

# Product Environmental Profile

**Switch disconnector, Compact INS2500 , 2500 A, standard version with black rotary handle, 4 poles**





## General information

### Representative product

Switch disconnecter, Compact INS2500 , 2500 A, standard version with black rotary handle, 4 poles - 31341

### Description of the product

This Compact INS2500 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 4000A at 415VAC in categories AC21A, 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. Compact INS4000 is a class II insulation level front-face device as per IEC 60664 standard.

### Functional unit

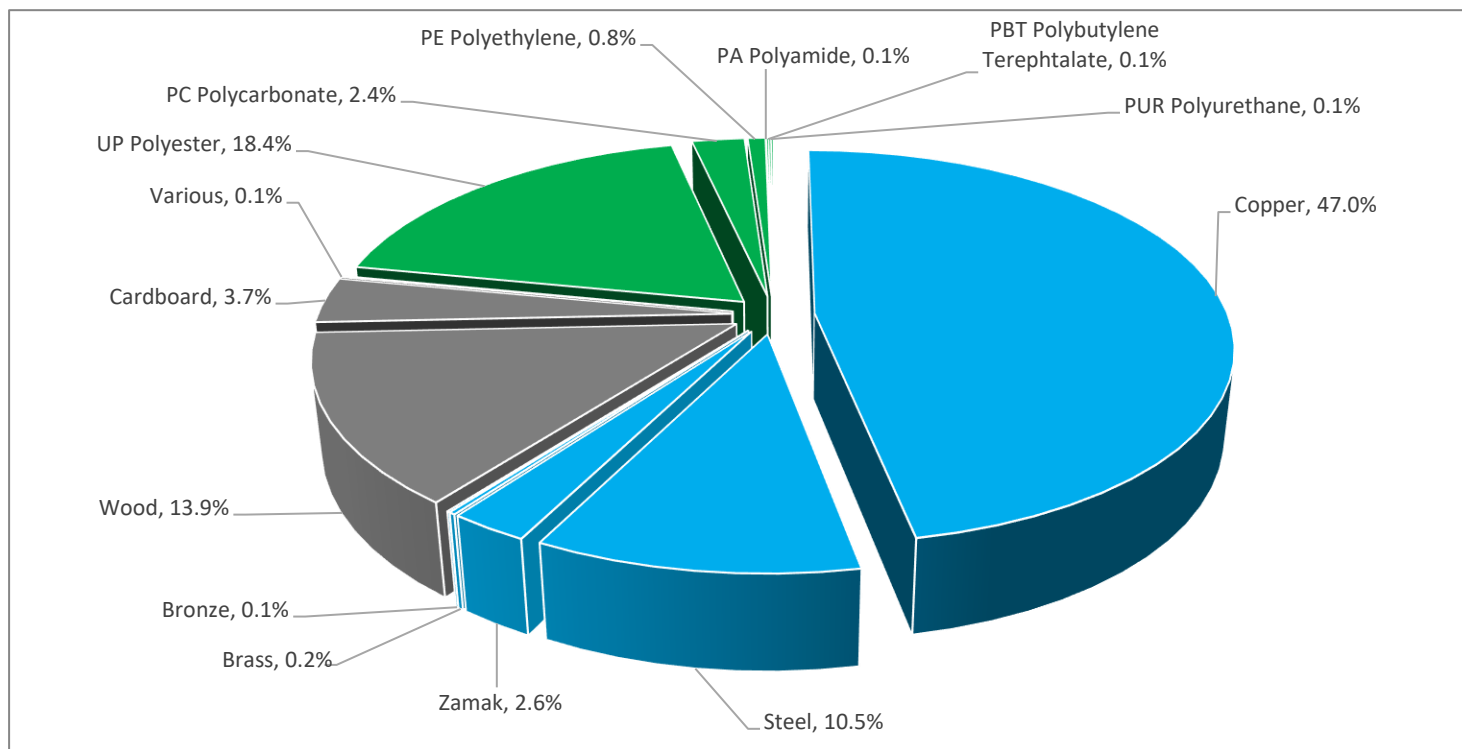
Turn off all or part of an installation by separating the installation or part of the installation of all electrical energy or earth, for safety reasons with a rated voltage 690V and rated current 2500A ensuring isolation characterized by rated voltage 1000V. This function is provided for 20 years.



## Constituent materials

### Reference product mass

55117.82 g including the product, its packaging and additional elements and accessories



Plastics	21.9%
Metals	60.4%
Others	17.7%



## 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

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



## Additional environmental information

The Switch disconnecter, Compact INS2500 , 2500 A, standard version with black rotary handle, 4 poles presents the following relevant environmental aspects

<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 10117.8 g, consisting of Wood(79.1%), cardboard(20.8%) and paper(0.1%) Product distribution optimised by setting up local distribution centres
<b>Installation</b>	The product does not require special installation procedure
<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>64%</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

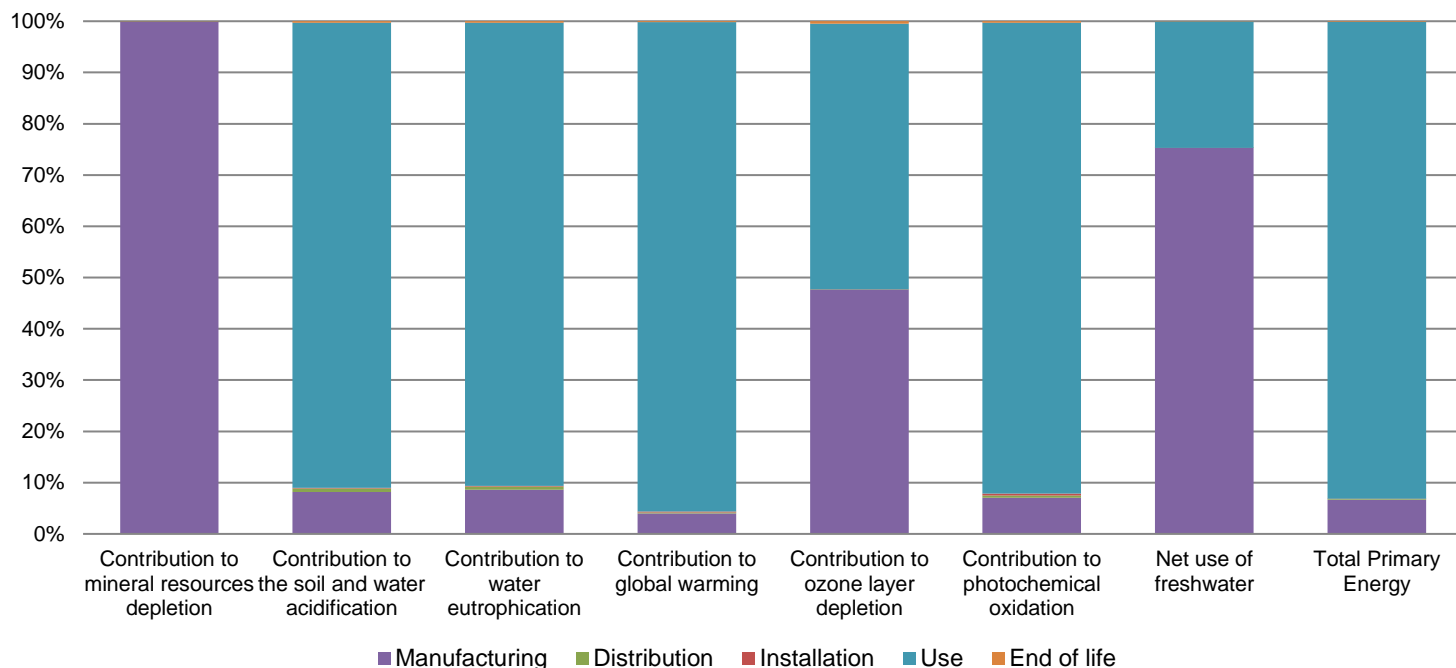
<b>Reference life time</b>	20 years			
<b>Product category</b>	Disconnectors - Low voltage			
<b>Installation elements</b>	No special components needed			
<b>Use scenario</b>	Load rate: 50% Use time rate (closed unit): 30% of RLT			
<b>Geographical representativeness</b>	China			
<b>Technological representativeness</b>	This Compact INS2500 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 4000A at 415VAC in categories AC21A, 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. Compact INS4000 is a class II insulation level front-face device as per IEC 60664 standard.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: China	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

### Switch disconnecter, Compact INS2500 , 2500 A, standard version with black rotary handle, 4 poles - 31341

Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4.06E-02	4.06E-02	0*	0*	1.76E-05	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	4.79E+00	3.92E-01	3.25E-02	4.84E-03	4.35E+00	1.40E-02
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1.27E+00	1.10E-01	7.48E-03	2.24E-03	1.15E+00	3.68E-03
Contribution to global warming	kg CO <sub>2</sub> eq	4.20E+03	1.68E+02	7.11E+00	8.62E+00	4.01E+03	6.32E+00
Contribution to ozone layer depletion	kg CFC11 eq	6.16E-05	2.93E-05	1.44E-08	1.80E-08	3.19E-05	3.11E-07
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	5.59E-01	3.95E-02	2.32E-03	1.99E-03	5.14E-01	1.48E-03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m <sup>3</sup>	1.82E+01	1.37E+01	0*	2.28E-03	4.48E+00	6.07E-03
Total Primary Energy	MJ	7.05E+04	4.73E+03	1.01E+02	1.06E+01	6.56E+04	6.91E+01

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Optional indicators		Switch disconnecter, Compact INS2500 , 2500 A, standard version with black rotary handle, 4 poles - 31341						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Contribution to fossil resources depletion	MJ	6.31E+04	2.38E+03	9.99E+01	9.76E+00	6.06E+04	5.55E+01	
Contribution to air pollution	m <sup>3</sup>	5.74E+05	1.57E+05	3.03E+02	2.05E+02	4.16E+05	4.95E+02	
Contribution to water pollution	m <sup>3</sup>	2.18E+05	1.67E+04	1.17E+03	1.08E+02	1.99E+05	5.71E+02	
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Use of secondary material	kg	1.33E+01	1.33E+01	0*	0*	0*	0*	
Total use of renewable primary energy resources	MJ	3.77E+03	4.05E+02	0*	0*	3.37E+03	0*	
Total use of non-renewable primary energy resources	MJ	6.68E+04	4.33E+03	1.00E+02	1.04E+01	6.22E+04	6.90E+01	
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3.73E+03	3.64E+02	0*	0*	3.37E+03	0*	
Use of renewable primary energy resources used as raw material	MJ	4.17E+01	4.17E+01	0*	0*	0*	0*	
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6.65E+04	4.04E+03	1.00E+02	1.04E+01	6.22E+04	6.90E+01	
Use of non renewable primary energy resources used as raw material	MJ	2.87E+02	2.87E+02	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	3.78E+03	3.58E+03	0*	0*	1.29E+02	6.49E+01	
Non hazardous waste disposed	kg	7.94E+02	6.01E+01	2.53E-01	6.40E+00	7.27E+02	2.12E-01	
Radioactive waste disposed	kg	5.06E-02	2.59E-02	1.80E-04	2.25E-04	2.40E-02	3.32E-04	
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Materials for recycling	kg	3.93E+01	5.11E+00	0*	4.39E+00	0*	2.98E+01	
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	
Materials for energy recovery	kg	6.24E-01	0*	0*	0*	0*	6.24E-01	
Exported Energy	MJ	1.26E+01	7.61E+00	0*	4.98E+00	0*	0*	

\* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.9.4, 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).

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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	ENVPEP1304028_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	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>

*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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