# **Product Environmental Profile**

#### 16AX 250V 1G 1W SW LW

AvatarOn flush switch, momentary switch, doorbell switch, Intermediate switch, curtain switch and hotel switch







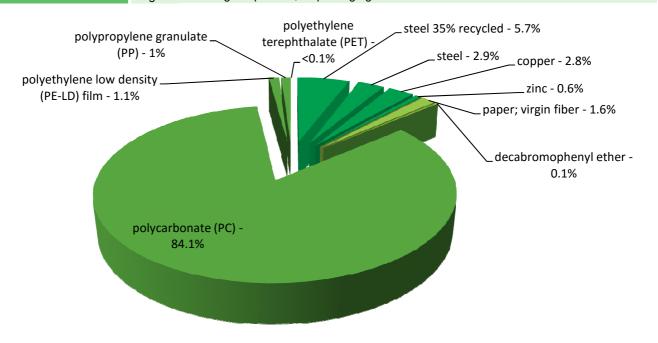




Representative product	16AX 250V 1G 1W SW LW -E8331L1_WD_C1					
Description of the product	16AX 250V 1G 1W SW LW is a switch to divert current					
Description of the range	AvatarOn flush switch, momentary switch, doorbell switch, Intermediate switch, curtain switch and hotel switch  The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.					
Functional unit	To break an electrical circuit, voltage under 250V, diverting the current from the main supply to different electrical appliances for 20 years					

#### Constituent materials

Reference product mass 92 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 <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a>

## (1) Additional environmental information

	The 16AX 250V 1G 1W SW LW presents the following relevent environmental aspects							
Design								
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified							
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive  Packaging weight is 2.5 g, consisting of PE film 1.5g,paper 1g  Product distribution optimised by setting up local distribution centres							
Installation	0							
Use	The product does not require special maintenance operations.							
End of life	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.							
	Based on "ECO'DEEE recyclability and recoverability calculation method" Recyclability potential: 12% (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).							

# **Environmental impacts**

Reference life time	20 years					
Product category	Passive products - non-continuous operation					
Installation elements	No special components needed					
Use scenario	Product dissipation is 0.00144 W full load, loading rate is 30% and service uptime percentage is 30%					
Geographical representativeness	China					
Technological representativeness	16AX 250V 1G 1W SW LW is a switch to divert current					
	Manufacturing Installation Use End of life					

**Energy model used** 

Energy model used: China(SEMC) Electricity mix; AC; consumption mix, at consumer; 220V; CN

Electricity mix; AC; consumption mix, at consumer; 220V; CN Electricity mix; AC; consumption mix, at consumer; 220V; CN

Compulsory indicators		16AX 250V	1G 1W SW LW - I	E8331L1_WD_C	21		
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	7.52E-06	7.52E-06	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	9.70E-04	7.72E-04	8.59E-05	7.42E-07	8.34E-05	2.81E-05
Contribution to water eutrophication	kg PO <sub>4</sub> ³- eq	2.38E-04	1.87E-04	1.99E-05	1.81E-07	2.22E-05	9.00E-06
Contribution to global warming	kg CO <sub>2</sub> eq	8.77E-01	7.61E-01	1.84E-02	2.67E-04	7.70E-02	2.02E-02
Contribution to ozone layer depletion	kg CFC11 eq	5.74E-09	4.39E-09	3.72E-11	1.78E-11	6.13E-10	6.75E-10
Contribution to photochemical oxidation	kg C₂H₄ eq	9.72E-05	7.82E-05	6.22E-06	7.85E-08	9.86E-06	2.83E-06
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.12E-03	2.02E-03	1.64E-06	3.00E-07	8.59E-05	1.43E-05
Total Primary Energy	MJ	1.44E+01	1.27E+01	2.60E-01	4.07E-03	1.30E+00	1.46E-01
100% — 90% — 80% — 60% — 40% — 30% — 90% —							
20% —							
10% —							
mineral the soil and water wa		ribution to		Contribution to photochemical oxidation	Net use of freshwater		,

Optional indicators	16AX 250V 1G 1W SW LW - E8331L1_WD_C1						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.12E+01	9.57E+00	2.58E-01	3.35E-03	1.20E+00	1.21E-01
Contribution to air pollution	m³	5.58E+01	4.60E+01	8.62E-01	2.62E-02	7.99E+00	9.77E-01
Contribution to water pollution	m³	5.16E+02	5.08E+02	3.02E+00	0*	3.83E+00	1.30E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life

■Manufacturing ■Distribution ■Installation ■Use ■End of life

depletion

Use of secondary material	kg	2.63E-03	2.63E-03	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.06E-01	4.05E-02	3.46E-04	0*	6.46E-02	1.45E-04
Total use of non-renewable primary energy resources	MJ	1.43E+01	1.26E+01	2.59E-01	4.07E-03	1.24E+00	1.46E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7.92E-02	1.41E-02	3.46E-04	0*	6.46E-02	1.45E-04
Use of renewable primary energy resources used as raw material	MJ	2.64E-02	2.64E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.14E+01	9.79E+00	2.59E-01	4.07E-03	1.24E+00	1.46E-01
Use of non renewable primary energy resources used as raw material	MJ	2.85E+00	2.85E+00	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	8.06E-01	6.32E-01	0*	4.11E-03	2.48E-03	1.67E-01
Non hazardous waste disposed	kg	3.61E-02	2.11E-02	6.53E-04	1.12E-05	1.40E-02	4.01E-04
Radioactive waste disposed	kg	7.52E-06	5.93E-06	4.65E-07	1.80E-08	4.60E-07	6.50E-07
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.33E-02	1.69E-03	0*	9.00E-04	0*	1.07E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	4.45E-03	5.65E-04	0*	1.00E-05	0*	3.87E-03
Exported Energy	MJ	0.00E+00	0*	0*	0*	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.5, database version 2015-04.

The manufacturing 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.

According to this environmental analysis, the Manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators.

The proportionality rules may be used to evaluate the impacts of other products of this range: depending on the impact analysis, the environmental indicators of the other products in this family may be proportional extrapolated by the products 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°	SCHN-00025-V01.01-EN	Drafting rules	PCR-ed3-EN-2015 04 02			
Verifier accreditation N°	VH24	Supplemented by	PSR-0005-ed1-EN -2012 12 11			
Date of issue	03-2016	Information and reference documents	www.pep-ecopassport.org			
		Validity period	5 years			
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010						

External X Internal

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)

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 »



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Published by Schneider Electric

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03-2016