

Product Environmental Profile

EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP





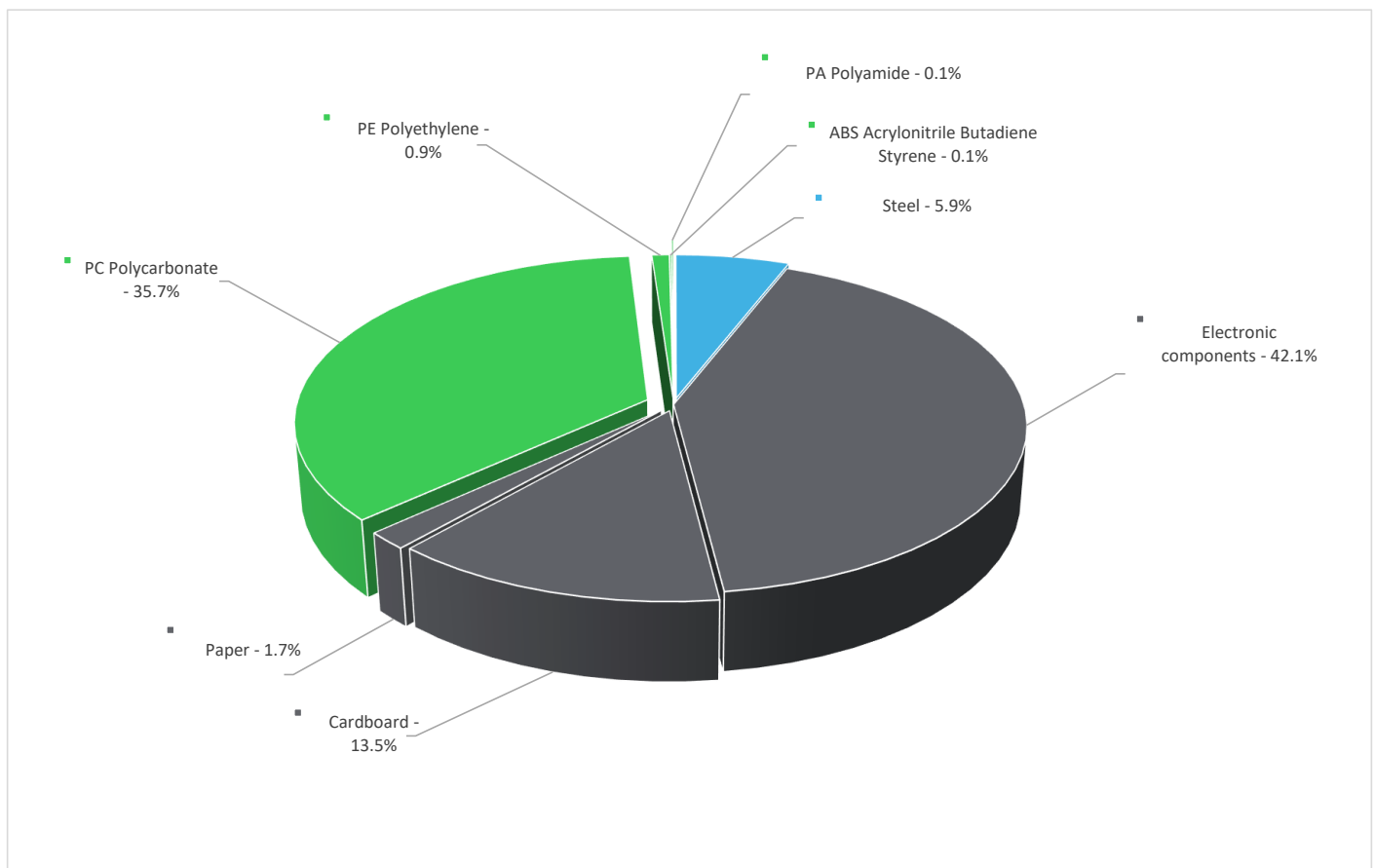
General information

Reference product	EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP - OVA48985
Description of the product	Maintained and Non Maintained emergency luminaire (EN 60598-2-22). Luminaire in which the emergency lighting lamps are energized at all times when normal or emergency lighting is required.
Description of the range	Single product
Functional unit	The luminaire provides 220 lumens of Light for 3 hours to avoid panic during a black-out and to guarantee the visibility of obstacles. This functionality is provided for ten years.
Additional similar product references	OVA48985
Specifications are:	The product has a consumption of 3.6 W and is designed to operate for 10 years thanks to its IP65 protection rating and IK07 shock resistance. The consumption of the product during its declared lifetime is 22 kWh.



Constituent materials

Reference product mass 620 g including the product, its packaging, additional elements and accessories



Plastics	36.80%
Metals	5.90%
Others	57.30%

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:	65%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECYLAB 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).
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Environmental impacts

Reference service life time	10 years		
Product category	Self-contained emergency lighting units - Open area emergency lighting - SCELL		
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	During the installation phase, the packaging must be disposed off. The product is suitable for recessed installation in the ceiling and in the false-ceiling.		
Use scenario	The luminaire is working in maintained and non maintained mode. This function is provided for 10 years with a power consumption of 3.6 W.		
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.		
Final assembly site	Italy		
Geographical representativeness	Europe		
Energy model used	[A1 - A3]	[A5]	[B6]
	Electricity Mix; Low voltage; 2020; Italy, IT	Electricity Mix; Low voltage; 2020; Europe, EU-27	Electricity Mix; Low voltage; 2020; Europe, EU-27
			[C1 - C4]
			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		EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP - OVA48985						
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	1.98E+01	8.95E+00	3.30E-01	1.09E-01	8.99E+00	1.46E+00	-6.05E-02
Contribution to climate change-fossil	kg CO2 eq	1.97E+01	9.06E+00	3.30E-01	1.05E-01	8.79E+00	1.44E+00	-1.71E-01
Contribution to climate change-biogenic	kg CO2 eq	1.05E-01	0*	0*	4.86E-03	1.98E-01	1.25E-02	1.11E-01
Contribution to climate change-land use and land use change	kg CO2 eq	1.98E-06	1.97E-06	0*	0*	0*	1.84E-08	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	3.39E-06	3.35E-06	5.04E-10	1.33E-09	3.85E-08	3.15E-09	-2.31E-08
Contribution to acidification	mol H+ eq	1.01E-01	5.02E-02	2.14E-03	3.05E-04	4.70E-02	1.23E-03	-1.18E-03
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	1.69E-03	1.66E-03	0*	2.39E-06	2.15E-05	6.36E-06	6.79E-07
Contribution to eutrophication marine	kg N eq	1.64E-02	9.26E-03	1.00E-03	1.31E-04	5.50E-03	4.99E-04	-1.88E-04
Contribution to eutrophication, terrestrial	mol N eq	1.84E-01	7.89E-02	1.10E-02	9.19E-04	8.83E-02	5.29E-03	-1.81E-03
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.50E-02	2.32E-02	2.83E-03	2.10E-04	1.75E-02	1.30E-03	-5.36E-04
Contribution to resource use, minerals and metals	kg Sb eq	1.98E-03	1.97E-03	0*	0*	2.91E-06	0*	-4.43E-05
Contribution to resource use, fossils	MJ	3.58E+02	1.34E+02	4.59E+00	1.04E+00	2.16E+02	2.52E+00	-3.28E+00
Contribution to water use	m3 eq	4.99E+01	4.91E+01	0*	8.65E-03	6.81E-01	6.96E-02	-7.01E-02

Inventory flows Indicators		EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP - OVA48985						
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	6.39E+01	1.32E+01	0*	1.38E-01	5.05E+01	4.64E-02	2.99E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	9.35E-01	9.35E-01	0*	0*	0*	0*	-1.41E+00
Contribution to total use of renewable primary energy resources	MJ	6.48E+01	1.42E+01	0*	1.38E-01	5.05E+01	4.64E-02	-1.11E+00
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.55E+02	1.31E+02	4.59E+00	1.04E+00	2.16E+02	2.52E+00	-3.51E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	3.30E+00	3.30E+00	0*	0*	0*	0*	2.26E-01
Contribution to total use of non-renewable primary energy resources	MJ	3.58E+02	1.34E+02	4.59E+00	1.04E+00	2.16E+02	2.52E+00	-3.28E+00
Contribution to use of secondary material	kg	3.65E-01	3.65E-01	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	1.16E+00	1.14E+00	0*	2.01E-04	1.59E-02	1.68E-03	-1.63E-03
Contribution to hazardous waste disposed	kg	4.78E+01	4.73E+01	0*	0*	2.48E-01	2.49E-01	-3.50E+00
Contribution to non hazardous waste disposed	kg	5.99E+00	4.27E+00	1.15E-02	4.73E-02	1.35E+00	3.07E-01	-1.71E-01
Contribution to radioactive waste disposed	kg	2.59E-03	2.24E-03	8.22E-06	5.54E-06	3.19E-04	1.27E-05	-7.75E-05
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	4.51E-02	6.57E-03	0*	2.26E-03	0*	3.63E-02	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	4.58E-03	5.98E-05	0*	4.17E-03	0*	3.59E-04	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	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg of C	2.78E-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		EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP - OVA48985							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	8.99E+00	0*	0*	0*	0*	0*	8.99E+00	0*
Contribution to climate change-fossil	kg CO2 eq	8.79E+00	0*	0*	0*	0*	0*	8.79E+00	0*
Contribution to climate change-biogenic	kg CO2 eq	1.98E-01	0*	0*	0*	0*	0*	1.98E-01	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	3.85E-08	0*	0*	0*	0*	0*	3.85E-08	0*
Contribution to acidification	mol H+ eq	4.70E-02	0*	0*	0*	0*	0*	4.70E-02	0*
Contribution to eutrophication, freshwater	kg (PO4)³⁻ eq	2.15E-05	0*	0*	0*	0*	0*	2.15E-05	0*
Contribution to eutrophication marine	kg N eq	5.50E-03	0*	0*	0*	0*	0*	5.50E-03	0*
Contribution to eutrophication, terrestrial	mol N eq	8.83E-02	0*	0*	0*	0*	0*	8.83E-02	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.75E-02	0*	0*	0*	0*	0*	1.75E-02	0*
Contribution to resource use, minerals and metals	kg Sb eq	2.91E-06	0*	0*	0*	0*	0*	2.91E-06	0*
Contribution to resource use, fossils	MJ	2.16E+02	0*	0*	0*	0*	0*	2.16E+02	0*
Contribution to water use	m3 eq	6.81E-01	0*	0*	0*	0*	0*	6.81E-01	0*

Inventory flows Indicators		EXW-SMARTBEAM-SO IP65 AD3 L6V/SA/3LFP - OVA48985							
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	5.05E+01	0*	0*	0*	0*	0*	5.05E+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	5.05E+01	0*	0*	0*	0*	0*	5.05E+01	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.16E+02	0*	0*	0*	0*	0*	2.16E+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	2.16E+02	0*	0*	0*	0*	0*	2.16E+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	1.59E-02	0*	0*	0*	0*	0*	1.59E-02	0*
Contribution to hazardous waste disposed	kg	2.48E-01	0*	0*	0*	0*	0*	2.48E-01	0*
Contribution to non hazardous waste disposed	kg	1.35E+00	0*	0*	0*	0*	0*	1.35E+00	0*
Contribution to radioactive waste disposed	kg	3.19E-04	0*	0*	0*	0*	0*	3.19E-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*

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

Life cycle assessment performed with EIME version v6.2.2, 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.

