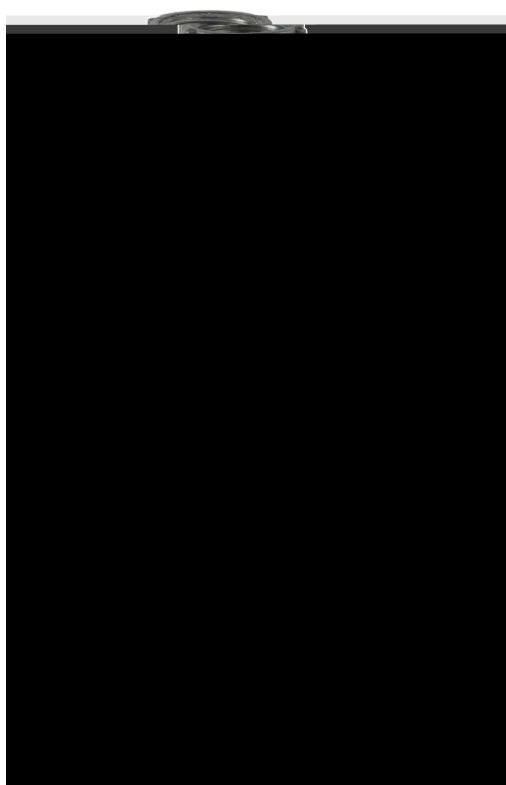


Product Environmental Profile

9001SKY

**Empty or equipped control
station enclosures**



Product Environmental Profile - PEP

Product overview

The range of control station enclosures designed for Harmony™ diameter 30 mm metal control and signalling units is the best solution for mounting control and signalling units. It is water, dust and oil tight and provides corrosion protection indoor and outdoor.

The 9001SKY Polymeric Control Stations range consists of glass fiber reinforced with polyester enclosures with 1 to 9 cut-outs.

Products can be supplied empty or equipped with pushbuttons and/or pilot lights. In the second case, to determine the environmental impacts, use this PEP and add the impacts described in the buttons and /or pilot lights PEP.

The representative product used for the analysis 9001SKY1 Polymeric Control Stations is an empty wall-mounted control station enclosure.

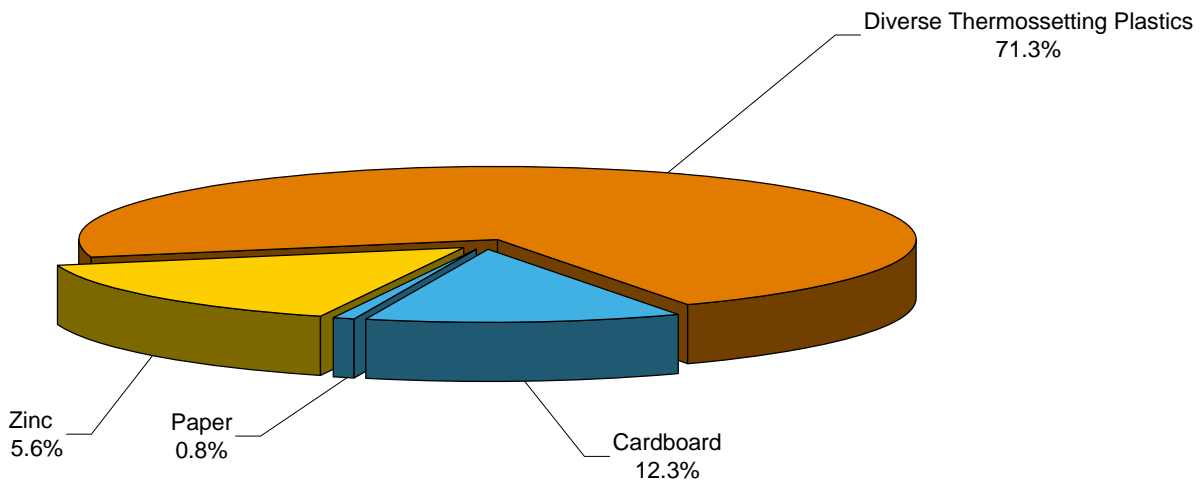
The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.

The environmental analysis was performed in conformity with ISO 14040.

Constituent materials

The mass of the product range is from 792 g and 1928 g including packaging. It is 792 g for the 9001SKY1 Polymeric Control Station..

The constituent materials are distributed as follows:



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2002/95/EC of 27 January 2003) 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.

Manufacturing

The 9001SKY Polymeric Control Station product range is manufactured at a Schneider Electric production site on which an ISO14001 certified environmental management system has been established.

Distribution

The weight and volume of the packaging have been optimized, based on the European Union's packaging directive.

The 9001SKY Polymeric Control Station packaging weight is 104 g. It consists of cardboard and paper.

The weight of recycled materials used is 100% of total packaging mass.

The product distribution flows have been optimised by setting up local distribution centres close to the market areas.

Product Environmental Profile - PEP

Use

The products of the 9001SKY Polymeric Control Station range do not generate environmental pollution (noise, emissions) requiring special precautionary measures in standard use.

This product doesn't consume energy. It's service life is approximately 20 years for normal usage.

End of life

At end of life, the products in the 9001SKY Polymeric Control Station range have been optimized to decrease the amount of waste and allow recovery of the product components and materials.

This product range doesn't need any special end-of-life treatment. According to countries' practices this product can enter the usual end-of-life treatment process.

The recyclability potential of the products has been evaluated using the "ECO DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

According to this method, the potential recyclability ratio is: 24%.

As described in the recyclability calculation method this ratio includes only metals, plastics and packaging material which have proven industrial recycling processes.

Environmental impacts

Life cycle assessment has been performed on the following life cycle phases: Materials and Manufacturing (M), Distribution (D), Installation (I) Use (U), and End of life (E).

Modeling hypothesis and method:

- the calculation was performed on the 9001SKY1 Polymeric Control Station
- product packaging: is included
- installation components: no special components included.
- scenario for the Use phase: this product range is included in the category "Enclosure or envelope": (assumed service life is 20 years.)

The electrical power model used for calculation is US model.

End of life impacts are based on a worst case transport distance to the recycling plant (1000km)

Presentation of the product environmental impacts

Environmental indicators	Unit	For Harmony 9001SKY1					
		S = M + D + I + U + E	M	D	I	U	E
Raw Material Depletion	Y-1	5.25 ^E -15	5.24 ^E -15	3.24 ^E -19	0	0	1.62 ^E -18
Energy Depletion	MJ	5.77 ^E +01	56.28	2.37 ^E -01	0	0	1.19
Water depletion	dm ³	23.18	23.04	2.25 ^E -02	0	0	1.13 ^E -01
Global Warming	g _≈ CO ₂	3.56 ^E +03	3.45 ^E +03	1.88 ^E +01	0	0	94.04
Ozone Depletion	g _≈ CFC-11	7.63 ^E -04	6.83 ^E -04	1.33 ^E -05	0	0	6.65 ^E -05
Air Toxicity	m ³	1.69 ^E +06	1.67 ^E +06	3.54 ^E +03	0	0	1.77 ^E +04
Photochemical Ozone Creation	g _≈ C ₂ H ₄	1.55	1.45	1.61 ^E -02	0	0	8.04 ^E -02
Air acidification	g _≈ H ⁺	5.10 ^E -01	4.96 ^E -01	2.40 ^E -03	0	0	1.20 ^E -02
Water Toxicity	dm ³	1.09 ^E +03	1.07 ^E +03	2.35	0	0	1.18 ^E +01
Water Eutrophication	g _≈ PO ₄	1.86 ^E -01	1.84 ^E -01	3.13 ^E -04	0	0	1.56 ^E -03
Hazardous waste production	Kg	2.51 ^E -02	2.51 ^E -02	6.99 ^E -06	0	0	3.50 ^E -05

Life cycle assessment has been performed with the EIME software (Environmental Impact and Management Explorer), version 4, and with its database version 11.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental 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 (without RMD) of other products in this family may be proportional extrapolated by energy consumption values.

System approach

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.

Please note that the values given above are

Product Environmental Profile - PEP

Glossary

Raw Material Depletion (RMD)

Energy Depletion (ED)

Water Depletion (WD)

Global Warming (GW)

Ozone Depletion (OD)

Air Toxicity (AT)

Photochemical Ozone Creation (POC)

Air Acidification (AA)

Water Toxicity (WT)

Hazardous Waste Production (HWP)