# **Product Environmental Profile**

### INS250 4P 250 A - Switch Disconnector









## **General information**

Representative product

INS250 4P 250 A - Switch Disconnector - 31107

Description of the product

This Compact INS250 is a 4 poles non-automatic switch-disconnector with black rotary handle. It is suitable for isolation with positive contact indication, as defined by IEC 60947-1 and IEC60947-3 standards. The operational current is 250A at 415VAC in categories AC22A and AC23A. The rated voltage is 690VAC 50/60Hz or 250VDC. The black rotary handle is designed to offer easy operation and high performance in interruption of currents.

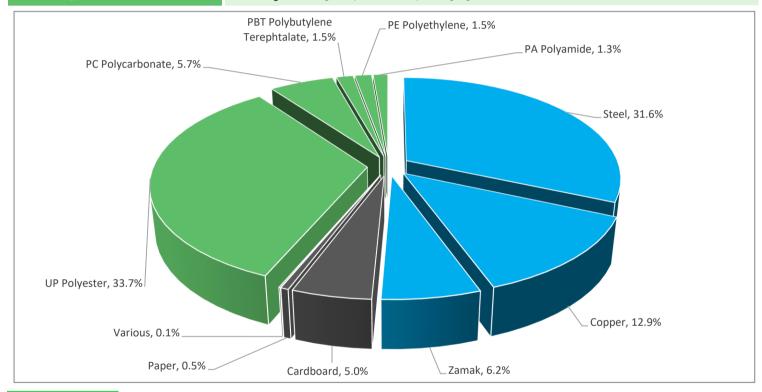
**Functional** unit

Turn off all or part of an installation by separating the installation or part of the installation of all electrical energy or earth, for safety reasons with a rated voltage 690V and rated current 250A ensuring isolation characterized by rated voltage 800V. This function is provided for 20 years.

## Constituent materials

#### Reference product mass

2441.44 g including the product, its packaging and additional elements and accessories



Plastics 43.7%

Metals 50.7%

Others 5.6%



### Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl 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 <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>

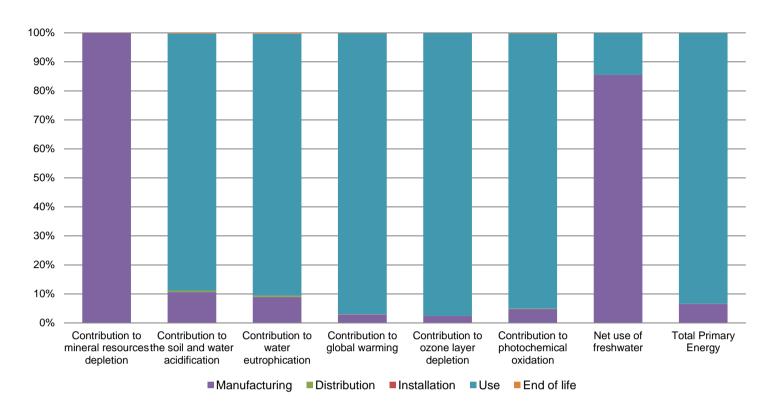
## (19) Additional environmental information

Т	he INS250 4P 250 A - Switch Disconnector presents the following relevent environmental aspects					
Manufacturing	cturing 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 139.9 g, consisting of Cardboard(89.9%), paper(8.2%) and plastic(1.9%)					
	Product distribution optimised by setting up local distribution centres					
Installation	The product does not require special installation procedure					
Use	The product does not require special maintenance operations.					
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials					
	This product contains Plastic with FR(17) (38.63g) that should be separated from the stream of waste so as to optimize end-of-life treatment.					
End of life	The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website					
	http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page					
	Based on "ECO'DEEE recyclability and recoverability calculation method"  Recyclability potential: 48% (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	Disconnectors - Low voltage					
Installation elements	No special components needed					
Use scenario	Load rate: 50% Use time rate (closed unit): 30% of RLT					
Geographical representativeness	Italy					
Technological representativeness	This Compact INS250 is a 4 poles non-automatic switch-disconnector with black rotary handle. It is suitable for isolation with positive contact indication, as defined by IEC 60947-1 and IEC60947-3 standards. The operational current is 250A at 415VAC in categories AC22A and AC23A. The rated voltage is 690VAC 50/60Hz or 250VDC. The black rotary handle is designed to offer easy operation and high performance in interruption of currents.					
	Manufacturing	Installation	Use	End of life		
Energy model used	Energy model used: Poland	Electricity mix; AC; consumption mix, at consumer; 220V; IT	Electricity mix; AC; consumption mix, at consumer; 220V; IT	Electricity mix; AC; consumption mix, at consumer; 220V; IT		

Compulsory indicators	INS250 4P 250 A - Switch Disconnector - 31107						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	6.02E-03	6.01E-03	0*	0*	1.02E-06	0*
Contribution to the soil and water acidification	$kg SO_2 eq$	2.69E-01	2.85E-02	1.44E-03	3.20E-05	2.38E-01	7.23E-04
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	6.99E-02	6.26E-03	3.31E-04	8.58E-06	6.31E-02	2.04E-04
Contribution to global warming	kg CO <sub>2</sub> eq	3.51E+02	1.03E+01	3.15E-01	0*	3.40E+02	3.91E-01
Contribution to ozone layer depletion	kg CFC11 eq	5.66E-05	1.37E-06	0*	0*	5.52E-05	1.64E-08
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	5.52E-02	2.64E-03	1.03E-04	0*	5.23E-02	7.52E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.36E+00	1.16E+00	0*	0*	1.96E-01	3.32E-04
Total Primary Energy	MJ	5.49E+03	3.60E+02	4.45E+00	0*	5.12E+03	3.50E+00



Optional indicators			INS250 4P 250 A - Switch Disconnector - 31107				
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	5.30E+03	1.73E+02	4.43E+00	0*	5.12E+03	2.81E+00
Contribution to air pollution	m³	2.21E+04	4.07E+03	1.34E+01	0*	1.80E+04	2.54E+01
Contribution to water pollution	m³	1.71E+04	1.42E+03	5.18E+01	0*	1.56E+04	3.08E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	3.94E-01	3.94E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	9.47E+00	9.46E+00	5.94E-03	0*	0*	3.88E-03
Total use of non-renewable primary energy resources	MJ	5.48E+03	3.50E+02	4.45E+00	0*	5.12E+03	3.50E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	8.90E+00	8.89E+00	5.94E-03	0*	0*	3.88E-03
Use of renewable primary energy resources used as raw material	MJ	5.70E-01	5.70E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.46E+03	3.24E+02	4.45E+00	0*	5.12E+03	3.50E+00
Use of non renewable primary energy resources used as raw material	MJ	2.65E+01	2.65E+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	6.78E+01	6.18E+01	0*	0*	2.27E+00	3.64E+00
Non hazardous waste disposed	kg	1.89E+01	3.77E+00	1.12E-02	3.21E-03	1.51E+01	1.07E-02
Radioactive waste disposed	kg	1.72E-02	1.66E-03	7.97E-06	0*	1.55E-02	1.70E-05
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.52E+00	2.45E-01	0*	1.37E-01	0*	1.14E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	5.51E-02	0*	0*	0*	0*	5.51E-02
Exported Energy	MJ	4.33E-04	4.08E-05	0*	3.93E-04	0*	0*
* range ante loss than 0.01% of the total life avala	of the refer	onco flow					

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

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

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

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	ENVPEP1304025_V2	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	10/2022	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 X 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) »

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