# **Product Environmental Profile**

## 16AX 1 way switch with indicator lamp





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### **General information**

Representative product

16AX 1 way switch with indicator lamp - P1181

**Description of the product** 

It's a simple ON/OFF switch which is connected to the circuit to control the power supply to a load.

**Functional unit** 

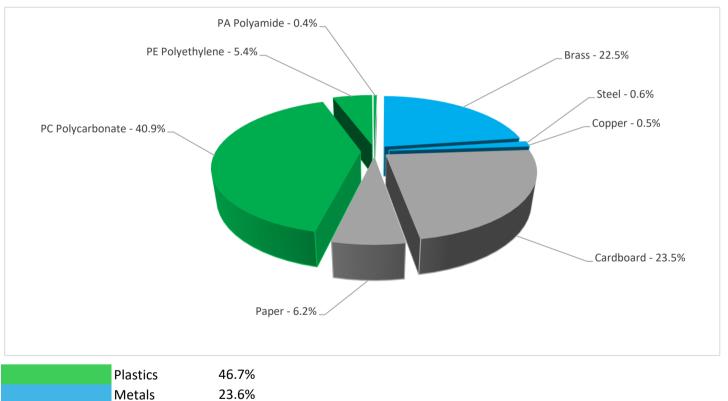
Establish, support and interrupt for 20 years rated currents in normal conditions of circuit characterized by the current 16A, including any conditions specified for overload in operation characterized by the current 16A, for the operating voltage 240V, in accordance with the standard IEC 60529.

- Rated Current 16AX
- Voltage 240V
- Protection degree IP20

## Constituent materials

Reference product mass

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



Others 29.7%



## **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 EU 2015/863) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium, flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE), or phthalates (Bis(2-ethylhexyl) phthalate DEHP, Butyl benzyl phthalate -BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the 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

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# Additional environmental information

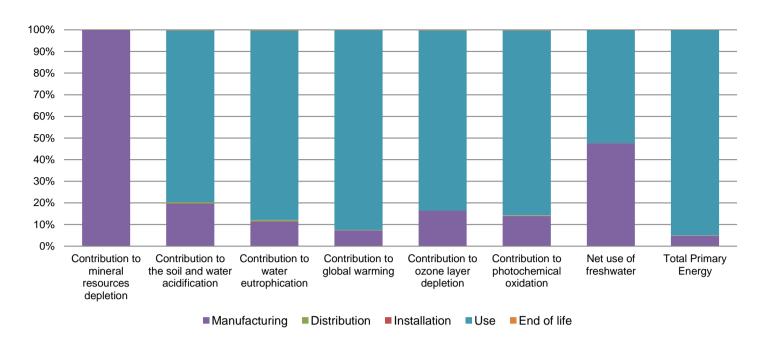
The 16AX 1 way switch with indicator lamp presents the following relevent environmental aspects						
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified					
	Weight and volume of the packaging optimized, based on the European Union's packaging directive					
Distribution	Packaging weight is 10.4 g, consisting of Cardboard(67.1%), Plastic(15.3%), Paper(17.6%)					
	Product distribution optimised by setting up local distribution centres					
Installation	Ref P1181 does not require any installation operations.					
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.					
	Recyclability potential: 27%	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

Reference life time	20 years					
Product category	Switches					
Installation elements	No special components needed					
Use scenario	Product dissipation is 0.12 W at 100% load rate and 0.03 W at load rate/rated current (In): 50% of In & percentage of ultization time: 30%.					
Geographical representativeness	India					
Technological representativeness	All the technologies pertaining to product manufacturing are represented in manufacturing phase properly.					
	Manufacturing	Installation	Use	End of life		
Energy model used	Energy model used: India	Electricity mix; AC; consumption mix, at consumer; 230V; IN	Electricity mix; AC; consumption mix, at consumer; 230V; IN	Electricity mix; AC; consumption mix, at consumer; 230V; IN		

Compulsory indicators	16AX 1 way switch with indicator lamp - P1181						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.56E-05	2.56E-05	0*	0*	1.19E-08	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	3.00E-03	5.92E-04	1.75E-05	2.62E-06	2.39E-03	6.00E-06
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	7.19E-04	8.18E-05	4.04E-06	1.10E-06	6.30E-04	1.79E-06
Contribution to global warming	kg CO <sub>2</sub> eq	2.47E+00	1.83E-01	3.84E-03	6.38E-04	2.28E+00	3.70E-03
Contribution to ozone layer depletion	kg CFC11 eq	7.62E-08	1.25E-08	7.78E-12	0*	6.35E-08	1.42E-10
Contribution to photochemical oxidation	kg C₂H₄ eq	3.57E-04	4.96E-05	1.25E-06	1.97E-07	3.05E-04	6.14E-07
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.77E-03	2.27E-03	0*	0*	2.50E-03	2.88E-06
Total Primary Energy	MJ	3.69E+01	1.79E+00	5.43E-02	8.06E-03	3.50E+01	2.87E-02

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Optional indicators		16AX 1 way switch with indicator lamp - P1181					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	3.38E+01	1.24E+00	5.40E-02	7.86E-03	3.24E+01	2.30E-02
Contribution to air pollution	m³	2.73E+02	4.70E+01	1.63E-01	3.62E-02	2.26E+02	2.10E-01
Contribution to water pollution	m³	2.00E+02	8.51E+01	6.32E-01	9.18E-02	1.14E+02	2.65E-01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	8.87E-04	8.87E-04	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.78E+00	1.36E-01	0*	0*	1.64E+00	0*
Total use of non-renewable primary energy resources	MJ	3.51E+01	1.66E+00	5.43E-02	8.02E-03	3.34E+01	2.86E-02
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.61E+00	0*	0*	0*	1.64E+00	0*
Use of renewable primary energy resources used as raw material	MJ	1.70E-01	1.70E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.46E+01	1.15E+00	5.43E-02	8.02E-03	3.34E+01	2.86E-02
Use of non renewable primary energy resources used as raw material	MJ	5.07E-01	5.07E-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	6.90E-01	5.88E-01	0*	0*	6.82E-02	3.37E-02
Non hazardous waste disposed	kg	6.40E-01	2.60E-01	1.37E-04	1.34E-03	3.78E-01	8.75E-05
Radioactive waste disposed	kg	8.33E-05	5.61E-05	9.72E-08	5.70E-08	2.69E-05	1.40E-07
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.73E-02	2.87E-03	0*	9.26E-03	0*	5.14E-03
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	6.16E-04	0*	0*	0*	0*	6.16E-04
Exported Energy	MJ	2.79E-05	2.63E-06	0*	2.53E-05	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 v5.9.1, database version 2016-11 in compliance with ISO14044.

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

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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 number	ENVPEP2103014_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	05/2021	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal Χ External

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 - Self-declared environmental claims (Type II environmental labelling) »

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 €

Published by Schneider Electric www.schneider-electric.com

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