use of renewable primary energy resources used as raw material	MJ	7,46E-02	7,46E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,97E+02	1,01E+01	5,03E-02	0*	1,87E+02	3,53E-02
Use of non renewable primary energy resources used as raw material	MJ	4,72E-01	4,72E-01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*

Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	4,50E-01	3,96E-01	0*	3,69E-03	5,59E-03	4,47E-02
Non hazardous waste disposed	kg	4,03E+01	2,78E-01	0*	0*	4,00E+01	0*
Radioactive waste disposed	kg	2,69E-02	1,41E-04	0*	0*	2,67E-02	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	7,49E-03	9,30E-04	0*	3,59E-03	0*	2,97E-03
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	7,91E-04	1,00E-04	0*	0*	0*	6,90E-04
Exported Energy	MJ	0,00E+00	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 EIME v5.6.0.1, database version CODDE-2016-11.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

Depending on the impact analysis, the environmental indicators(except RMD) of other products in this family may be proportional extrapolated by the energy consumption, the RMD indicator may be proportional extrapolated by product mass.

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.

Registration N°	ENVPEP1710008_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	10/2017	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010			
Internal	X	External	
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »			

Schneider Electric Industries SAS

Country Customer Care Center  
<http://www.schneider-electric.com/contact>

35, rue Joseph Monier  
CS 30323  
F- 92506 Rueil Malmaison Cedex  
RCS Nanterre 954 503 439  
Capital social 896 313 776 €

[www.schneider-electric.com](http://www.schneider-electric.com)

ENVPEP1710008EN\_V2

Published by Schneider Electric

© 2017 - Schneider Electric – All rights reserved

01/2018