# **Product Environmental Profile**

#### **KNX HIGH BAY PRESENCE DETECTOR**







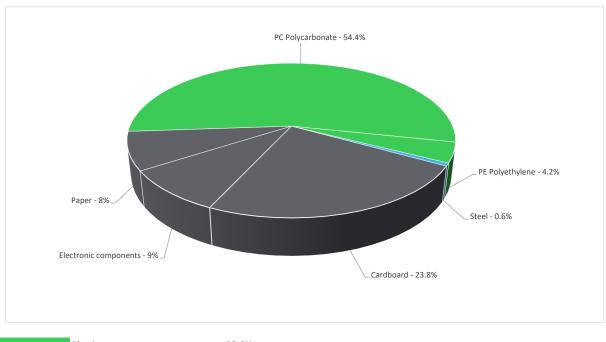
#### General information

Reference product	KNX HIGH BAY PRESENCE DETECTOR - MTN6354-0019
Description of the product	The KNX High Bay Presence Detector is designed to automatically switch lights ON and OFF. It uses pyro sensors to detect the invisible heat emitted by moving objects such as people or animals. This heat is electronically converted into a signal that controls the connected load (e.g., a light) via the KNX system and its settings. A built-in red LED also lights up to indicate detection.
Description of the range	Single product
Functional unit	The device is designed to control lighting and HVAC systems in environments such as offices, schools, public buildings, or homes, based on ambient light levels and the presence of individuals. It operates using the KNX bus voltage and features a wide coverage angle with a defined angle of aperture. The unit complies with relevant IP protection standards, ensuring durability in various conditions. It is intended for continuous operation, 24 hours a day, with a minimum expected lifetime of 10 years.
Specifications are:	-Power Supply: KNX bus voltage 21V - 30V -Angle of coverage: 360° with 180° angle of aperture -IP Rating: IP54

### Constituent materials

Reference product mass

251.4 g including the product and its packaging



 Plastics
 58.6%

 Others
 40.8%

 Metals
 0.6%

#### F | Substance assessment

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

# Additional environmental information

End Of Life

Recyclability potential:

1%

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 installation, the use and the end of life were taken into consideration in this study									
Electricity consumption	The electricity consumed during manufacturing processes is considered for each part of the product individually, the final assembly generates a negligible consumption									
Installation elements	The product installation requires little to no energy. The disposal of packaging materials is also accounted during the installation phase, including transport to disposal.  The material constituents of the packaging are Cardboard (74%), Paper (25%) and Plastic (1%).									
Use scenario	The product is in active mode 50% of the time with a power use of 0.36W and in stand-by mode 50% of the time with a power use of 0.2W over a period of 10 years.									
Time representativeness	The collected data are representative of the year 2024									
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.									
Geographical	Final assembly site Use phase End-of-life									
representativeness	Romania, RO Europe Europe									
	[A1 - A3]	[A5]	[B6]	[C1 - C4]						
Energy model used	Electricity Mix; Brazil, BR Electricity Mix; Europe, RER Electricity Mix; France, FR Electricity Mix; France, FR Electricity Mix; China, CN  Electricity Mix; Europe, RER 2020; Europe, EU-27  Electricity Mix; Europe, RER									

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		KNX HIGH BAY PRESENCE DETECTOR - MTN6354-0019							
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	2.94E+01	1.91E+01	4.86E-02	2.08E-01	9.91E+00	1.58E-01	5.28E-03	
Contribution to climate change-fossil	kg CO2 eq	2.92E+01	1.92E+01	4.86E-02	9.38E-02	9.70E+00	1.58E-01	-8.74E-02	
Contribution to climate change-biogenic	kg CO2 eq	2.38E-01	0*	0*	1.14E-01	2.19E-01	4.46E-04	9.27E-02	
Contribution to climate change-land use and land use char	ge kg CO2 eq	2.10E-04	2.10E-04	1.29E-07	0*	0*	5.64E-08	0.00E+00	
Contribution to ozone depletion	kg CFC-11 eq	3.14E-06	3.09E-06	9.41E-10	1.27E-09	4.25E-08	3.23E-09	-3.47E-09	
Contribution to acidification	mol H+ eq	1.29E-01	7.59E-02	9.15E-05	2.75E-04	5.19E-02	4.73E-04	-4.88E-04	
Contribution to eutrophication, freshwater	kg P eq	9.01E-05	6.35E-05	1.92E-07	1.97E-06	2.37E-05	7.01E-07	-1.31E-06	
Contribution to eutrophication marine	kg N eq	1.49E-02	8.54E-03	1.55E-05	1.15E-04	6.07E-03	1.19E-04	-1.35E-04	
Contribution to eutrophication, terrestrial	mol N eq	1.94E-01	9.41E-02	1.70E-04	8.34E-04	9.74E-02	1.51E-03	-1.12E-03	
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.80E-02	2.81E-02	5.54E-05	1.90E-04	1.93E-02	3.29E-04	-2.97E-04	
Contribution to resource use, minerals and metals	kg Sb eq	1.80E-03	1.80E-03	0*	0*	3.21E-06	0*	-1.93E-06	
Contribution to resource use, fossils	MJ	4.35E+02	1.93E+02	9.52E-01	9.08E-01	2.38E+02	1.70E+00	-1.15E+00	
Contribution to water use	m3 eq	7.51E+00	6.74E+00	2.63E-03	7.58E-03	7.52E-01	6.10E-03	-2.47E-02	

Inventory flows Indicators		KNX HIGH BAY PRESENCE DETECTOR - MTN6354-0019							
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	7.28E+01	1.69E+01	0*	1.24E-01	5.57E+01	9.06E-02	2.70E-01	
Contribution to use of renewable primary energy resources used as raw material	MJ	1.58E+00	1.58E+00	0	0	0	0	-1.18E+00	
Contribution to total use of renewable primary energy resources	MJ	7.44E+01	1.85E+01	0*	1.24E-01	5.57E+01	9.06E-02	-9.11E-01	
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.29E+02	1.88E+02	9.52E-01	9.08E-01	2.38E+02	1.70E+00	-1.13E+00	
Contribution to use of non renewable primary energy resources used as raw material	MJ	5.53E+00	5.53E+00	0	0	0	0	-2.12E-02	
Contribution to total use of non-renewable primary energy resources	MJ	4.35E+02	1.93E+02	9.52E-01	9.08E-01	2.38E+02	1.70E+00	-1.15E+00	
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	1.73E-01	1.55E-01	6.13E-05	5.84E-04	1.76E-02	1.43E-04	-5.76E-04	
Contribution to hazardous waste disposed	kg	3.29E+01	3.26E+01	0*	5.11E-03	2.74E-01	7.69E-02	-1.53E-01	
Contribution to non hazardous waste disposed	kg	6.18E+00	4.63E+00	7.94E-03	3.33E-02	1.49E+00	1.30E-02	-5.33E-02	
Contribution to radioactive waste disposed	kg	2.52E-03	2.15E-03	6.28E-06	5.98E-06	3.52E-04	5.88E-06	-2.44E-05	
Contribution to components for reuse	kg	0.00E+00	0	0	0	0	0	0.00E+00	
Contribution to materials for recycling	kg	8.04E-02	1.28E-02	0	6.61E-02	0	1.52E-03	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	
* 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	1.89E-05							

<sup>\*</sup> 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%)

kg of C

2.44E-02

Mandatory Indicators			KNX HIGH	I BAY PRE	SENCE D	ЕТЕСТОІ	R - MTN6354-00	119	
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	9.91E+00	0	0	0	0	0	9.91E+00	0
Contribution to climate change-fossil	kg CO2 eq	9.70E+00	0	0	0	0	0	9.70E+00	0
Contribution to climate change-biogenic	kg CO2 eq	2.19E-01	0	0	0	0	0	2.19E-01	0
Contribution to climate change-land use and land use cha	nge kg CO2 eq	0*	0	0	0	0	0	0	0
Contribution to ozone depletion	kg CFC-11 eq	4.25E-08	0	0	0	0	0	4.25E-08	0
Contribution to acidification	mol H+ eq	5.19E-02	0	0	0	0	0	5.19E-02	0
Contribution to eutrophication, freshwater	kg P eq	2.37E-05	0	0	0	0	0	2.37E-05	0
Contribution to eutrophication marine	kg N eq	6.07E-03	0	0	0	0	0	6.07E-03	0
Contribution to eutrophication, terrestrial	mol N eq	9.74E-02	0	0	0	0	0	9.74E-02	0
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.93E-02	0	0	0	0	0	1.93E-02	0
Contribution to resource use, minerals and metals	kg Sb eq	3.21E-06	0	0	0	0	0	3.21E-06	0
Contribution to resource use, fossils	MJ	2.38E+02	0	0	0	0	0	2.38E+02	0
Contribution to water use	m3 eq	7.52E-01	0	0	0	0	0	7.52E-01	0

Contribution to biogenic carbon content of the associated packaging

Inventory flows Indicators				KNX HIGH	I BAY PRE	SENCE D	ЕТЕСТО	R - MTN6354-00	)19	
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	5.57E+01	0	0	0	0	0	5.57E+01	0	
Contribution to use of renewable primary energy resources used as raw material	MJ	0	0	0	0	0	0	0	0	
Contribution to total use of renewable primary energy resources	MJ	5.57E+01	0	0	0	0	0	5.57E+01	0	
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.38E+02	0	0	0	0	0	2.38E+02	0	
Contribution to use of non renewable primary energy resources used as raw material	MJ	0	0	0	0	0	0	0	0	
Contribution to total use of non-renewable primary energy resources	MJ	2.38E+02	0	0	0	0	0	2.38E+02	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	1.76E-02	0	0	0	0	0	1.76E-02	0	
Contribution to hazardous waste disposed	kg	2.74E-01	0	0	0	0	0	2.74E-01	0	
Contribution to non hazardous waste disposed	kg	1.49E+00	0	0	0	0	0	1.49E+00	0	
Contribution to radioactive waste disposed	kg	3.52E-04	0	0	0	0	0	3.52E-04	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	

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

Life cycle assessment performed with EIME version v6.2.5, database version 2024-02 in compliance with ISO14044, EF3.2 method is applied, for biogenic carbon storage, assessment methodology -1/1 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.

Registration number :	SCHN-00443-V02.01-EN	Drafting rules	PEP-PCR-ed4-2021 09 06				
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Verifier accreditation N°	VH50	Information and reference documents	www.pep-ecopassport.org				
Date of issue	07-2025						
Independent verification of the declaration and data in compliance with ISO 14025 : 2006							

Independent verification of the declaration and data, in compliance with ISO 14025 : 2006

Internal External X

The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)

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.

Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"



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