ESYLUX

PRODUCT ENVIRONMENTAL PROFILE

Compact - Europe

ESYLUX

Climate change	Consumed primary energy	Depletion of natural resources	Water use
1.18E+01 kg CO2 eq.	**2.87E+02** MJ	**9.75E-04** kg Sb eq.	**1.96E-01** m3

Extract from individual PEP n°EL01-00015-V01.01-EN / PEP ecopasseport ®

www.pep-ecopassport.org

*Results based on a Lifecycle Analysis, at the declared unit

Registration number: **EL01-00015-V01.01-EN**	Drafting rules: **PCR-ed4-FR-2021 09 06** **Supplemented by PSR-0005-ed3.1-FR-2023 12 08**
Verifier accreditation number: **VH37**	Information and reference documents: **www.pep-ecopassport.org**
Date of issue: **07-2026**	Validity period: **5 years**
Independent verification of declaration and data in accordance with ISO 14025:2006	
Internal ☐	**External** ■
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)	
PEPs are compliant with NF 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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ESYLUX

PRODUCT ENVIRONMENTAL PROFILE

Compact - Europe

Holder of the declaration

ESYLUX GmbH & Co. KG
An der Strusbek 40
22926, Ahrensburg

PEP directed by
Qweeko
hello@qweeko.io

Contact
ESYLUX GmbH & Co. KG
jan-ole.rosin@esylux.com

Covered references

EP10055393 - MD-C 360i/8 ; EP10055416 ; EP10425875 ; EP10055379 ; EP10055553 ; EP10425059 ; EP10425233 ; EP10425882 ; EP10425042 ; EP10055317 ; EP10055546 ; EP10055386 ; EP10428067 ; EP10425257 ; EP10425707 ; EP10425288 ; EP10427749 ; EP10428128 ; EP10427770 ; EP10425790 ; EP10427756 ; EP10428180 ; EP10427763 ; EP10425783

Methodology

This PEP has been produced in compliance with the PCR version PCR-ed4-FR-2021 09 06 and the PSR version PSR-0005-ed3.1-FR-2023 12 08 of the PEP ecopassport program.

For more information, visit the program website www.pep-ecopassport.org

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Reference product

Identification of the reference product:
EP10055393 - MD-C 360i/8

Product category (PSR-0005-ed3.1-FR-2023 12 08) :
Family: Electrical switchgear and control gear solutions
Sub-family: Other device

Functional unit

Detect a 360 ° presence to Switch on the light, for 10 years

Declared unit

Detect a 360 presence to Switch on the light, for 10 years

Declared Unit coefficients by lifecycle stage

Formula	Coefficient	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
[UF]	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Technical characteristics

Detector function	Switch on the light
Detector detection angle	360 °
Power consumption in on mode	0.46 W
Power consumption in standby mode	0.23 W
Rate of uptime in on mode	0.2 ratio
Rate of uptime in standby mode	0.8 ratio

Materials and substances

All useful measures have been taken to ensure that the materials used in the composition of the product do not contain substances prohibited by the regulations in force when it was placed on the market. The mass of the reference product is 0.141 kg. The mass of the product packaging is 0.051 kg.
The constituent materials are:

Plastics	kg	%	Metals	kg	%	Others	kg	%
Makrolon 2407	0.07	37.0	galvanised steel plate (Zinc)	0.03	16.6	Paper	0.05	23.9
PIR HDPE-Granulat 22300,opak	0.01	7.0	23MnB4	0.00	1.5	Electronic components	0.03	14.1
Total	0.08	44	**Total**	0.03	18.1	**Total**	0.08	38
Total mass of the reference product : 0.20 kg								

The masses indicated correspond to the masses modeled within the framework of the PEP, and may present slight variations with the masses indicated in the technical documentation of the products, due to the assumptions made for the study. These masses do not include the packaging materials of the raw materials, which are modeled according to the recommendations of the PCR-ed4-FR-2021 09 06.

Additional environmental information

Manufacturing	Manufactured in a factory in Poland. The components are sourced from Europe and Asia. The raw materials, transport to the production site, manufacturing of components and parts, assembly, packaging, and waste disposal were all taken into consideration.
Distribution	The main market is Europe. The distribution modelling was carried out by considering the distances between the distribution center and the customers, weighted according to the annual sales volumes. The distances were calculated using Google Maps. Road transport by truck was assumed for distribution.
Installation	The product does not require any specific installation procedure and its installation does not require energy. Transportation and disposal of the product packaging are included in this step, in accordance with the European scenarios of the PSR-0005-ed3.1-FR-2023 12 08 rules.
Use	The product does not generate any direct emissions (B1). Furthermore, no standard repairs (B3, B4), refurbishment (B5), or maintenance (B2) are anticipated. The use of the product does not require water (B7). The use of the product results in electricity consumption (B6): C = (Pactive x %active + Pstandby x %standby) x Lifetime C = (0.46 * 20.0/100 + 0.23 * 80.0/100) * 10.0 * 8766.0/1000 = 24,19416 kWh Pactive: Power in active mode (W) Pstandby: Consumption in standby mode (W) % active: Percentage of time in active mode % standby: Percentage of time in standby mode The main market is Europe, so the European energy mix has been used here.
End of life	The downstream transport of waste to the recycling, incineration, or landfill site has been taken into account. The end-of-life treatment scenarios for the product listed in Annex D of the PCR, 4th edition, have been applied (Europe).

Environmental impacts

The environmental impact assessment covers the following stages of the product life cycle: Manufacturing (A1-A3), Distribution (A4), Installation (A5), Use (B1-B7), End of life (C1-C4) and Benefits and burdens across system boundaries (D).

The calculations were carried out with the OpenLCA software version 2.0.2 associated with the EcoInvent database version 3.91.

Indicator set : Indicators for PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v2.0

PEP representative of the products covered, installed and marketed in: Europe

Energy models considered for each phase:

Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B7)	End of life (C1-C4)
Poland	Europe	Europe	Europe	Europe

Environmental impact of the reference product calculated for the functional unit

This environmental declaration has been developed considering the following functional unit: Detect a 360 ° presence to Switch on the light, for 10 years

Mandatory environmental impact indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Environment: Global warming potential (total) | GWPT	kg CO2 eq	2.62E+00	6.00E-02	1.15E-02	8.87E+00	2.62E-01	1.18E+01	-8.86E-01
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	2.62E+00	6.00E-02	3.83E-03	8.56E+00	2.62E-01	1.15E+01	-8.95E-01
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	1.87E-03	5.31E-05	7.71E-03	2.94E-01	-2.41E-04	3.04E-01	1.15E-02
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	4.89E-03	2.96E-05	1.46E-06	2.14E-02	5.48E-05	2.63E-02	-2.16E-03
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	1.06E-07	1.31E-09	6.39E-11	1.63E-07	2.09E-09	2.73E-07	-2.99E-08
Environment: Acidification potential | AP	mol H+ eq	2.45E-02	1.31E-04	1.70E-05	4.91E-02	2.28E-04	7.40E-02	-1.03E-02
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	3.23E-03	4.26E-06	4.12E-07	8.11E-03	1.35E-05	1.14E-02	-1.45E-03
Environment: Eutrophication potential (marine) | EPM	kg N eq	3.81E-03	3.31E-05	7.12E-06	7.94E-03	1.23E-04	1.19E-02	-1.53E-03
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	4.10E-02	3.36E-04	6.80E-05	7.18E-02	7.89E-04	1.14E-01	-1.68E-02
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	1.36E-02	2.03E-04	2.51E-05	2.31E-02	2.69E-04	3.72E-02	-5.19E-03
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	8.71E-04	2.01E-07	1.46E-08	1.04E-04	2.69E-07	9.75E-04	-4.20E-04
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	3.88E+01	8.58E-01	4.45E-02	1.98E+02	6.75E-01	2.39E+02	-1.15E+01
Environment: Water deprivation potential | WDP	m3 world eq	1.19E+00	4.26E-03	6.25E-04	4.92E+00	1.28E-02	6.12E+00	-3.71E-01

*The detailed results of the module B can be found in the tables located at the end of this section.

Optional environmental impact indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Environment: Particulate matter formation | PMF	disease incidence	1.53E-07	4.47E-09	3.52E-10	1.80E-07	3.48E-09	3.42E-07	-5.69E-08
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	3.05E-01	1.15E-03	1.30E-04	5.49E+00	2.08E-03	5.80E+00	-9.95E-02
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	8.91E+01	4.21E-01	3.05E-02	3.27E+01	2.24E+00	1.25E+02	-3.12E+01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	3.93E-09	2.74E-11	2.78E-12	4.28E-09	6.07E-11	8.31E-09	-1.13E-09
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	1.32E-07	6.09E-10	4.61E-11	1.72E-07	4.64E-09	3.09E-07	-5.72E-08
Environment: Land use and land use change | LULUC	dimensionless	1.88E+01	5.15E-01	1.87E-02	3.79E+01	3.69E-01	5.76E+01	-7.44E+00

*The detailed results of the module B can be found in the tables located at the end of this section.

Resource use indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	4.36E+00	1.34E-02	1.30E-03	4.37E+01	3.19E-02	4.81E+01	-1.66E+00
Primary energy: Renewable (material use) | PERM	MJ (PERM)	4.60E-04	0	0	0	0	4.60E-04	-2.30E-04
Primary energy: Renewable (total) | PERT	MJ (PERT)	4.36E+00	1.34E-02	1.30E-03	4.37E+01	3.19E-02	4.81E+01	-1.66E+00
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	3.71E+01	7.84E-01	4.10E-02	1.95E+02	6.28E-01	2.34E+02	-1.12E+01
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	1.63E+00	7.43E-02	3.52E-03	2.85E+00	4.78E-02	4.60E+00	-3.15E-01
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	3.88E+01	8.58E-01	4.45E-02	1.98E+02	6.75E-01	2.39E+02	-1.15E+01
Resource: Secondary materials | SM	kg (SM)	2.06E-01	9.41E-04	4.00E-02	2.55E+00	2.86E-02	2.83E+00	-8.12E-02
Resource: Renewable secondary fuels | RSF	MJ (RSF)	5.01E-02	2.54E-04	5.23E-05	1.48E+00	3.31E-04	1.53E+00	-1.27E-02
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	1.27E-01	4.99E-04	4.49E-05	1.47E+00	2.05E-03	1.60E+00	-3.18E-02
Resource: Net use of fresh water | FW	m3 (FW)	3.84E-02	1.04E-04	1.34E-05	1.57E-01	2.77E-04	1.96E-01	-1.45E-02

*The detailed results of the module B can be found in the tables located at the end of this section.

Waste category indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Hazardous waste disposed | HWD	kg (HWD)	1.75E-01	8.05E-04	1.71E-04	1.94E-01	1.44E-02	3.84E-01	-5.46E-02
Non-hazardous waste disposed | NHWD	kg (NHWD)	2.13E-01	4.15E-02	1.56E-03	6.02E-01	5.24E-02	9.11E-01	-4.95E-02
Radioactive waste disposed | RWD	kg (RWD)	7.88E-05	2.80E-07	3.27E-08	1.41E-03	5.14E-07	1.48E-03	-2.59E-05

*The detailed results of the module B can be found in the tables located at the end of this section.

Output flow indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Output: Components for reuse | CRU	kg (CRU)	0	0	0	0	0	0	0
Output: Materials for recycling | MFR	kg (MFR)	3.68E-01	8.52E-04	1.20E-04	2.48E+00	2.79E-03	2.85E+00	-1.56E-01
Output: Materials for energy recovery | MER	kg (MER)	0	0	0	0	0	0	0
Output: Exported energy (electrical) | EEE	MJ (EEE)	0	0	0	0	0	0	0
Output: Exported energy (thermal) | EET	MJ (EET)	0	0	0	0	0	0	0

*The detailed results of the module B can be found in the tables located at the end of this section.

Biogenic Carbon Inventory Flow

Indicators	Unit	Total
Biogenic carbon content of the product	kg of C	0
Biogenic Carbon content of associated packaging	kg of C	1.81E-02

Indicators calculated based on the following values :

Wood: 39.5% (EN16485), Paper: 37.8% (APSESA/RECORD) and Cardboard: 28% (ADEME)

Detail of module B

Indicators	Unit	B1	B2	B3	B4	B5	B6	B7	Total module B
Environment: Global warming potential (total) | GWPT	kg CO2 eq	0	0	0	0	0	8.87E+00	0	8.87E+00
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	0	0	0	0	0	8.56E+00	0	8.56E+00
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	0	0	0	0	0	2.94E-01	0	2.94E-01
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	0	0	0	0	0	2.14E-02	0	2.14E-02
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	0	0	0	0	0	1.63E-07	0	1.63E-07
Environment: Acidification potential | AP	mol H+ eq	0	0	0	0	0	4.91E-02	0	4.91E-02
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	0	0	0	0	0	8.11E-03	0	8.11E-03
Environment: Eutrophication potential (marine) | EPM	kg N eq	0	0	0	0	0	7.94E-03	0	7.94E-03
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	0	0	0	0	0	7.18E-02	0	7.18E-02
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	0	0	0	0	0	2.31E-02	0	2.31E-02
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	0	0	0	0	0	1.04E-04	0	1.04E-04
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	0	0	0	0	0	1.98E+02	0	1.98E+02
Environment: Water deprivation potential | WDP	m3 world eq	0	0	0	0	0	4.92E+00	0	4.92E+00
Environment: Particulate matter formation | PMF	disease incidence	0	0	0	0	0	1.80E-07	0	1.80E-07
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	0	0	0	0	0	5.49E+00	0	5.49E+00
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	0	0	0	0	0	3.27E+01	0	3.27E+01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	0	0	0	0	0	4.28E-09	0	4.28E-09
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	0	0	0	0	0	1.72E-07	0	1.72E-07
Environment: Land use and land use change | LULUC	dimensionless	0	0	0	0	0	3.79E+01	0	3.79E+01
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	0	0	0	0	0	4.37E+01	0	4.37E+01
Primary energy: Renewable (material use) | PERM	MJ (PERM)	0	0	0	0	0	0	0	0
Primary energy: Renewable (total) | PERT	MJ (PERT)	0	0	0	0	0	4.37E+01	0	4.37E+01
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	0	0	0	0	0	1.95E+02	0	1.95E+02
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	0	0	0	0	0	2.85E+00	0	2.85E+00
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	0	0	0	0	0	1.98E+02	0	1.98E+02
Resource: Secondary materials | SM	kg (SM)	0	0	0	0	0	2.55E+00	0	2.55E+00
Resource: Renewable secondary fuels | RSF	MJ (RSF)	0	0	0	0	0	1.48E+00	0	1.48E+00
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	0	0	0	0	0	1.47E+00	0	1.47E+00
Resource: Net use of fresh water | FW	m3 (FW)	0	0	0	0	0	1.57E-01	0	1.57E-01
Hazardous waste disposed | HWD	kg (HWD)	0	0	0	0	0	1.94E-01	0	1.94E-01
Non-hazardous waste disposed | NHWD	kg (NHWD)	0	0	0	0	0	6.02E-01	0	6.02E-01
Radioactive waste disposed | RWD	kg (RWD)	0	0	0	0	0	1.41E-03	0	1.41E-03
Output: Components for reuse | CRU	kg (CRU)	0	0	0	0	0	0	0	0
Output: Materials for recycling | MFR	kg (MFR)	0	0	0	0	0	2.48E+00	0	2.48E+00
Output: Materials for energy recovery | MER	kg (MER)	0	0	0	0	0	0	0	0
Output: Exported energy (electrical) | EEE	MJ (EEE)	0	0	0	0	0	0	0	0
Output: Exported energy (thermal) | EET	MJ (EET)	0	0	0	0	0	0	0	0

Environmental impact of the reference product calculated for the declared unit

This environmental declaration has been developed on the basis of the following declared unit: Detect a 360 presence to Switch on the light, for 10 years

Mandatory environmental impact indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Environment: Global warming potential (total) | GWPT	kg CO2 eq	2.62E+00	6.00E-02	1.15E-02	8.87E+00	2.62E-01	1.18E+01	-8.86E-01
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	2.62E+00	6.00E-02	3.83E-03	8.56E+00	2.62E-01	1.15E+01	-8.95E-01
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	1.87E-03	5.31E-05	7.71E-03	2.94E-01	-2.41E-04	3.04E-01	1.15E-02
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	4.89E-03	2.96E-05	1.46E-06	2.14E-02	5.48E-05	2.63E-02	-2.16E-03
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	1.06E-07	1.31E-09	6.39E-11	1.63E-07	2.09E-09	2.73E-07	-2.99E-08
Environment: Acidification potential | AP	mol H+ eq	2.45E-02	1.31E-04	1.70E-05	4.91E-02	2.28E-04	7.40E-02	-1.03E-02
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	3.23E-03	4.26E-06	4.12E-07	8.11E-03	1.35E-05	1.14E-02	-1.45E-03
Environment: Eutrophication potential (marine) | EPM	kg N eq	3.81E-03	3.31E-05	7.12E-06	7.94E-03	1.23E-04	1.19E-02	-1.53E-03
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	4.10E-02	3.36E-04	6.80E-05	7.18E-02	7.89E-04	1.14E-01	-1.68E-02
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	1.36E-02	2.03E-04	2.51E-05	2.31E-02	2.69E-04	3.72E-02	-5.19E-03
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	8.71E-04	2.01E-07	1.46E-08	1.04E-04	2.69E-07	9.75E-04	-4.20E-04
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	3.88E+01	8.58E-01	4.45E-02	1.98E+02	6.75E-01	2.39E+02	-1.15E+01
Environment: Water deprivation potential | WDP	m3 world eq	1.19E+00	4.26E-03	6.25E-04	4.92E+00	1.28E-02	6.12E+00	-3.71E-01

*The detailed results of the module B can be found in the tables located at the end of this section.

Optional environmental impact indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Environment: Particulate matter formation | PMF	disease incidence	1.53E-07	4.47E-09	3.52E-10	1.80E-07	3.48E-09	3.42E-07	-5.69E-08
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	3.05E-01	1.15E-03	1.30E-04	5.49E+00	2.08E-03	5.80E+00	-9.95E-02
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	8.91E+01	4.21E-01	3.05E-02	3.27E+01	2.24E+00	1.25E+02	-3.12E+01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	3.93E-09	2.74E-11	2.78E-12	4.28E-09	6.07E-11	8.31E-09	-1.13E-09
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	1.32E-07	6.09E-10	4.61E-11	1.72E-07	4.64E-09	3.09E-07	-5.72E-08
Environment: Land use and land use change | LULUC	dimensionless	1.88E+01	5.15E-01	1.87E-02	3.79E+01	3.69E-01	5.76E+01	-7.44E+00

*The detailed results of the module B can be found in the tables located at the end of this section.

Resource use indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	4.36E+00	1.34E-02	1.30E-03	4.37E+01	3.19E-02	4.81E+01	-1.66E+00
Primary energy: Renewable (material use) | PERM	MJ (PERM)	4.60E-04	0	0	0	0	4.60E-04	-2.30E-04
Primary energy: Renewable (total) | PERT	MJ (PERT)	4.36E+00	1.34E-02	1.30E-03	4.37E+01	3.19E-02	4.81E+01	-1.66E+00
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	3.71E+01	7.84E-01	4.10E-02	1.95E+02	6.28E-01	2.34E+02	-1.12E+01
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	1.63E+00	7.43E-02	3.52E-03	2.85E+00	4.78E-02	4.60E+00	-3.15E-01
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	3.88E+01	8.58E-01	4.45E-02	1.98E+02	6.75E-01	2.39E+02	-1.15E+01
Resource: Secondary materials | SM	kg (SM)	2.06E-01	9.41E-04	4.00E-02	2.55E+00	2.86E-02	2.83E+00	-8.12E-02
Resource: Renewable secondary fuels | RSF	MJ (RSF)	5.01E-02	2.54E-04	5.23E-05	1.48E+00	3.31E-04	1.53E+00	-1.27E-02
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	1.27E-01	4.99E-04	4.49E-05	1.47E+00	2.05E-03	1.60E+00	-3.18E-02
Resource: Net use of fresh water | FW	m3 (FW)	3.84E-02	1.04E-04	1.34E-05	1.57E-01	2.77E-04	1.96E-01	-1.45E-02

*The detailed results of the module B can be found in the tables located at the end of this section.

Waste category indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Hazardous waste disposed | HWD	kg (HWD)	1.75E-01	8.05E-04	1.71E-04	1.94E-01	1.44E-02	3.84E-01	-5.46E-02
Non-hazardous waste disposed | NHWD	kg (NHWD)	2.13E-01	4.15E-02	1.56E-03	6.02E-01	5.24E-02	9.11E-01	-4.95E-02
Radioactive waste disposed | RWD	kg (RWD)	7.88E-05	2.80E-07	3.27E-08	1.41E-03	5.14E-07	1.48E-03	-2.59E-05

*The detailed results of the module B can be found in the tables located at the end of this section.

Output flow indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Output: Components for reuse | CRU	kg (CRU)	0	0	0	0	0	0	0
Output: Materials for recycling | MFR	kg (MFR)	3.68E-01	8.52E-04	1.20E-04	2.48E+00	2.79E-03	2.85E+00	-1.56E-01
Output: Materials for energy recovery | MER	kg (MER)	0	0	0	0	0	0	0
Output: Exported energy (electrical) | EEE	MJ (EEE)	0	0	0	0	0	0	0
Output: Exported energy (thermal) | EET	MJ (EET)	0	0	0	0	0	0	0

*The detailed results of the module B can be found in the tables located at the end of this section.

Biogenic Carbon Inventory Flow

Indicators	Unit	Total
Biogenic carbon content of the product	kg of C	0
Biogenic Carbon content of associated packaging	kg of C	1.81E-02

Indicators calculated based on the following values :

Wood: 39.5% (EN16485), Paper: 37.8% (APSESA/RECORD) and Cardboard: 28% (ADEME)

Detail of module B

Indicators	Unit	B1	B2	B3	B4	B5	B6	B7	Total module B
Environment: Global warming potential (total) | GWPT	kg CO2 eq	0	0	0	0	0	8.87E+00	0	8.87E+00
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	0	0	0	0	0	8.56E+00	0	8.56E+00
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	0	0	0	0	0	2.94E-01	0	2.94E-01
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	0	0	0	0	0	2.14E-02	0	2.14E-02
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	0	0	0	0	0	1.63E-07	0	1.63E-07
Environment: Acidification potential | AP	mol H+ eq	0	0	0	0	0	4.91E-02	0	4.91E-02
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	0	0	0	0	0	8.11E-03	0	8.11E-03
Environment: Eutrophication potential (marine) | EPM	kg N eq	0	0	0	0	0	7.94E-03	0	7.94E-03
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	0	0	0	0	0	7.18E-02	0	7.18E-02
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	0	0	0	0	0	2.31E-02	0	2.31E-02
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	0	0	0	0	0	1.04E-04	0	1.04E-04
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	0	0	0	0	0	1.98E+02	0	1.98E+02
Environment: Water deprivation potential | WDP	m3 world eq	0	0	0	0	0	4.92E+00	0	4.92E+00
Environment: Particulate matter formation | PMF	disease incidence	0	0	0	0	0	1.80E-07	0	1.80E-07
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	0	0	0	0	0	5.49E+00	0	5.49E+00
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	0	0	0	0	0	3.27E+01	0	3.27E+01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	0	0	0	0	0	4.28E-09	0	4.28E-09
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	0	0	0	0	0	1.72E-07	0	1.72E-07
Environment: Land use and land use change | LULUC	dimensionless	0	0	0	0	0	3.79E+01	0	3.79E+01
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	0	0	0	0	0	4.37E+01	0	4.37E+01
Primary energy: Renewable (material use) | PERM	MJ (PERM)	0	0	0	0	0	0	0	0
Primary energy: Renewable (total) | PERT	MJ (PERT)	0	0	0	0	0	4.37E+01	0	4.37E+01
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	0	0	0	0	0	1.95E+02	0	1.95E+02
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	0	0	0	0	0	2.85E+00	0	2.85E+00
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	0	0	0	0	0	1.98E+02	0	1.98E+02
Resource: Secondary materials | SM	kg (SM)	0	0	0	0	0	2.55E+00	0	2.55E+00
Resource: Renewable secondary fuels | RSF	MJ (RSF)	0	0	0	0	0	1.48E+00	0	1.48E+00
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	0	0	0	0	0	1.47E+00	0	1.47E+00
Resource: Net use of fresh water | FW	m3 (FW)	0	0	0	0	0	1.57E-01	0	1.57E-01
Hazardous waste disposed | HWD	kg (HWD)	0	0	0	0	0	1.94E-01	0	1.94E-01
Non-hazardous waste disposed | NHWD	kg (NHWD)	0	0	0	0	0	6.02E-01	0	6.02E-01
Radioactive waste disposed | RWD	kg (RWD)	0	0	0	0	0	1.41E-03	0	1.41E-03
Output: Components for reuse | CRU	kg (CRU)	0	0	0	0	0	0	0	0
Output: Materials for recycling | MFR	kg (MFR)	0	0	0	0	0	2.48E+00	0	2.48E+00
Output: Materials for energy recovery | MER	kg (MER)	0	0	0	0	0	0	0	0
Output: Exported energy (electrical) | EEE	MJ (EEE)	0	0	0	0	0	0	0	0
Output: Exported energy (thermal) | EET	MJ (EET)	0	0	0	0	0	0	0	0

Extrapolation factor of homogeneous environmental families

To calculate the environmental impacts at the declared unit scale of the products covered by this PEP, please multiply the environmental impacts of the reference product by the extrapolation factor for each phase.

The extrapolation factors were calculated according to the following rules:

- Manufacturing phases (A1-A3), distribution (A4) and Module D: (product weight + its packaging) / (reference product weight + its packaging)
- Installation (A5): (product packaging weight) / (reference product packaging weight)
- Use (B1-B5; B7): value of 1

- Use (B6): (total energy consumption of the product) / (total energy consumption of the reference product)
- End of life (C1-C4): (product weight) / (reference product weight)

	1. Fabrication	2. Distribution	3. Installation	B1 Consommables	B2 Maintenance	B6 Utilisation	5. Fin de vie	6. Module D
Compact - Europe	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EP10055416	1.031	1.031	1.078	1.000	1.000	1.000	1.014	1.031
EP10425875	1.000	1.000	0.941	1.000	1.000	1.000	1.021	1.000
EP10055379	0.901	0.901	0.941	1.000	1.000	0.833	0.887	0.901
EP10055553	0.927	0.927	1.059	1.000	1.000	0.833	0.879	0.927
EP10425059	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EP10425233	1.016	1.016	1.039	1.000	1.000	1.000	1.007	1.016
EP10425882	1.000	1.000	0.941	1.000	1.000	1.000	1.021	1.000
EP10425042	1.021	1.021	0.941	1.000	1.000	1.000	1.050	1.021
EP10055317	1.021	1.021	0.980	1.000	1.000	1.000	1.035	1.021
EP10055546	1.036	1.036	1.039	1.000	1.000	1.000	1.035	1.036
EP10055386	0.927	0.927	0.941	1.000	1.000	0.833	0.922	0.927
EP10428067	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10425257	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10425707	1.005	1.005	0.941	1.000	1.000	1.000	1.028	1.005
EP10425288	1.047	1.047	0.941	1.000	1.000	1.000	1.085	1.047
EP10427749	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10428128	1.010	1.010	0.980	1.000	1.000	1.000	1.021	1.010
EP10427770	0.927	0.927	0.961	1.000	1.000	0.833	0.915	0.927
EP10425790	0.943	0.943	0.941	1.000	1.000	0.833	0.943	0.943
EP10427756	1.016	1.016	0.941	1.000	1.000	1.000	1.043	1.016
EP10428180	1.000	1.000	0.961	1.000	1.000	1.000	1.014	1.000
EP10427763	1.047	1.047	0.941	1.000	1.000	1.000	1.085	1.047
EP10425783	1.057	1.057	0.980	1.000	1.000	1.000	1.085	1.057

Extrapolation coefficients at the functional unit scale

To calculate the environmental impacts at the declared unit scale of the products covered by this PEP, please multiply the environmental impacts of the reference product by the extrapolation factor for each phase. The extrapolation factors were calculated according to the following rules: · Manufacturing phases (A1-A3), distribution (A4) and Module D: (product weight + its packaging) / (reference product weight + its packaging) · Installation (A5): (product packaging weight) / (reference product packaging weight) · Use B1: according to the PSR rules to be applied, otherwise 1 · Use B2: according to the PSR rules to be applied, otherwise 1 · Use (B3, B4, B5 and B7): value of 1 · Use (B6): (total energy consumption of the product) / (total energy consumption of the reference product) · End of life (C1-C4): (product weight) / (reference product weight)

	1. Fabrication	2. Distribution	3. Installation	B1 Consommables	B2 Maintenance	B6 Utilisation	5. Fin de vie	6. Module D
Compact - Europe	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EP10055416	1.031	1.031	1.078	1.000	1.000	1.000	1.014	1.031
EP10425875	1.000	1.000	0.941	1.000	1.000	1.000	1.021	1.000
EP10055379	0.901	0.901	0.941	1.000	1.000	0.833	0.887	0.901
EP10055553	0.927	0.927	1.059	1.000	1.000	0.833	0.879	0.927
EP10425059	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EP10425233	1.016	1.016	1.039	1.000	1.000	1.000	1.007	1.016
EP10425882	1.000	1.000	0.941	1.000	1.000	1.000	1.021	1.000
EP10425042	1.021	1.021	0.941	1.000	1.000	1.000	1.050	1.021
EP10055317	1.021	1.021	0.980	1.000	1.000	1.000	1.035	1.021
EP10055546	1.036	1.036	1.039	1.000	1.000	1.000	1.035	1.036
EP10055386	0.927	0.927	0.941	1.000	1.000	0.833	0.922	0.927
EP10428067	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10425257	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10425707	1.005	1.005	0.941	1.000	1.000	1.000	1.028	1.005
EP10425288	1.047	1.047	0.941	1.000	1.000	1.000	1.085	1.047
EP10427749	1.010	1.010	0.941	1.000	1.000	1.000	1.035	1.010
EP10428128	1.010	1.010	0.980	1.000	1.000	1.000	1.021	1.010
EP10427770	0.927	0.927	0.961	1.000	1.000	0.833	0.915	0.927
EP10425790	0.943	0.943	0.941	1.000	1.000	0.833	0.943	0.943
EP10427756	1.016	1.016	0.941	1.000	1.000	1.000	1.043	1.016
EP10428180	1.000	1.000	0.961	1.000	1.000	1.000	1.014	1.000
EP10427763	1.047	1.047	0.941	1.000	1.000	1.000	1.085	1.047
EP10425783	1.057	1.057	0.980	1.000	1.000	1.000	1.085	1.057