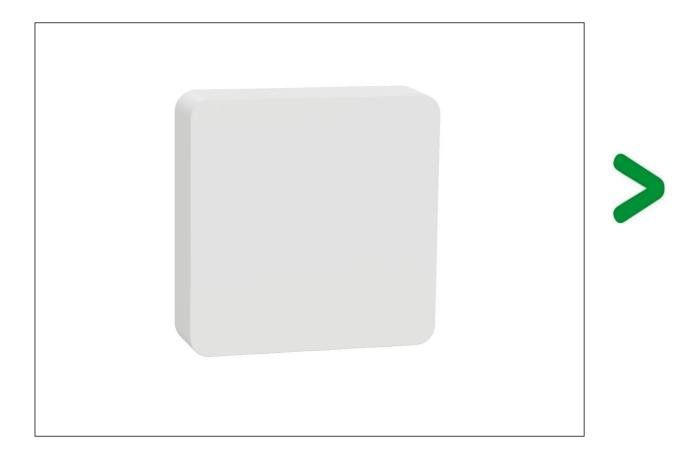
Product Environmental Profile

TEMPERATURE & HUMIDITY SENSOR







General information

Reference product	TEMPERATURE & HUMIDITY SENSOR - CCT593012
Description of the product	The main purpose of the product is to sense temperature and humidity, and maintain comfore zone in the closed environment.
Description of the range	Single product
Functional unit	To measure and monitor environment / indoor humidity and temperature with the dimension 45 X 45 X 17 mm according to the appropriate use scenario with IP20 Degree of protection against ingress of solid foreign objects and water with harmful effects in accordance for reference service life time of 10 years with the following specifications. - Communication network type: Wireless Zigbee (2.4 GHz), - Indoor line of sight 40 meters - Operation temperature: -10 °C to 50 °C - Operation humidity: 5 % to 90 % - Standards: IEC 60730-2-9



Constituent materials

Reference product mass

67.05 g including the product and its packaging

Polycarbonate - 22%

Polyethylene - <0.1%

Polyethylene - <0.1%

Paper - 60%

 Others
 77.3%

 Plastics
 22.0%

 Metals
 0.7%



Details of ROHS and REACH substances information are available on the Schneider-Electric website https://www.se.com

(1) Additional environmental information

End Of Life

Recyclability potential:

2%

The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the EIME database and the related PSR was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	10 years									
Product category	Other equipments - Active product									
Life cycle of the product	The manufacturing, the distribution, the installatio	n, the use and the end of life w	vere taken into consideration in	this study						
Electricity consumtion	The electricity consumed during manufacturing progenerates a negligable consumption	rocesses is considered for eac	h part of the product individual	y, the final assembly						
Installation elements	This product does not require a special installation materials is accounted for during the installation p. The material constituant of the packaging is Pape	hase (including transport to dis	sposal).							
Use scenario	No power consumption since product works with battery Substitution of 1 battery has been considered									
Time representativeness	The collected data are representative of the year	2023								
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are Similar and Representative of the actual type of technologies used to make the product.									
Final assembly site	China	China								
Geographical representativeness	Europe									
	[A1 - A3] [A5] [B6] [C1 - C4]									
Energy model used	Electricity Mix; Low voltage; 2020; China, CN Electricity Mix; Low voltage; 2020; Europe, EU- 27	Electricity Mix; Low voltage; 2020; Europe, EU-27	-	Electricity Mix; Low voltage; 2020; Europe, EU-27						

Detailed results of the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.se.com/contact

Mandatory Indicators			TE	MPERATURE &	HUMIDITY SEN	ISOR - CCT59301	2	
Impact indicators	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to climate change	kg CO2 eq	1.46E+00	1.04E+00	9.08E-02	4.23E-02	2.09E-01	7.59E-02	-1.08E-02
Contribution to climate change-fossil	kg CO2 eq	1.53E+00	1.11E+00	9.08E-02	4.03E-02	2.08E-01	7.59E-02	-4.62E-02
Contribution to climate change-biogenic	kg CO2 eq	-6.69E-02	-6.93E-02	0*	0*	0*	0*	3.54E-02
Contribution to climate change-land use and land use change	kg CO2 eq	2.24E-05	2.23E-05	0*	0*	1.25E-07	0*	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	5.64E-07	2.95E-07	7.99E-08	5.48E-10	1.88E-07	6.28E-11	-2.71E-09
Contribution to acidification	mol H+ eq	8.66E-03	7.17E-03	3.74E-04	1.24E-04	9.41E-04	5.48E-05	-2.13E-04
Contribution to eutrophication, freshwater	kg P eq	2.24E-04	1.13E-04	0*	9.70E-07	1.10E-04	2.61E-07	-9.56E-07
Contribution to eutrophication marine	kg N eq	1.63E-03	1.05E-03	1.70E-04	5.39E-05	3.27E-04	2.45E-05	-6.03E-05
Contribution to eutrophication, terrestrial	mol N eq	1.38E-02	9.53E-03	1.84E-03	3.75E-04	1.75E-03	2.62E-04	-5.23E-04
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.51E-03	3.14E-03	6.15E-04	8.59E-05	6.03E-04	6.41E-05	-1.68E-04
Contribution to resource use, minerals and metals	kg Sb eq	5.54E-05	5.03E-05	0*	0*	5.04E-06	0*	-5.79E-07
Contribution to resource use, fossils	MJ	1.83E+01	1.47E+01	1.13E+00	4.19E-01	1.84E+00	1.95E-01	-9.75E-01
Contribution to water use	m3 eq	6.65E+00	3.48E+00	4.59E-03	3.27E-03	3.16E+00	4.21E-03	-2.61E-02

Inventory flows Indicators		TE	MPERATURE &	HUMIDITY SEN	ISOR - CCT59301	2		
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7.52E-01	6.31E-01	0*	5.50E-02	6.58E-02	3.38E-04	1.00E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	7.22E-01	7.17E-01	0*	0*	5.17E-03	0*	-4.60E-01
Contribution to total use of renewable primary energy resources	MJ	1.47E+00	1.35E+00	0*	5.50E-02	7.10E-02	3.38E-04	-3.59E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.77E+01	1.41E+01	1.13E+00	4.19E-01	1.80E+00	1.95E-01	-6.47E-01
Contribution to use of non renewable primary energy resources used as raw material	MJ	6.27E-01	5.88E-01	0*	0*	3.91E-02	0*	-3.28E-01
Contribution to total use of non-renewable primary energy resources	MJ	1.83E+01	1.47E+01	1.13E+00	4.19E-01	1.84E+00	1.95E-01	-9.75E-01
Contribution to use of secondary material	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m³	1.55E-01	8.09E-02	1.07E-04	7.62E-05	7.36E-02	9.81E-05	-6.07E-04
Contribution to hazardous waste disposed	kg	5.28E+00	2.83E+00	0*	1.06E-03	2.44E+00	1.15E-02	-4.64E-02
Contribution to non hazardous waste disposed	kg	7.42E-01	5.48E-01	9.21E-05	1.81E-02	1.60E-01	1.57E-02	-2.06E-02
Contribution to radioactive waste disposed	kg	4.66E-04	3.28E-04	1.80E-05	2.24E-06	1.18E-04	6.55E-07	-9.39E-06
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	4.73E-03	4.25E-03	0*	8.44E-06	0*	4.70E-04	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

 $^{^{\}star}$ represents less than 0.01% of the total life cycle of the reference flow

Contribution to biogenic carbon content of the product kg of C 0.00E+00 Contribution to biogenic carbon content of the associated packaging kg of C 1.50E-02

^{*} The calculation of the biogenic carbon is based on the Ademe for the Cardboard (28%), EN16485 for Wood (39,52%), and APESA/RECORD for Paper (37,8%)

Mandatory Indicators			TEMPERA	ATURE &	HUMIDI	TY SENS	OR - CCT5930	12	
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	2.09E-01	0*	2.09E-01	0*	0*	0*	0*	0*
Contribution to climate change-fossil	kg CO2 eq	2.08E-01	0*	2.08E-01	0*	0*	0*	0*	0*
Contribution to climate change-biogenic	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to climate change-land use and land use chan-	ge kg CO2 eq	1.25E-07	0*	1.25E-07	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	1.88E-07	0*	1.88E-07	0*	0*	0*	0*	0*
Contribution to acidification	mol H+ eq	9.41E-04	0*	9.41E-04	0*	0*	0*	0*	0*
Contribution to eutrophication, freshwater	kg P eq	1.10E-04	0*	1.10E-04	0*	0*	0*	0*	0*
Contribution to eutrophication marine	kg N eq	3.27E-04	0*	3.27E-04	0*	0*	0*	0*	0*
Contribution to eutrophication, terrestrial	mol N eq	1.75E-03	0*	1.75E-03	0*	0*	0*	0*	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	6.03E-04	0*	6.03E-04	0*	0*	0*	0*	0*
Contribution to resource use, minerals and metals	kg Sb eq	5.04E-06	0*	5.04E-06	0*	0*	0*	0*	0*
Contribution to resource use, fossils	MJ	1.84E+00	0*	1.84E+00	0*	0*	0*	0*	0*
Contribution to water use	m3 eq	3.16E+00	0*	3.16E+00	0*	0*	0*	0*	0*

Inventory flows Indicators				TEMPERA	ATURE &	HUMIDI	TY SENS	OR - CCT5930	12
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.58E-02	0*	6.58E-02	0*	0*	0*	0*	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	5.17E-03	0*	5.17E-03	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	7.10E-02	0*	7.10E-02	0*	0*	0*	0*	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.80E+00	0*	1.80E+00	0*	0*	0*	0*	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	3.91E-02	0*	3.91E-02	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	1.84E+00	0*	1.84E+00	0*	0*	0*	0*	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m³	7.36E-02	0*	7.36E-02	0*	0*	0*	0*	0*
Contribution to hazardous waste disposed	kg	2.44E+00	0*	2.44E+00	0*	0*	0*	0*	0*
Contribution to non hazardous waste disposed	kg	1.60E-01	0*	1.60E-01	0*	0*	0*	0*	0*
Contribution to radioactive waste disposed	kg	1.18E-04	0*	1.18E-04	0*	0*	0*	0*	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	0*	0*	0*	0*	0*

^{*} represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v6.2.3, database version 2024-01 in compliance with ISO14044, EF3.1 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

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.

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PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022 The components of the present PEP may not be compared with components from any other program.								
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